



# Open Source Used In Clarke IOSXE Releases Clarke 17.11

**Cisco Systems, Inc.**

[www.cisco.com](http://www.cisco.com)

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

Text Part Number: 78EE117C99-1556060149

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

**In your requests please include the following reference number 78EE117C99-1556060149**

## Contents

### **1.1 libtomcrypt 1.17**

1.1.1 Available under license

### **1.2 libtommath 0.42.0**

1.2.1 Available under license

### **1.3 diffutils 3.7**

1.3.1 Available under license

### **1.4 gzip 1.10**

1.4.1 Available under license

### **1.5 bzip2 1.0.8**

### **1.6 zlib 1.2.8**

1.6.1 Available under license

### **1.7 e2fsprogs 1.43**

1.7.1 Available under license

### **1.8 net-tools 2.10**

1.8.1 Available under license

### **1.9 lsof 4.91**

1.9.1 Available under license

### **1.10 hd-parm 9.58**

### **1.11 tar 1.32**

1.11.1 Available under license

### **1.12 readline 7.0-10.el8**

1.12.1 Available under license

### **1.13 attr 2.4.48-3.el8**

1.13.1 Available under license

### **1.14 libmnl 1.0.4-6.el8**

1.14.1 Available under license

## **1.15 libpcap 1.9.1**

1.15.1 Available under license

## **1.16 libxml2 2.9.10**

1.16.1 Available under license

## **1.17 popt 1.16-14.el8**

1.17.1 Available under license

## **1.18 libxslt 1.1.34**

1.18.1 Available under license

## **1.19 findutils 4.7.0**

1.19.1 Available under license

## **1.20 tcpdump 4.9.3**

1.20.1 Available under license

## **1.21 libunistring 0.9.10**

1.21.1 Available under license

## **1.22 ncurses 6.2**

1.22.1 Available under license

## **1.23 grep 3.4**

1.23.1 Available under license

## **1.24 parted 3.3**

1.24.1 Available under license

## **1.25 cpio 2.13**

1.25.1 Available under license

## **1.26 xz 5.2.5**

1.26.1 Available under license

## **1.27 netcat 0.7.1**

1.27.1 Available under license

## **1.28 coreutils 8.32**

1.28.1 Available under license

## **1.29 sed 4.8**

1.29.1 Available under license

## **1.30 libtasn 4.16.0**

1.30.1 Available under license

## **1.31 libnl3 3.5.0**

1.31.1 Available under license

## **1.32 libbsd 0.10.0**

1.32.1 Available under license

## **1.33 iptables 1.8.5**

1.33.1 Available under license

## **1.34 nghttp2 1.41.0**

- 1.34.1 Available under license
- 1.35 libidn 2.3.0**
  - 1.35.1 Available under license
- 1.36 libvirt 5.5.0**
  - 1.36.1 Available under license
- 1.37 busybox 1.32.0**
  - 1.37.1 Available under license
- 1.38 libssh2 1.9.0**
  - 1.38.1 Available under license
- 1.39 file 5.39**
  - 1.39.1 Available under license
- 1.40 traceroute 2.1.0-r0**
  - 1.40.1 Available under license
- 1.41 sqlite 3.33.0**
  - 1.41.1 Available under license
- 1.42 glibc 2.32**
  - 1.42.1 Available under license
- 1.43 fdisk 2.36.0**
  - 1.43.1 Available under license
- 1.44 ethtool 5.8**
  - 1.44.1 Available under license
- 1.45 json-c 0.15**
  - 1.45.1 Available under license
- 1.46 libcap 2.26-4.el8**
  - 1.46.1 Available under license
- 1.47 gnutils 3.6.14**
  - 1.47.1 Available under license
- 1.48 bash 5.0.18**
  - 1.48.1 Available under license
- 1.49 tftp-hpa 5.2**
  - 1.49.1 Available under license
- 1.50 glib 2.64.5**
  - 1.50.1 Available under license
- 1.51 iputils 20200821**
  - 1.51.1 Available under license
- 1.52 elfutils 0.180**
  - 1.52.1 Available under license
- 1.53 curl 7.72.0**
  - 1.53.1 Available under license

## **1.54 expat 2.2.9**

1.54.1 Available under license

## **1.55 util-linux 2.36.0**

1.55.1 Available under license

## **1.56 libtirpc 1.2.6**

1.56.1 Available under license

## **1.57 dosfs-tools 4.2**

1.57.1 Available under license

## **1.58 gawk 5.1.0**

1.58.1 Available under license

## **1.59 pcre 8.44**

1.59.1 Available under license

## **1.60 rsync 3.2.3**

1.60.1 Available under license

## **1.61 libevdev 1.11.0**

1.61.1 Available under license

## **1.62 iproute 5.9.0-1.el8**

1.62.1 Available under license

## **1.63 libsemanage-common 2.9-4.el8**

1.63.1 Available under license

## **1.64 selinux 2.9-5.el8**

1.64.1 Available under license

## **1.65 policycoreutils 2.9-9.el8**

1.65.1 Available under license

## **1.66 acl 2.2.53-1.el8**

1.66.1 Available under license

## **1.67 bridgeutils 1.7.1**

1.67.1 Available under license

## **1.68 d-bus 1.12.20**

1.68.1 Available under license

## **1.69 procps 3.3.15**

1.69.1 Available under license

## **1.70 pam 1.3.1-14.el8**

1.70.1 Available under license

## **1.71 shadow 4.8.1**

1.71.1 Available under license

## **1.72 util-linux 2.36**

1.72.1 Available under license

## **1.73 binutils 2.35.1**

- 1.73.1 Available under license
- 1.74 tdb 1.43**
- 1.74.1 Available under license
- 1.75 c-ares 1.18.1**
- 1.75.1 Available under license
- 1.76 kexec-tools 2.0.20**
- 1.76.1 Available under license
- 1.77 libdevmapper 1.02.165**
- 1.77.1 Available under license
- 1.78 libcap-ng 2.26-4.el8**
- 1.78.1 Available under license
- 1.79 yajl 2.0**
- 1.79.1 Available under license
- 1.80 libnsl 2.0.0**
- 1.80.1 Available under license
- 1.81 zlib 1.2.11**
- 1.81.1 Available under license
- 1.82 openssl 1.1.1l**
- 1.82.1 Available under license
- 1.83 gmp 6.2.0**
- 1.83.1 Available under license
- 1.84 linux-kernel 5.4.212**
- 1.84.1 Available under license
- 1.85 nfs-utils 2.6.2**
- 1.85.1 Available under license
- 1.86 systemd 246**
- 1.86.1 Available under license
- 1.87 pciutils 3.9.0**
- 1.87.1 Available under license
- 1.88 less 4.1.3**
- 1.88.1 Available under license
- 1.89 audit 3.0.9**
- 1.89.1 Available under license
- 1.90 psmisc 23.6-1**
- 1.90.1 Available under license
- 1.91 safestring 4.1.25**
- 1.91.1 Available under license
- 1.92 libsepol 3.4-2**
- 1.92.1 Available under license

## 1.93 gpt-fdisk 1.0.5

1.93.1 Available under license

## 1.94 nettle 3.6

1.94.1 Available under license

# 1.1 libtomcrypt 1.17

## 1.1.1 Available under license :

```
# /*
# * SHA-512
# * Implementation derived from LibTomCrypt (Tom St Denis)
# *
# * LibTomCrypt is a library that provides various cryptographic
# * algorithms in a highly modular and flexible manner.
# *
# * The library is free for all purposes without any express
# * guarantee it works.
# *
# * Tom St Denis, tomstdenis@gmail.com, http://libtomcrypt.org
# */
```

# 1.2 libtommath 0.42.0

## 1.2.1 Available under license :

LibTomMath is hereby released into the Public Domain.

-- Tom St Denis

# 1.3 diffutils 3.7

## 1.3.1 Available under license :

GNU 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.

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:

```
<program> Copyright (C) <year> <name of author>
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>.

## 1.4 gzip 1.10

### 1.4.1 Available under license :

GNU 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.

#### 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:

```
<program> Copyright (C) <year> <name of author>  
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>.

## 1.5 bzip2 1.0.8

## 1.6 zlib 1.2.8

### 1.6.1 Available under license :

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

Copyright (C) 1995-2017 Jean-loup Gailly and Mark Adler

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

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

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

Jean-loup Gailly     Mark Adler

jloup@gzip.org      madler@alumni.caltech.edu

\*/

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

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

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

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

## 1.7 e2fsprogs 1.43

### 1.7.1 Available under license :

This package was added to the e2fsprogs debian source package by Theodore Ts'o <tytso@mit.edu> on Sat Mar 15 15:33:37 EST 2003

It is part of the main e2fsprogs distribution, which can be found at:

<http://sourceforge.net/projects/e2fsprogs>

Upstream Author: Theodore Ts'o <tytso@mit.edu>

Copyright:

Copyright (C) 1999, 2001 by Andries Brouwer

Copyright (C) 1999, 2000, 2003 by Theodore Ts'o

You are free to distribute this software under the terms of the GNU Lesser (Library) General Public License.

On Debian systems, the complete text of the GNU Lesser (Library) General Public License can be found in /usr/share/common-licenses/LGPL-2. This is the Debian GNU/Linux prepackaged version of the static EXT2 file system consistency checker (e2fsck.static). The EXT2 utilities were written by Theodore Ts'o <tytso@mit.edu> and Remy Card <card@masi.ibp.fr>.

Sources were obtained from <http://sourceforge.net/projects/e2fsprogs>

Packaging is Copyright (c) 2003-2006 Theodore Ts'o <tytso@mit.edu>  
Copyright (c) 1997-2003 Yann Dirson <dirson@debian.org>  
Copyright (c) 2001 Alcove <<http://www.alcove.com/>>  
Copyright (c) 1997 Klee Dienes  
Copyright (c) 1995-1996 Michael Nonweiler <mrn20@cam.ac.uk>

Upstream Author: Theodore Ts'o <tytso@mit.edu>

Copyright notice:

This package, the EXT2 filesystem utilities, is protected by the GNU General Public License.

Copyright (c) 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008 by Theodore Ts'o

On Debian GNU systems, the complete text of the GNU General Public License can be found in /usr/share/common-licenses/GPL-2'. Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

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

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

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

This is the Debian GNU/Linux prepackaged version of the translation files of the EXT2 file system utilities. The EXT2 utilities were written by Theodore Ts'o <tytso@mit.edu> and Remy Card <card@masi.ibp.fr>.

Sources were obtained from <http://sourceforge.net/projects/e2fsprogs>

Packaging is Copyright (c) 2003-2006 Theodore Ts'o <tytso@mit.edu>  
Copyright (c) 1997-2003 Yann Dirson <dirson@debian.org>  
Copyright (c) 2001 Alcove <<http://www.alcove.com/>>  
Copyright (c) 1997 Klee Dienes  
Copyright (c) 1995-1996 Michael Nonweiler <mrn20@cam.ac.uk>

Upstream Author: Theodore Ts'o <tytso@mit.edu>

Copyright notice:

This package, the EXT2 filesystem utilities, is protected by the GNU General Public License.

Copyright (c) 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008 by Theodore Ts'o

On Debian GNU systems, the complete text of the GNU General Public License can be found in ``/usr/share/common-licenses/GPL-2'`. This package was added to the e2fsprogs debian source package by Theodore Ts'o <tytso@mit.edu> on Fri Dec 14 22:24:35 EST 2007

It is part of the main e2fsprogs distribution, which can be found at:

<http://sourceforge.net/projects/e2fsprogs>

Upstream Author: Theodore Ts'o <tytso@mit.edu>

Copyright:

Copyright (C) 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007 by Theodore Ts'o

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



are met:

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

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

/\*

Copyright 1987 by the Student Information Processing Board  
of the Massachusetts Institute of Technology

Permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the names of M.I.T. and the M.I.T. S.I.P.B. not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission. M.I.T. and the M.I.T. S.I.P.B. make no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

\*/

Index: tdbsa/tdb.c

=====  
--- tdbsa.orig/tdb.c

+++ tdbsa/tdb.c

@@ -4,11 +4,11 @@ Rev: 23371

Last Changed Date: 2007-06-06 20:14:06 -0400 (Wed, 06 Jun 2007)

\*/

/\*

- Unix SMB/CIFS implementation.
- + trivial database library - standalone version

- trivial database library - private includes

-

- Copyright (C) Andrew Tridgell 2005
- + Copyright (C) Andrew Tridgell 1999-2005
- + Copyright (C) Jeremy Allison 2000-2006
- + Copyright (C) Paul 'Rusty' Russell 2000

\*\* NOTE! The following LGPL license applies to the tdb  
\*\* library. This does NOT imply that all of Samba is released  
EXT2ED is hereby placed under the terms of the GNU General Public License.  
Follows the GNU license.

Gadi Oxman, August 1995

-----  
GNU GENERAL PUBLIC LICENSE

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.

675 Mass Ave, Cambridge, MA 02139, USA

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

Preamble

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

GNU Library General Public License instead.) You can apply it to  
your programs, too.

When we speak of free software, we are referring to freedom, not  
price. Our General Public Licenses are designed to make sure that you  
have the freedom to distribute copies of free software (and charge for  
this service if you wish), that you receive source code or can get it  
if you want it, that you can change the software or use pieces of it  
in new free programs; and that you know you can do these things.

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

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

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

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

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

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

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

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

Activities other than copying, distribution and modification are not

covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

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

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

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

a) You

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

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

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

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those

sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

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

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

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

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

b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

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

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component

itself accompanies the executable.

If distribution of executable or object code is made by offering access

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

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

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

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

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

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

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

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

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

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

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

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

of preserving the free status of all derivatives of our free software and  
of promoting  
the sharing and reuse of software generally.

#### NO WARRANTY

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

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

#### END OF TERMS AND CONDITIONS

##### Appendix: How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

```
<one line to give the program's name and a brief idea of what it does.>  
Copyright (C) 19yy <name of author>
```

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



This program is distributed in the hope that it will be useful,  
but WITHOUT ANY WARRANTY; without even the implied warranty of  
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the  
GNU General Public License for more details.

You should have received a copy of the GNU General Public License  
along with this program; if not, write to the Free Software  
Foundation, Inc., 675 Mass Ave, Cambridge, MA 02139, USA.

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

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

```
Gnomovision version 69, Copyright (C) 19yy name of author  
Gnomovision comes with ABSOLUTELY NO WARRANTY;  
for details type `show w'.
```

```
This is free software, and you are welcome to redistribute it  
under certain conditions; type `show c' for details.
```

The hypothetical commands `show w' and `show c' should show the appropriate  
parts of the General Public License. Of course, the commands you use may  
be called something other than `show w' and `show c'; they could even be  
mouse-clicks or menu items--whatever suits your program.

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

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

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

This General Public License does not permit incorporating your program into  
proprietary programs. If your program is a subroutine library, you may  
consider

it more useful to permit linking proprietary applications with the  
library. If this is what you want to do, use the GNU Library General  
Public License instead of this License.

This package, the EXT2 filesystem utilities, are made available under  
the GNU Public License version 2, with the exception of the lib/ext2fs  
and lib/e2p libraries, which are made available under the GNU Library  
General Public License Version 2, the lib/uuid library which is made  
available under a BSD-style license and the lib/et and lib/ss  
libraries which are made available under an MIT-style license. Please  
see lib/uuid/COPYING for more details for the license for the files

comprising the libuuid library, and the source file headers of the libet and libss libraries for more information.

The most recent officially distributed version can be found at <http://e2fsprogs.sourceforge.net>. If you need to make a distribution, that's the one you should use. If there is some reason why you'd like a more recent version that is still in ALPHA testing (i.e., either using the "WIP" test distributions or one from the hg or git repository from the development branch, please contact me (tytso@mit.edu) before you ship. The release schedules for this package are flexible, if you give me enough lead time.

Theodore Ts'o  
23-June-2007

---

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 Library General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid

anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

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

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

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

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

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

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

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

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

is covered

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

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

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

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

- a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.
- b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.
- c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of

this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

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

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

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

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

b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

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

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made

by offering

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

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

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

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

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

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

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

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

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

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

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

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

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

## NO WARRANTY

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

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

## END OF TERMS AND CONDITIONS

### How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

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

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

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



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

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

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

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

```
Gnomovision version 69, Copyright (C) year name of author
Gnomovision
comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute it
under certain conditions; type `show c' for details.
```

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

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

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

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

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

-----  
GNU LIBRARY GENERAL PUBLIC LICENSE  
Version 2, June 1991

Copyright (C) 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.

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

#### Preamble

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

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

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

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

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

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

Also, for each distributor's protection, we want to make certain that everyone understands that there is no warranty for this free library. If the library is modified by someone else and passed on, we want its recipients to know that what they have is not the original

version, so that any problems introduced by others will not reflect on the original authors' reputations.

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

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

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

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

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

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

works together with the library.

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

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

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

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

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

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

### Activities

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

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

Library.

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

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

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

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

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

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

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

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

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

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

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

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

However, linking a "work that uses the Library" with the Library

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

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

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

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

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

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

- a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then

relink to produce a modified

executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

b) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

c) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

d) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

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

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

7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:

a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.

b) Give prominent notice with the combined library of the fact



that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

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

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

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

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

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any

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

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

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

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

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

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

NO WARRANTY

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

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

#### END OF TERMS AND CONDITIONS

#### How to Apply These Terms to Your New Libraries

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

To apply these terms, attach the following notices to the library. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

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

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

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

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

You should have received a copy of the GNU Library General Public License along with this library; if not, write to the Free Software Foundation, Inc.,  
51 Franklin 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!

This is the Debian GNU/Linux prepackaged version of the EXT2 file system utilities (e2fsck, mke2fs, etc.). The EXT2 utilities were written by Theodore Ts'o <tytso@mit.edu> and Remy Card <card@masi.ibp.fr>.

Sources were obtained from <http://sourceforge.net/projects/e2fsprogs>

Packaging is Copyright (c) 2003-2007 Theodore Ts'o <tytso@mit.edu>  
Copyright (c) 1997-2003 Yann Dirson <dirson@debian.org>  
Copyright (c) 2001 Alcove <<http://www.alcove.com/>>  
Copyright (c) 1997 Klee Dienes  
Copyright (c) 1995-1996 Michael Nonweiler <mrn20@cam.ac.uk>

Upstream Author: Theodore Ts'o <tytso@mit.edu>

Copyright notice:

This package, the EXT2 filesystem utilities, are made available under the GNU General Public License version 2, with the exception of the lib/ext2fs and lib/e2p libraries, which are made available under the GNU Library General Public License Version 2, the lib/uuid library which is made available under a BSD-style license and the lib/et and lib/ss libraries which are made available under an MIT-style license.

Copyright (c) 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008 by Theodore Ts'o

On Debian GNU systems, the complete text of the GNU General Public License can be found in `/usr/share/common-licenses/GPL-2`. The complete text of the GNU Library General Public License can be found in `/usr/share/common-licenses/LGPL-2`.

The license used for lib/et and lib/ss libraries is:

Copyright 1987 by the Student Information Processing Board  
of the Massachusetts Institute of Technology

Permission to use, copy, modify, and distribute this software and its documentation for any purpose is hereby granted, provided that the names of M.I.T. and the M.I.T. S.I.P.B. not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission. M.I.T. and the M.I.T. S.I.P.B. make no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

The license used for lib/uuid is:

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

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

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

DAMAGE.

This package was added to the e2fsprogs debian source package by Theodore Ts'o <tytso@mit.edu> on Sat Mar 15 15:33:37 EST 2003

It is part of the main e2fsprogs distribution, which can be found at:

<http://sourceforge.net/projects/e2fsprogs>

Upstream Author: Theodore Ts'o <tytso@mit.edu>

Copyright:

Copyright (C) 1999, 2000, 2003, 2004 by Theodore Ts'o

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

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

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

#

# This is a Makefile stub which handles the creation of BSD shared  
# libraries.

#

# In order to use this stub, the following makefile variables must be defined.

#

# BSDLIB\_VERSION = 1.0

# BSDLIB\_IMAGE = libce

```

# BSDLIB_MYDIR = et
# BSDLIB_INSTALL_DIR = $(SHLIBDIR)
#

all:: image

real-subdirs:: Makefile
@echo " MKDIR pic"
@mkdir -p pic

BSD_LIB = $(BSDLIB_IMAGE).so.$(BSDLIB_VERSION)
BSDLIB_PIC_FLAG = -fpic

image: $(BSD_LIB)

$(BSD_LIB): $(OBJS)
(cd pic; ld -Bshareable -o $(BSD_LIB) $(LDFLAGS_SHLIB) $(OBJS))
$(MV) pic/$(BSD_LIB) .
$(RM) -f ../$(BSD_LIB)
(cd ..; $(LN) $(LINK_BUILD_FLAGS) \
`echo $(my_dir) | sed -e 's;lib/;;' /$(BSD_LIB) $(BSD_LIB)

install-shlibs install: $(BSD_LIB)
@echo " INSTALL_PROGRAM $(BSDLIB_INSTALL_DIR)/$(BSD_LIB)"
@$(INSTALL_PROGRAM) $(BSD_LIB) \
$(DESTDIR)$$(BSDLIB_INSTALL_DIR)/$(BSD_LIB)
@-$(LDCONFIG)

install-strip: install

install-shlibs-strip: install-shlibs

uninstall-shlibs uninstall:
$(RM) -f $(DESTDIR)$$(BSDLIB_INSTALL_DIR)/$(BSD_LIB)

clean:
$(RM)
-rf pic
$(RM) -f $(BSD_LIB)
$(RM) -f ../$(BSD_LIB)

```

This is the Debian GNU/Linux prepackaged version of the ss command-line interface parsing library. It is currently distributed together with the EXT2 file system utilities, which are otherwise packaged as "e2fsprogs".

This package was put together by Yann Dirson <dirson@debian.org>, from sources obtained from a mirror of:  
[tsx-11.mit.edu:/pub/linux/packages/ext2fs/](http://tsx-11.mit.edu:/pub/linux/packages/ext2fs/)

From the original distribution:

Copyright 1987, 1988 by the Student Information Processing Board  
of the Massachusetts Institute of Technology

Permission to use, copy, modify, and distribute this software  
and its documentation for any purpose and without fee is  
hereby granted, provided that the above copyright notice  
appear in all copies and that both that copyright notice and  
this permission notice appear in supporting documentation,  
and that the names of M.I.T. and the M.I.T. S.I.P.B. not be  
used in advertising or publicity pertaining to distribution  
of the software without specific, written prior permission.

M.I.T. and

the M.I.T. S.I.P.B. make no representations about  
the suitability of this software for any purpose. It is  
provided "as is" without express or implied warranty.

This is the Debian GNU/Linux prepackaged version of the Common Error  
Description library. It is currently distributed together with the EXT2 file  
system utilities, which are otherwise packaged as "e2fsprogs".

This package was put together by Yann Dirson <dirson@debian.org>,  
from sources obtained from a mirror of:  
[tsx-11.mit.edu:/pub/linux/packages/ext2fs/](http://tsx-11.mit.edu/pub/linux/packages/ext2fs/)

From the original distribution:

Copyright 1987, 1988 by the Student Information Processing Board  
of the Massachusetts Institute of Technology

Permission to use, copy, modify, and distribute this software  
and its documentation for any purpose and without fee is  
hereby granted, provided that the above copyright notice  
appear in all copies and that both that copyright notice and  
this permission notice appear in supporting documentation,  
and that the names of M.I.T. and the M.I.T. S.I.P.B. not be  
used in advertising or publicity pertaining to distribution  
of the software without specific, written prior permission.

M.I.T. and the M.I.T.

S.I.P.B. make no representations about  
the suitability of this software for any purpose. It is  
provided "as is" without express or implied warranty.

## 1.8 net-tools 2.10



## 1.8.1 Available under license :

Copyright (c) 2000-2006 Dug Song <dugsong@monkey.org>  
All rights reserved, all wrongs reversed.

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 names of the authors and copyright holders may not be used to endorse or promote products derived from this software without specific prior written permission.

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

## 1.9 Isof 4.91

### 1.9.1 Available under license :

GNU GENERAL PUBLIC LICENSE  
Version 2, June 1991

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

Preamble

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

General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Lesser General Public License instead.)

You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

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

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

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

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

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

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

GNU GENERAL PUBLIC LICENSE

## TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

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

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

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

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

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

- a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.
- b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.
- c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such

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

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

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

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

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

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

b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete

machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

c) Accompany it with the information you received as to the offer

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

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

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

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License.

However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

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

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

this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license

would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

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

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

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

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

address new problems or concerns.

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

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author

to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

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

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

#### END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

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

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

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

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

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

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

```
Gnomovision version 69, Copyright (C) year name of author  
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type 'show w'.  
This  
is free software, and you are welcome to redistribute it  
under certain conditions; type 'show c' for details.
```

The hypothetical commands 'show w' and 'show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than 'show w' and 'show c'; they could even be mouse-clicks or menu items--whatever suits your program.

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

```
Yoyodyne, Inc., hereby disclaims all copyright interest in the program
```



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

<signature of Ty Coon>, 1 April 1989

Ty Coon, President of Vice

This General

Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Lesser General Public License instead of this License.

# 1.10 hd-parm 9.58

## 1.11 tar 1.32

### 1.11.1 Available under license :

GNU 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.

#### 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:

```
<program> Copyright (C) <year> <name of author>  
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>>.



# 1.12 headline 7.0-10.el8

## 1.12.1 Available under license :

@c The GNU Free Documentation License.

@center Version 1.3, 3 November 2008

@c This file is intended to be included within another document,

@c hence no sectioning command or @node.

@display

Copyright @copyright{ } 2000, 2001, 2002, 2007, 2008 Free Software Foundation, Inc.

@uref{http://fsf.org/}

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

@end display

@enumerate 0

@item

PREAMBLE

The purpose of this License is to make a manual, textbook, or other  
functional and useful document @dfn{free} in the sense of freedom: to  
assure everyone the effective freedom to copy and redistribute it,  
with or without modifying it, either commercially or noncommercially.  
Secondarily, this License preserves for the author and publisher a way  
to get credit for their work, while not being considered responsible  
for modifications made by others.

This License is a kind of ``copyleft'', which means that derivative  
works of the document  
must themselves be free in the same sense. It  
complements the GNU General Public License, which is a copyleft  
license designed for free software.

We have designed this License in order to use it for manuals for free  
software, because free software needs free documentation: a free  
program should come with manuals providing the same freedoms that the  
software does. But this License is not limited to software manuals;  
it can be used for any textual work, regardless of subject matter or  
whether it is published as a printed book. We recommend this License  
principally for works whose purpose is instruction or reference.

@item

APPLICABILITY AND DEFINITIONS

This License applies to any manual or other work, in any medium, that

contains a notice placed by the copyright holder saying it can be distributed under the terms of this License. Such a notice grants a world-wide, royalty-free license, unlimited in duration, to use that work under the conditions stated herein. The ``Document'', below, refers

to any such manual or work. Any member of the public is a licensee, and is addressed as ``you''. You accept the license if you copy, modify or distribute the work in a way requiring permission under copyright law.

A ``Modified Version'' of the Document means any work containing the Document or a portion of it, either copied verbatim, or with modifications and/or translated into another language.

A ``Secondary Section'' is a named appendix or a front-matter section of the Document that deals exclusively with the relationship of the publishers or authors of the Document to the Document's overall subject (or to related matters) and contains nothing that could fall directly within that overall subject. (Thus, if the Document is in part a textbook of mathematics, a Secondary Section may not explain any mathematics.) The relationship could be a matter of historical connection with the subject or with related matters, or of legal, commercial, philosophical, ethical or political position regarding them.

The ``Invariant Sections'' are certain Secondary Sections whose titles are designated, as being those of Invariant Sections, in the notice that says that the Document is released under this License. If a section does not fit the above definition of Secondary then it is not allowed to be designated as Invariant. The Document may contain zero Invariant Sections. If the Document does not identify any Invariant Sections then there are none.

The ``Cover Texts'' are certain short passages of text that are listed, as Front-Cover Texts or Back-Cover Texts, in the notice that says that the Document is released under this License. A Front-Cover Text may be at most 5 words, and a Back-Cover Text may be at most 25 words.

A ``Transparent'' copy of the Document means a machine-readable copy, represented in a format whose specification is available to the general public, that is suitable for revising the document straightforwardly with generic text editors or (for images composed of pixels) generic paint programs or (for drawings) some widely available drawing editor, and that is suitable for input to text formatters or for automatic translation to a variety of formats suitable for input to text formatters. A copy made in an otherwise Transparent file

format whose markup, or absence of markup, has been arranged to thwart or discourage subsequent modification by readers is not Transparent. An image format is not Transparent if used for any substantial amount of text. A copy that is not ``Transparent" is called ``Opaque".

Examples of suitable formats for Transparent copies include plain @sc{ascii} without markup, Texinfo input format, La@TeX{} input format, @acronym{SGML} or @acronym{XML} using a publicly available @acronym{DTD}, and standard-conforming simple @acronym{HTML}, PostScript or @acronym{PDF} designed for human modification. Examples of transparent image formats include @acronym{PNG}, @acronym{XCF} and @acronym{JPG}. Opaque formats include proprietary formats that can be read and edited only by proprietary word processors, @acronym{SGML} or @acronym{XML} for which the @acronym{DTD} and/or processing tools are not generally available, and the machine-generated @acronym{HTML}, PostScript or @acronym{PDF} produced by some word processors for output purposes only.

The ``Title Page" means, for a printed book, the title page itself, plus such following pages as are needed to hold, legibly, the material this License requires to appear in the title page. For works in formats which do not have any title page as such, ``Title Page" means the text near the most prominent appearance of the work's title, preceding the beginning of the body of the text.

The ``publisher" means any person or entity that distributes copies of the Document to the public.

A section ``Entitled XYZ" means a named subunit of the Document whose title either is precisely XYZ or contains XYZ in parentheses following text that translates XYZ in another language. (Here XYZ stands for a specific section name mentioned below, such as ``Acknowledgements", ``Dedications", ``Endorsements", or ``History".) To ``Preserve the Title" of such a section when you modify the Document means that it remains a section ``Entitled XYZ" according to this definition.

The Document may include Warranty Disclaimers next to the notice which states that this License applies to the Document. These Warranty Disclaimers are considered to be included by reference in this License, but only as regards disclaiming warranties: any other implication that these Warranty Disclaimers may have is void and has no effect on the meaning of this License.

@item

VERBATIM COPYING

You may copy and distribute the Document in any medium, either commercially or noncommercially, provided that this License, the copyright notices, and the license notice saying this License applies to the Document are reproduced in all copies, and that you add no other conditions whatsoever

to those of this License. You may not use technical measures to obstruct or control the reading or further copying of the copies you make or distribute. However, you may accept compensation in exchange for copies. If you distribute a large enough number of copies you must also follow the conditions in section 3.

You may also lend copies, under the same conditions stated above, and you may publicly display copies.

@item

### COPYING IN QUANTITY

If you publish printed copies (or copies in media that commonly have printed covers) of the Document, numbering more than 100, and the Document's license notice requires Cover Texts, you must enclose the copies in covers that carry, clearly and legibly, all these Cover Texts: Front-Cover Texts on the front cover, and Back-Cover Texts on the back cover. Both covers must also clearly and legibly identify you as the publisher of these copies. The front cover must present the full title with all words of the title equally prominent and visible.

You may add other material on the covers in addition.

Copying with changes limited to the covers, as long as they preserve the title of the Document and satisfy these conditions, can be treated as verbatim copying in other respects.

If the required texts for either cover are too voluminous to fit legibly, you should put the first ones listed (as many as fit reasonably) on the actual cover, and continue the rest onto adjacent pages.

If you publish or distribute Opaque copies of the Document numbering more than 100, you must either include a machine-readable Transparent copy along with each Opaque copy, or state in or with each Opaque copy a computer-network location from which the general network-using public has access to download using public-standard network protocols a complete Transparent copy of the Document, free of added material.

If you use the latter option, you must take reasonably prudent steps, when you begin distribution of Opaque copies in quantity, to ensure that

this Transparent copy will remain thus accessible at the stated location until at least one year after the last time you distribute an Opaque copy (directly or through your agents or retailers) of that

edition to the public.

It is requested, but not required, that you contact the authors of the Document well before redistributing any large number of copies, to give them a chance to provide you with an updated version of the Document.

@item

## MODIFICATIONS

You may copy and distribute a Modified Version of the Document under the conditions of sections 2 and 3 above, provided that you release the Modified Version under precisely this License, with the Modified Version filling the role of the Document, thus licensing distribution and modification of the Modified Version to whoever possesses a copy of it. In addition, you must do these things in the Modified Version:

@enumerate A

@item

Use in the Title Page (and on the covers, if any) a title distinct from that of the Document, and from those of previous versions (which should, if there were any, be listed in the History section of the Document). You may use the same title as a previous version if the original publisher of that version gives permission.

@item

List on the Title Page, as authors, one or more persons or entities responsible for authorship of the modifications in the Modified Version, together with at least five of the principal authors of the Document (all of its principal authors, if it has fewer than five), unless they release you from this requirement.

@item

State on the Title page the name of the publisher of the Modified Version, as the publisher.

@item

Preserve all the copyright notices of the Document.

@item

Add an appropriate copyright notice for your modifications adjacent to the other copyright notices.

@item

Include, immediately after the copyright notices, a license notice giving the public permission to use the Modified Version under the terms of this License, in the form shown in

the Addendum below.

@item

Preserve in that license notice the full lists of Invariant Sections and required Cover Texts given in the Document's license notice.

@item

Include an unaltered copy of this License.

@item

Preserve the section Entitled ``History'', Preserve its Title, and add to it an item stating at least the title, year, new authors, and publisher of the Modified Version as given on the Title Page. If there is no section Entitled ``History'' in the Document, create one stating the title, year, authors, and publisher of the Document as given on its Title Page, then add an item describing the Modified Version as stated in the previous sentence.

@item

Preserve the network location, if any, given in the Document for public access to a Transparent copy of the Document, and likewise the network locations given in the Document for previous versions it was based on. These may be placed in the ``History'' section. You may omit a network location for a work that was published at least four years before the Document itself, or if the original publisher of the version it refers to gives permission.

@item

For any section Entitled ``Acknowledgements'' or ``Dedications'', Preserve the Title of the section, and preserve in the section all the substance and tone of each of the contributor acknowledgements and/or dedications given therein.

@item

Preserve all the Invariant Sections of the Document, unaltered in their text and in their titles. Section numbers or the equivalent are not considered part of the section titles.

@item

Delete any section Entitled ``Endorsements''. Such a section may not be included in the Modified Version.

@item

Do not retitle any existing section to be Entitled ``Endorsements'' or to conflict in title with any Invariant Section.

@item

Preserve any Warranty Disclaimers.

@end enumerate

If the Modified Version includes new front-matter sections or appendices that qualify as Secondary Sections and contain no material copied from the Document,

you may at your option designate some or all of these sections as invariant. To do this, add their titles to the list of Invariant Sections in the Modified Version's license notice. These titles must be distinct from any other section titles.

You may add a section Entitled ``Endorsements'', provided it contains nothing but endorsements of your Modified Version by various parties---for example, statements of peer review or that the text has been approved by an organization as the authoritative definition of a standard.

You may add a passage of up to five words as a Front-Cover Text, and a passage of up to 25 words as a Back-Cover Text, to the end of the list of Cover Texts in the Modified Version. Only one passage of Front-Cover Text and one of Back-Cover Text may be added by (or through arrangements made by) any one entity. If the Document already includes a cover text for the same cover, previously added by you or by arrangement made by the same entity you are acting on behalf of, you may not add another; but you may replace the old one, on explicit permission from the previous publisher that added the old one.

The author(s) and publisher(s) of the Document do not by this License give permission to use their names for publicity for or to assert or imply endorsement of any Modified Version.

@item

## COMBINING DOCUMENTS

You may combine the Document with other documents released under this License, under the terms defined in section 4 above for modified versions, provided that you include in the combination all of the Invariant Sections of all of the original documents, unmodified, and list them all as Invariant Sections of your combined work in its license notice, and that you preserve all their Warranty Disclaimers.

The combined work need only contain one copy of this License, and multiple identical Invariant Sections may be replaced with a single copy. If there are multiple Invariant Sections with the same name but different contents, make the title of each such section unique by adding at the end of it, in parentheses, the name of the original

author or publisher of that section if known, or else a unique number.

Make the same adjustment to the section titles in the list of

Invariant Sections in the license notice of the combined work.

In the combination, you must combine any sections Entitled ``History" in the various original documents, forming one section Entitled ``History"; likewise combine any sections Entitled ``Acknowledgements", and any sections Entitled ``Dedications". You must delete all sections Entitled ``Endorsements."

@item

## COLLECTIONS OF DOCUMENTS

You may make a collection consisting of the Document and other documents released under this License, and replace the individual copies of this License in the various documents with a single copy that is included in the collection, provided that you follow the rules of this License for verbatim copying of each of the documents in all other respects.

You may extract

a single document from such a collection, and distribute it individually under this License, provided you insert a copy of this License into the extracted document, and follow this License in all other respects regarding verbatim copying of that document.

@item

## AGGREGATION WITH INDEPENDENT WORKS

A compilation of the Document or its derivatives with other separate and independent documents or works, in or on a volume of a storage or distribution medium, is called an ``aggregate" if the copyright resulting from the compilation is not used to limit the legal rights of the compilation's users beyond what the individual works permit. When the Document is included in an aggregate, this License does not apply to the other works in the aggregate which are not themselves derivative works of the Document.

If the Cover Text requirement of section 3 is applicable to these copies of the Document, then if the Document is less than one half of the entire aggregate, the Document's Cover Texts may be placed on covers that bracket the Document within the aggregate, or the electronic equivalent of covers if the Document is in electronic form. Otherwise they must appear on printed covers that bracket the whole aggregate.

@item

## TRANSLATION



Translation is considered a kind of modification, so you may distribute translations of the Document under the terms of section 4. Replacing Invariant Sections with translations requires special permission from their copyright holders, but you may include translations of some or all Invariant Sections in addition to the original versions of these Invariant Sections. You may include a translation of this License, and all the license notices in the Document, and any Warranty Disclaimers, provided that you also include the original English version of this License and the original versions of those notices and disclaimers. In case of a disagreement between the translation and the original version of this License or a notice or disclaimer, the original version will prevail.

If a section in the Document is Entitled ``Acknowledgements'', ``Dedications'', or ``History'', the requirement (section 4) to Preserve its Title (section 1) will typically require changing the actual title.

@item

## TERMINATION

You may not copy, modify, sublicense, or distribute the Document except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, or distribute it is void, and will automatically terminate your rights under this License.

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, receipt of a copy of some or all of the same material does not give you any rights to use it.

@item

## FUTURE REVISIONS OF THIS LICENSE

The Free Software Foundation may publish new, revised versions of the GNU Free Documentation 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. See [@uref{http://www.gnu.org/copyleft/}](http://www.gnu.org/copyleft/).

Each version of the License is given a distinguishing version number. If the Document specifies that a particular numbered version of this License "or any later version" applies to it, you have the option of following the terms and conditions either of that specified version or of any later version that has been published (not as a draft) by the Free Software Foundation. If the Document does not specify a version number of this License, you may choose any version ever published (not as a draft) by the Free Software Foundation. If the Document specifies that a proxy can decide which future versions of this License can be used, that proxy's public statement of acceptance of a version permanently authorizes you to choose that version for the Document.

@item

## RELICENSING

"Massive Multiauthor Collaboration Site" (or "MMC Site") means any World Wide Web server that publishes copyrightable works and also provides prominent facilities for anybody to edit those works. A public wiki that anybody can edit is an example of such a server. A "Massive Multiauthor Collaboration" (or "MMC") contained in the site means any set of copyrightable works thus published on the MMC site.

"CC-BY-SA" means the Creative Commons Attribution-Share Alike 3.0 license published by Creative Commons Corporation, a not-for-profit corporation with a principal place of business in San Francisco, California, as well as future copyleft versions of that license published by that same organization.

"Incorporate" means to publish or republish a Document, in whole or in part, as part of another Document.

An MMC is "eligible for relicensing" if it is licensed under this License, and if all works that were first published under this License somewhere other than this MMC, and subsequently incorporated in whole

or in part into the MMC, (1) had no cover texts or invariant sections, and (2) were thus incorporated prior to November 1, 2008.

The operator of an MMC Site may republish an MMC contained in the site under CC-BY-SA on the same site at any time before August 1, 2009, provided the MMC is eligible for relicensing.

@end enumerate

@page

@heading ADDENDUM: How to use this License for your documents

To use this License in a document you have written, include a copy of the License in the document and put the following copyright and license notices just after the title page:

@smallexample

@group

Copyright (C) @var{year} @var{your name}.

Permission is granted to copy, distribute and/or modify this document under the terms of the GNU Free Documentation License, Version 1.3 or any later version published by the Free Software Foundation; with no Invariant Sections, no Front-Cover Texts, and no Back-Cover Texts. A copy of the license is included in the section entitled ``GNU Free Documentation License''.

@end group

@end smallexample

If you have Invariant Sections, Front-Cover Texts and Back-Cover Texts, replace the ``with@dots{ }Texts." line with this:

@smallexample

@group

with the Invariant Sections being @var{list their titles}, with the Front-Cover

Texts being @var{list}, and with the Back-Cover Texts

being @var{list}.

@end group

@end smallexample

If you have Invariant Sections without Cover Texts, or some other combination of the three, merge those two alternatives to suit the situation.

If your document contains nontrivial examples of program code, we recommend releasing these examples in parallel under your choice of free software license, such as the GNU General Public License,

to permit their use in free software.

@c Local Variables:

@c ispell-local-pdict: "ispell-dict"

@c End:

## GNU 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.

### 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:

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

```
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>>.

GNU GENERAL PUBLIC LICENSE

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.

59 Temple Place, Suite 330, Boston, MA 02111-1307 USA

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

## Preamble

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

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

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

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

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

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

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free

program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

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

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

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

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

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

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

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

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

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

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

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

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

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

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

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

b) Accompany it with a written offer, valid for at least three

years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

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

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

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

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

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

6. Each

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

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

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

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

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

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among

countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

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

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

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

#### NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW.

EXCEPT WHEN

OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

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

IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.



## END OF TERMS AND CONDITIONS

### How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

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

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

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

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA

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

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

```
Gnomovision version 69, Copyright (C) year name of author
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute it
under certain conditions; type `show c' for details.
```

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

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

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

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

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

## 1.13 attr 2.4.48-3.el8

### 1.13.1 Available under license :

Most components of the "attr" package are licensed under Version 2.1 of the GNU Lesser General Public License (see below).  
below.

Some components (as annotated in the source) are licensed under Version 2 of the GNU General Public License (see COPYING).

-----  
**GNU LESSER GENERAL PUBLIC LICENSE**

Version 2.1, February 1999

Copyright (C) 1991, 1999 Free Software Foundation, Inc.  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA  
Everyone is permitted to copy and distribute verbatim copies  
of this license document, but changing it is not allowed.

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

#### Preamble

The licenses for most software are designed to take away your  
freedom to share and change it. By contrast, the GNU General Public  
Licenses are intended to guarantee your

freedom to share and change  
free software--to make sure the software is free for all its users.

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

When we speak of free software, we are referring to freedom of use, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish); that you receive source code or can get it if you want it; that you can change the software and use pieces of it in new free programs; and that you are informed that you can do these things.

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

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

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

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

Finally, software patents pose a constant threat to the existence of any free program. We wish to make sure that a company cannot effectively restrict the users of a free program by obtaining a restrictive license from a patent holder. Therefore, we insist that

any patent license obtained for a version of the library must be consistent with the full freedom of use specified in this license.

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

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

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

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

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

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

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

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

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

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

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

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

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

1. You may copy and distribute verbatim copies of the Library's complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact

all the notices that refer to this License and to the absence of any warranty; and distribute a copy of this License along with the Library.

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

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

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

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

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

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

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

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

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

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

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

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

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

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

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

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

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

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

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



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

b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

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

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

7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate

distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:

- a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.
- b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

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

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

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

11. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Library at all. For example, if a patent

license would not permit royalty-free redistribution of the Library by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Library.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances.

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

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

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

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

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

14. If you wish to incorporate parts of the Library into other free programs

whose distribution conditions are incompatible with these, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

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

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

#### END OF TERMS AND CONDITIONS

##### How to Apply These Terms to Your New Libraries

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

To apply these terms, attach the following notices to the library. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the library's name and a brief 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!  
Most components of the "attr" package are licensed under Version 2.1 of the GNU Lesser General Public License (see COPYING.LGPL).

Some components (as annotated in the source) are licensed under Version 2 of the GNU General Public License (see below),

-----  
GNU GENERAL PUBLIC LICENSE  
Version 2, June 1991

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

Preamble

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

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

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

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

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

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

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

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

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

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

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

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

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

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

- a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.
- b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third

parties under the terms of this License.

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

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

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

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

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

- a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections



1 and 2 above on a medium customarily used for software interchange; or,

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

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

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

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

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

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to

these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

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

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

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

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

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

9. The Free Software Foundation

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

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

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

#### NO WARRANTY

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

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

#### END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

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

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

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

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

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

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

```
Gnomovision version 69, Copyright (C) year name of author  
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.  
This is free software, and you are welcome to redistribute it  
under certain conditions; type `show c' for details.
```

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

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

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

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

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

## 1.14 libmnl 1.0.4-6.el8

### 1.14.1 Available under license :

GNU LESSER GENERAL PUBLIC LICENSE  
Version 2.1, February 1999

Copyright (C) 1991, 1999 Free Software Foundation, Inc.  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA  
Everyone is permitted to copy and distribute verbatim copies  
of this license document, but changing it is not allowed.

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

#### Preamble

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

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

When we speak of free software, we are referring to freedom of use,  
not price. Our General Public Licenses are designed to make sure that  
you have the freedom to distribute copies of free software (and charge  
for this service if you wish); that you receive source code or can get

it if you want it; that you can change the software and use pieces of it in new free programs; and that you are informed that you can do these things.

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

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

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

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

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

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

When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits

such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.

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

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

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

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

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

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

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

Each licensee is addressed as "you".

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

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

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

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

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

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

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

a) The modified work must itself be a software library.



- b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.
  
- c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.
  
- d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

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

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

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

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

3. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do

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

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

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

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

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

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

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

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

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

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

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

a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is

interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally

distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

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

7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:

a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.

b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

8. You may not copy, modify, sublicense, link with, or distribute

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

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

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

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

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system

which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

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

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

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

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

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

#### NO WARRANTY

15. BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR

OTHER PARTIES PROVIDE THE LIBRARY "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

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

#### END OF TERMS AND CONDITIONS

#### How to Apply These Terms to Your New Libraries

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

To apply these terms, attach the following notices to the library. It is safest to attach them to the start of each source file to most effectively convey

the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the library's name and a brief 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!

## 1.15 libpcap 1.9.1

### 1.15.1 Available under license :

License: BSD

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 names of the authors may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED ``AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

/\*-

- \* Copyright (c) 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997
- \* The Regents of the University of California. All rights reserved.
- \*
- \* This code is derived from the Stanford/CMU enet packet filter,
- \* (net/enet.c) distributed as part of 4.3BSD, and code contributed



\* to Berkeley by Steven McCanne and Van Jacobson both of Lawrence  
 \* Berkeley Laboratory.  
 \*  
 \* Redistribution and use in source and binary forms, with or without  
 \* modification, are permitted provided that the following conditions  
 \* are met:  
 \* 1. Redistributions of source code must retain the above copyright  
 \* notice, this list of conditions and the following disclaimer.  
 \* 2. Redistributions in binary form must reproduce the above copyright  
 \* notice, this list of conditions and the following disclaimer in the  
 \* documentation and/or other materials provided with the distribution.  
 \* 3. All advertising materials mentioning features or use of this software  
 \* must display the following acknowledgement:  
 \* This product includes software developed by the University of  
 \* California, Berkeley and its contributors.  
 \* 4. Neither the name of the University nor the names of its contributors  
 \* may be used to endorse or promote products derived from this software  
 \* without specific prior written permission.  
 \*  
 \* THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS ``AS IS" AND  
 \* ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE  
 \* IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE  
 \* ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE  
 \* FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL  
 \* DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS  
 \* OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)  
 \* HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT  
 \* LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING  
 \* IN ANY WAY  
 \* OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF  
 \* SUCH DAMAGE.  
 \*/

## 1.16 libxml2 2.9.10

### 1.16.1 Available under license :

Except where otherwise noted in the source code (e.g. the files hash.c, list.c and the trio files, which are covered by a similar licence but with different Copyright notices) all the files are:

Copyright (C) 1998-2012 Daniel Veillard. All Rights Reserved.

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

nished to do so, subject to the following conditions:

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

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

## 1.17 popt 1.16-14.el8

### 1.17.1 Available under license :

Copyright (c) 1998 Red Hat Software

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 X CONSORTIUM BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Except as contained in this notice, the name of the X Consortium shall not be used in advertising or otherwise to promote the sale, use or other dealings in this Software without prior written authorization from the X Consortium.

## 1.18 libxslt 1.1.34

## 1.18.1 Available under license :

DocBk XML V3.1.7 DTD  
Copyright (C) 1998, 1999 Norman Walsh  
<http://nwalsh.com/docbook/xml/>

You may distribute this DTD under the same terms as DocBook.

Please direct all questions and comments about this DTD to  
Norman Walsh, <[ndw@nwalsh.com](mailto:ndw@nwalsh.com)>.

This DTD is based on the DocBook V3.1 DTD from OASIS:

[DocBook is] Copyright 1992, 1993, 1994, 1995, 1996, 1998,  
1999 HaL Computer Systems, Inc., O'Reilly & Associates, Inc.,  
ArborText, Inc., Fujitsu Software Corporation, and the  
Organization for the Advancement of Structured Information  
Standards (OASIS).

Permission to use, copy, modify and distribute the DocBook  
DTD and its accompanying documentation for any purpose and  
without fee is hereby granted in perpetuity, provided that  
the above copyright notice and this paragraph appear in all  
copies. The copyright holders make no representation about  
the suitability of the DTD for any purpose. It is provided  
"as is" without expressed or implied warranty.

For  
more information about the DocBook DTD, see  
<http://www.oasis-open.org/docbook/>  
Licence for libxslt except libxslt

-----  
Copyright (C) 2001-2002 Daniel Veillard. All Rights Reserved.

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

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

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR  
IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FIT-  
NESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE  
DANIEL VEILLARD BE LIABLE FOR ANY CLAIM,

DAMAGES OR OTHER LIABILITY, WHETHER  
IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CON-  
NECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Except as contained in this notice, the name of Daniel Veillard shall not  
be used in advertising or otherwise to promote the sale, use or other deal-  
ings in this Software without prior written authorization from him.

-----  
Licence for libxslt  
-----

Copyright (C) 2001-2002 Thomas Broyer, Charlie Bozeman and Daniel Veillard.  
All Rights Reserved.

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

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

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

Except as contained in this notice, the name of the authors shall not  
be used in advertising or otherwise to promote the sale, use or other deal-  
ings in this Software without prior written authorization from him.

-----  
Simplified DocBk XML V3.1.7.1 DTD  
Copyright (C) 1999 Norman Walsh  
<http://nwalsh.com/docbook/simple/>

You may distribute this DTD under the same terms as DocBook.

Please direct all questions and comments about this DTD to  
Norman Walsh, <[ndw@nwalsh.com](mailto:ndw@nwalsh.com)>.

This DTD is based on the DocBk XML DTD, which is in turn based  
on the DocBook V3.1 DTD from OASIS:

[DocBook is] Copyright 1992, 1993, 1994, 1995, 1996, 1998, 1999 HaL Computer Systems, Inc., O'Reilly & Associates, Inc., ArborText, Inc., Fujitsu Software Corporation, and the Organization for the Advancement of Structured Information Standards (OASIS).

Permission to use, copy, modify and distribute the DocBook DTD and its accompanying documentation for any purpose and without fee is hereby granted in perpetuity, provided that the above copyright notice and this paragraph appear in all copies. The copyright holders make no representation about the suitability of the DTD for any purpose. It is provided "as is" without expressed or implied warranty.

For more information about the DocBook DTD, see <http://www.oasis-open.org/docbook/>  
Simplified DocBook XML V4.1.2.4 DTD  
Copyright (C) 1999, 2000 Norman Walsh  
<http://nwalsh.com/docbook/simple/>

You may distribute this DTD under the same terms as DocBook.

Please direct all questions and comments about this DTD to Norman Walsh, <[ndw@nwalsh.com](mailto:ndw@nwalsh.com)>.

This DTD is based on the DocBook XML V4.1.2 DTD from OASIS:

[DocBook is] Copyright 1992-2000 HaL Computer Systems, Inc., O'Reilly & Associates, Inc., ArborText, Inc., Fujitsu Software Corporation, Norman Walsh, and the Organization for the Advancement of Structured Information Standards (OASIS).

Permission to use, copy, modify and distribute the DocBook DTD and its accompanying documentation for any purpose and without fee is hereby granted in perpetuity, provided that the above copyright notice and this paragraph appear in all copies. The copyright holders make no representation about the suitability of the DTD for any purpose. It is provided "as is" without expressed or implied warranty.

For more information about the DocBook DTD, see <http://www.oasis-open.org/docbook/>

# 1.19 findutils 4.7.0

## 1.19.1 Available under license :

GNU GENERAL PUBLIC LICENSE

Version 3, 29 June 2007

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

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

### Preamble

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

The licenses for most software and other practical works are designed to take away your freedom to share and change the works. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change all versions of a program--to make sure it remains free software for all its users. We, the Free Software Foundation, use the GNU General Public License for most of our software; it applies also to any other work released this way by its authors. You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for them if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs, and that you know you can do these things.

To protect your rights, we need to prevent others from denying you these rights or asking you to surrender the rights. Therefore, you have certain responsibilities if you distribute copies of the software, or if you modify it: responsibilities to respect the freedom of others.

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

Developers that use the GNU GPL protect your rights with two steps:

- (1) assert copyright on the software, and
- (2) offer you this License giving you legal permission to copy, distribute and/or modify it.

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

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

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

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

## TERMS AND CONDITIONS

### 0. Definitions.

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

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

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

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

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

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

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

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

#### 1. Source Code.

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

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

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

The "Corresponding Source" for a work in object code form means all



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

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

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

## 2. Basic Permissions.

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

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

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

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

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

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

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

#### 4. Conveying Verbatim Copies.

You may convey verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice; keep intact all notices stating that this License and any non-permissive terms added in accord with section 7 apply to the code; keep intact all notices of the absence of any warranty; and give all recipients a copy of this License along with the Program.

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

#### 5. Conveying Modified Source Versions.

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

- a) The work must carry prominent notices stating that you modified it, and giving a relevant date.
- b) The work must carry prominent notices stating that it is released under this License and any conditions added under section 7. This requirement modifies the requirement in section 4 to "keep intact all notices".
- c) You must license the entire work, as a whole, under this License to anyone who comes into possession of a copy. This License will therefore apply, along with any applicable section 7 additional terms, to the whole of the work, and all its parts,

regardless of how they are packaged. This License gives no permission to license the work in any other way, but it does not invalidate such permission if you have separately received it.

d) If the work has interactive user interfaces, each must display Appropriate Legal Notices; however, if the Program has interactive interfaces that do not display Appropriate Legal Notices, your work need not make them do so.

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

#### 6. Conveying Non-Source Forms.

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

a) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by the Corresponding Source fixed on a durable physical medium customarily used for software interchange.

b) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by a written offer, valid for at least three years and valid for as long as you offer spare parts or customer support for that product model, to give anyone who possesses the object code either (1) a copy of the Corresponding Source for all the software in the product that is covered by this License, on a durable physical medium customarily used for software interchange, for a price no more than your reasonable cost of physically performing this conveying of source, or (2) access to copy the Corresponding Source from a network server at no charge.

c) Convey individual copies of the object code with a copy of the written offer to provide the Corresponding Source. This alternative is allowed only occasionally and noncommercially, and

only if you received the object code with such an offer, in accord with subsection 6b.

d) Convey the object code by offering access from a designated place (gratis or for a charge), and offer equivalent access to the Corresponding Source in the same way through the same place at no further charge. You need not require recipients to copy the Corresponding Source along with the object code. If the place to copy the object code is a network server, the Corresponding Source may be on a different server (operated by you or a third party) that supports equivalent copying facilities, provided you maintain clear directions next to the object code saying where to find the Corresponding Source. Regardless of what server hosts the Corresponding Source, you remain obligated to ensure that it is available for as long as needed to satisfy these requirements.

e) Convey the object code using peer-to-peer transmission, provided you inform other peers where the object code and Corresponding Source of the work are being offered to the general public at no charge under subsection 6d.

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

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

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

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

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

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

## 7. Additional Terms.

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

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

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

that material) supplement the terms of this License with terms:

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

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

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

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

## 8. Termination.

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

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

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

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

#### 9. Acceptance Not Required for Having Copies.

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

#### 10. Automatic Licensing of Downstream Recipients.

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

An "entity transaction" is a transaction transferring control of an organization, or substantially all assets of one, or subdividing an

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

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

## 11. Patents.

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

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

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

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

If you convey a covered work, knowingly relying on a patent license, and the Corresponding Source of the work is not available for anyone



to copy, free of charge and under the terms of this License, through a publicly available network server or other readily accessible means, then you must either (1) cause the Corresponding Source to be so available, or (2) arrange to deprive yourself of the benefit of the patent license for this particular work, or (3) arrange, in a manner consistent with the requirements of this License, to extend the patent license to downstream recipients. "Knowingly relying" means you have actual knowledge that, but for the patent license, your conveying the covered work in a country, or your recipient's use of the covered work in a country, would infringe one or more identifiable patents in that country that you have reason to believe are valid.

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

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

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

## 12. No Surrender of Others' Freedom.

If conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot convey a covered work so as to satisfy simultaneously your obligations under this

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

### 13. Use with the GNU Affero General Public License.

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

### 14. Revised Versions of this License.

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

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

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

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

### 15. Disclaimer of Warranty.

THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY

APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16. Limitation of Liability.

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

17.

Interpretation of Sections 15 and 16.

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

## END OF TERMS AND CONDITIONS

### How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively state the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

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

This program is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program. If not, see <https://www.gnu.org/licenses/>.

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

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

```
<program> Copyright (C) <year> <name of author>  
This program comes with ABSOLUTELY NO WARRANTY; for details type `show w'.  
This is free software, and you are welcome to redistribute it  
under certain conditions; type `show c' for details.
```

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, your program's commands might be different; for a GUI interface, you would use an "about box".

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

The GNU General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Lesser General Public License instead of this License. But first, please read <https://www.gnu.org/licenses/why-not-lgpl.html>.

## 1.20 tcpdump 4.9.3

### 1.20.1 Available under license :

License: BSD

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 names of the authors may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED ``AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

## 1.21 libunistring 0.9.10

### 1.21.1 Available under license :

@c The GNU Free Documentation License.  
@center Version 1.3, 3 November 2008

@c This file is intended to be included within another document,  
@c hence no sectioning command or @node.

@display  
Copyright @copyright{ } 2000, 2001, 2002, 2007, 2008 Free Software Foundation, Inc.  
@uref{http://fsf.org/}

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

@enumerate 0  
@item  
PREAMBLE

The purpose of this License is to make a manual, textbook, or other functional and useful document @dfn{free} in the sense of freedom: to assure everyone the effective freedom to copy and redistribute it, with or without modifying it, either commercially or noncommercially. Secondly, this License preserves for the author and publisher a way to get credit for their work, while not being considered responsible for modifications made by others.

This License is a kind of ``copyleft", which means that derivative works of the document

must themselves be free in the same sense. It complements the GNU General Public License, which is a copyleft license designed for free software.

We have designed this License in order to use it for manuals for free software, because free software needs free documentation: a free program should come with manuals providing the same freedoms that the software does. But this License is not limited to software manuals; it can be used for any textual work, regardless of subject matter or whether it is published as a printed book. We recommend this License principally for works whose purpose is instruction or reference.

@item

## APPLICABILITY AND DEFINITIONS

This License applies to any manual or other work, in any medium, that contains a notice placed by the copyright holder saying it can be distributed under the terms of this License. Such a notice grants a world-wide, royalty-free license, unlimited in duration, to use that work under the conditions stated herein. The ``Document'', below, refers

to any such manual or work. Any member of the public is a licensee, and is addressed as ``you''. You accept the license if you copy, modify or distribute the work in a way requiring permission under copyright law.

A ``Modified Version'' of the Document means any work containing the Document or a portion of it, either copied verbatim, or with modifications and/or translated into another language.

A ``Secondary Section'' is a named appendix or a front-matter section of the Document that deals exclusively with the relationship of the publishers or authors of the Document to the Document's overall subject (or to related matters) and contains nothing that could fall directly within that overall subject. (Thus, if the Document is in part a textbook of mathematics, a Secondary Section may not explain any mathematics.) The relationship could be a matter of historical connection with the subject or with related matters, or of legal, commercial, philosophical, ethical or political position regarding them.

The ``Invariant Sections'' are certain Secondary Sections whose titles are designated, as being those of Invariant Sections, in the notice that says that the Document is released under this License. If a section does not fit the above definition of Secondary then it is not allowed to be designated as Invariant. The Document may contain zero Invariant Sections. If the Document does not identify any Invariant

Sections then there are none.

The "Cover Texts" are certain short passages of text that are listed, as Front-Cover Texts or Back-Cover Texts, in the notice that says that the Document is released under this License. A Front-Cover Text may be at most 5 words, and a Back-Cover Text may be at most 25 words.

A "Transparent" copy of the Document means a machine-readable copy, represented in a format whose specification is available to the general public, that is suitable for revising the document straightforwardly with generic text editors or (for images composed of pixels) generic paint programs or (for drawings) some widely available drawing editor, and that is suitable for input to text formatters or for automatic translation to a variety of formats suitable for input to text formatters. A copy made in an otherwise Transparent file format whose markup, or absence of markup, has been arranged to thwart or discourage subsequent modification by readers is not Transparent. An image format is not Transparent if used for any substantial amount of text. A copy that is not "Transparent" is called "Opaque".

Examples of suitable formats for Transparent copies include plain `@sc{ascii}` without markup, Texinfo input format, `La@TeX{}` input format, `@acronym{SGML}` or `@acronym{XML}` using a publicly available `@acronym{DTD}`, and standard-conforming simple `@acronym{HTML}`, PostScript or `@acronym{PDF}` designed for human modification. Examples of transparent image formats include `@acronym{PNG}`, `@acronym{XCF}` and `@acronym{JPG}`. Opaque formats include proprietary formats that can be read and edited only by proprietary word processors, `@acronym{SGML}` or `@acronym{XML}` for which the `@acronym{DTD}` and/or processing tools are not generally available, and the machine-generated `@acronym{HTML}`, PostScript or `@acronym{PDF}` produced by some word processors for output purposes only.

The "Title Page" means, for a printed book, the title page itself, plus such following pages as are needed to hold, legibly, the material this License requires to appear in the title page. For works in formats which do not have any title page as such, "Title Page" means the text near the most prominent appearance of the work's title, preceding the beginning of the body of the text.

The "publisher" means any person or entity that distributes copies of the Document to the public.

A section "Entitled XYZ" means a named subunit of the Document whose title either is precisely XYZ or contains XYZ in parentheses following text that translates XYZ in

another language. (Here XYZ stands for a specific section name mentioned below, such as "Acknowledgements", "Dedications", "Endorsements", or "History".) To "Preserve the Title" of such a section when you modify the Document means that it remains a section "Entitled XYZ" according to this definition.

The Document may include Warranty Disclaimers next to the notice which states that this License applies to the Document. These Warranty Disclaimers are considered to be included by reference in this License, but only as regards disclaiming warranties: any other implication that these Warranty Disclaimers may have is void and has no effect on the meaning of this License.

@item

### VERBATIM COPYING

You may copy and distribute the Document in any medium, either commercially or noncommercially, provided that this License, the copyright notices, and the license notice saying this License applies to the Document are reproduced in all copies, and that you add no other conditions whatsoever to those of this License. You may not use technical measures to obstruct or control the reading or further copying of the copies you make or distribute. However, you may accept compensation in exchange for copies. If you distribute a large enough number of copies you must also follow the conditions in section 3.

You may also lend copies, under the same conditions stated above, and you may publicly display copies.

@item

### COPYING IN QUANTITY

If you publish printed copies (or copies in media that commonly have printed covers) of the Document, numbering more than 100, and the Document's license notice requires Cover Texts, you must enclose the copies in covers that carry, clearly and legibly, all these Cover Texts: Front-Cover Texts on the front cover, and Back-Cover Texts on the back cover. Both covers must also clearly and legibly identify you as the publisher of these copies. The front cover must present the full title with all words of the title equally prominent and visible.

You may add other material on the covers in addition.

Copying with changes limited to the covers, as long as they preserve the title of the Document and satisfy these conditions, can be treated as verbatim copying in other respects.

If the required texts for either cover are too voluminous to fit



legibly, you should put the first ones listed (as many as fit reasonably) on the actual cover, and continue the rest onto adjacent pages.

If you publish or distribute Opaque copies of the Document numbering more than 100, you must either include a machine-readable Transparent copy along with each Opaque copy, or state in or with each Opaque copy a computer-network location from which the general network-using public has access to download using public-standard network protocols a complete Transparent copy of the Document, free of added material.

If you use the latter option, you must take reasonably prudent steps, when you begin distribution of Opaque copies in quantity, to ensure that

this Transparent copy will remain thus accessible at the stated location until at least one year after the last time you distribute an Opaque copy (directly or through your agents or retailers) of that edition to the public.

It is requested, but not required, that you contact the authors of the Document well before redistributing any large number of copies, to give them a chance to provide you with an updated version of the Document.

@item

## MODIFICATIONS

You may copy and distribute a Modified Version of the Document under the conditions of sections 2 and 3 above, provided that you release the Modified Version under precisely this License, with the Modified Version filling the role of the Document, thus licensing distribution and modification of the Modified Version to whoever possesses a copy of it. In addition, you must do these things in the Modified Version:

@enumerate A

@item

Use in the Title Page (and on the covers, if any) a title distinct from that of the Document, and from

those of previous versions

(which should, if there were any, be listed in the History section of the Document). You may use the same title as a previous version if the original publisher of that version gives permission.

@item

List on the Title Page, as authors, one or more persons or entities responsible for authorship of the modifications in the Modified Version, together with at least five of the principal authors of the Document (all of its principal authors, if it has fewer than five), unless they release you from this requirement.

@item

State on the Title page the name of the publisher of the Modified Version, as the publisher.

@item

Preserve all the copyright notices of the Document.

@item

Add an appropriate copyright notice for your modifications adjacent to the other copyright notices.

@item

Include, immediately after the copyright notices, a license notice giving the public permission to use the Modified Version under the terms of this License, in the form shown in the Addendum below.

@item

Preserve in that license notice the full lists of Invariant Sections and required Cover Texts given in the Document's license notice.

@item

Include an unaltered copy of this License.

@item

Preserve the section Entitled ``History'', Preserve its Title, and add to it an item stating at least the title, year, new authors, and publisher of the Modified Version as given on the Title Page. If there is no section Entitled ``History'' in the Document, create one stating the title, year, authors, and publisher of the Document as given on its Title Page, then add an item describing the Modified Version as stated in the previous sentence.

@item

Preserve the network location, if any, given in the Document for public access to a Transparent copy of the Document, and likewise the network locations given in the Document for previous versions it was based on. These may be placed in the ``History'' section. You may omit a network location for a work that was published at least four years before the Document itself, or if the original publisher of the version it refers to gives permission.

@item

For any section Entitled ``Acknowledgements'' or ``Dedications'', Preserve the Title of the section, and preserve in the section all the substance and tone of each of the contributor acknowledgements and/or dedications given therein.

@item

Preserve all the Invariant Sections of the Document, unaltered in their text and in their titles. Section numbers or the equivalent are not considered part of the section titles.

@item

Delete any section Entitled ``Endorsements''. Such a section may not be included in the Modified Version.

@item

Do not retitle any existing section to be Entitled ``Endorsements'' or to conflict in title with any Invariant Section.

@item

Preserve any Warranty Disclaimers.

@end enumerate

If the Modified Version includes new front-matter sections or appendices that qualify as Secondary Sections and contain no material copied from the Document, you may at your option designate some or all of these sections as invariant. To do this, add their titles to the list of Invariant Sections in the Modified Version's license notice. These titles must be distinct from any other section titles.

You may add a section Entitled ``Endorsements'', provided it contains nothing but endorsements of your Modified Version by various parties---for example, statements of peer review or that the text has been approved by an organization as the authoritative definition of a standard.

You may add a passage of up to five words as a Front-Cover Text, and a passage of up to 25 words as a Back-Cover Text, to the end of the list of Cover Texts in the Modified Version. Only one passage of Front-Cover Text and one of Back-Cover Text may be added by (or through arrangements made by) any one entity. If the Document already includes a cover text for the same cover, previously added by you or by arrangement made by the same entity you are acting on behalf of, you may not add another; but you may replace the old one, on explicit permission from the previous publisher that added the old one.

The author(s) and publisher(s) of the Document do not by this License give permission to use their names for publicity for or to assert or imply endorsement of any Modified Version.

@item

## COMBINING DOCUMENTS

You may combine the Document with other documents released under this License, under the terms defined in section 4 above for modified versions, provided that you include in the combination all of the Invariant Sections of all of the original documents, unmodified, and list them all as Invariant Sections of your combined work in its license notice, and that you preserve all their Warranty Disclaimers.

The combined work need only contain one copy of this License, and multiple identical Invariant Sections may be replaced with a single copy. If there are multiple Invariant Sections with the same name but different contents, make the title of each such section unique by adding at the end of it, in parentheses, the name of the original author or publisher of that section if known, or else a unique number. Make the same adjustment to the section titles in the list of Invariant Sections in the license notice of the combined work.

In the combination, you must combine any sections Entitled ``History'' in the various original documents, forming one section Entitled ``History''; likewise combine any sections Entitled ``Acknowledgements'', and any sections Entitled ``Dedications''. You must delete all sections Entitled ``Endorsements.''

@item

## COLLECTIONS OF DOCUMENTS

You may make a collection consisting of the Document and other documents released under this License, and replace the individual copies of this License in the various documents with a single copy that is included in the collection, provided that you follow the rules of this License for verbatim copying of each of the documents in all other respects.

You may extract a single document from such a collection, and distribute it individually under this License, provided you insert a copy of this License into the extracted document, and follow this License in all other respects regarding verbatim copying of that document.

@item

## AGGREGATION WITH INDEPENDENT WORKS

A compilation of the Document or its derivatives with other separate and independent documents or works, in or on a volume of a storage or distribution medium, is called an ``aggregate'' if the copyright resulting from the compilation is not used to limit the legal rights of the compilation's users beyond what the individual works permit.

When the Document is included in an aggregate, this License does not apply to the other works in the aggregate which are not themselves derivative works of the Document.

If the Cover Text requirement of section 3 is applicable to these copies of the Document, then if the Document is less than one half of the entire aggregate, the Document's Cover Texts may be placed on covers that bracket the Document within the aggregate, or the electronic equivalent of covers if the Document is in electronic form. Otherwise they must appear on printed covers that bracket the whole aggregate.

@item

## TRANSLATION

Translation is considered a kind of modification, so you may distribute translations of the Document under the terms of section 4. Replacing Invariant Sections with translations requires special permission from their copyright holders, but you may include translations of some or all Invariant Sections in addition to the original versions of these Invariant Sections. You may include a translation of this License, and all the license notices in the Document, and any Warranty Disclaimers, provided that you also include the original English version of this License and the original versions of those notices and disclaimers. In case of a disagreement between the translation and the original version of this License or a notice or disclaimer, the original version will prevail.

If a section in the Document is Entitled ``Acknowledgements'', ``Dedications'', or ``History'', the requirement (section 4) to Preserve its Title (section 1) will typically require changing the actual title.

@item

## TERMINATION

You may not copy, modify, sublicense, or distribute the Document except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, or distribute it is void, and will automatically terminate your rights under this License.

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, receipt of a copy of some or all of the same material does not give you any rights to use it.

@item

#### FUTURE REVISIONS OF THIS LICENSE

The Free Software Foundation may publish new, revised versions of the GNU Free Documentation 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. See <http://www.gnu.org/copyleft/>.

Each version of the License is given a distinguishing version number. If the Document specifies that a particular numbered version of this License "or any later version" applies to it, you have the option of following the terms and conditions either of that specified version or of any later version that has been published (not as a draft) by the Free Software Foundation. If the Document does not specify a version number of this License, you may choose any version ever published (not as a draft) by the Free Software Foundation. If the Document specifies that a proxy can decide which future versions of this License can be used, that proxy's public statement of acceptance of a version permanently authorizes you to choose that version for the Document.

@item

#### RELICENSING

"Massive Multiauthor Collaboration Site" (or "MMC Site") means any World Wide Web server that publishes copyrightable works and also provides prominent facilities for anybody to edit those works. A public wiki that anybody can edit is an example of such a server. A "Massive Multiauthor Collaboration" (or "MMC")

contained in the site means any set of copyrightable works thus published on the MMC site.

``CC-BY-SA" means the Creative Commons Attribution-Share Alike 3.0 license published by Creative Commons Corporation, a not-for-profit corporation with a principal place of business in San Francisco, California, as well as future copyleft versions of that license published by that same organization.

``Incorporate" means to publish or republish a Document, in whole or in part, as part of another Document.

An MMC is ``eligible for relicensing" if it is licensed under this License, and if all works that were first published under this License somewhere other than this MMC, and subsequently incorporated in whole or in part into the MMC, (1) had no cover texts or invariant sections, and (2) were thus incorporated prior to November 1, 2008.

The operator of an MMC Site may republish an MMC contained in the site under CC-BY-SA on the same site at any time before August 1, 2009, provided the MMC is eligible for relicensing.

@end enumerate

@page

@heading ADDENDUM: How to use this License for your documents

To use this License in a document you have written, include a copy of the License in the document and put the following copyright and license notices just after the title page:

@smallexample

@group

Copyright (C) @var{year} @var{your name}.

Permission is granted to copy, distribute and/or modify this document under the terms of the GNU Free Documentation License, Version 1.3 or any later version published by the Free Software Foundation; with no Invariant Sections, no Front-Cover Texts, and no Back-Cover Texts. A copy of the license is included in the section entitled ``GNU Free Documentation License".

@end group

@end smallexample

If you have Invariant Sections, Front-Cover Texts and Back-Cover Texts, replace the ``with@dots{ }Texts." line with this:

```
@smallexample
@group
  with the Invariant Sections being @var{list their titles}, with
  the Front-Cover
Texts being @var{list}, and with the Back-Cover Texts
  being @var{list}.
@end group
@end smallexample
```

If you have Invariant Sections without Cover Texts, or some other combination of the three, merge those two alternatives to suit the situation.

If your document contains nontrivial examples of program code, we recommend releasing these examples in parallel under your choice of free software license, such as the GNU General Public License, to permit their use in free software.

```
@c Local Variables:
@c ispell-local-pdict: "ispell-dict"
@c End:
```

GNU 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.

### 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:

```
<program> Copyright (C) <year> <name of author>  
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>>.  
@c The GNU General Public License.  
@center Version 3, 29 June 2007

@c This file is intended to be included within another document,  
@c hence no sectioning command or @node.

@display  
Copyright @copyright{ } 2007 Free Software Foundation, Inc. @url{<http://fsf.org/>}

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

@heading 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.

@heading TERMS AND CONDITIONS

@enumerate 0

@item 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.

@item 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.

@item 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.

@item 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.

@item 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.

@item 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:

@enumerate a

@item

The work must carry prominent notices stating that you modified it, and giving a relevant date.

@item

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".

@item

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.

@item

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.

@end enumerate

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.

@item 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:

@enumerate a

@item

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.

@item

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.

@item

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.

@item

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.

@item

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.

@end enumerate

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.

@item 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:

@enumerate a

@item

Disclaiming warranty or limiting liability differently from the terms of sections 15 and 16 of this License; or

@item

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

@item

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

@item

Limiting the use for publicity purposes of names of licensors or authors of the material; or

@item

Declining to grant rights under trademark law for use of some trade names, trademarks, or service marks; or

@item

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.

@end enumerate

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.

@item 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.

#### @item 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.

#### @item 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.

@item 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.

@item 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.

@item 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.

@item 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.

@item 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.

@item 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.

@item 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 enumerate

@heading END OF TERMS AND CONDITIONS

@heading 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.

@smallexample

@var{one line to give the program's name and a brief idea of what it does.}

Copyright

(C) @var{year} @var{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 [@url{http://www.gnu.org/licenses/}](http://www.gnu.org/licenses/).  
@end smallexample

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:

```
@smallexample
@var{program} Copyright (C) @var{year} @var{name of author}
This program comes with ABSOLUTELY NO WARRANTY;
for details type @samp{show w}.
This is free software, and you are welcome to redistribute it
under certain conditions; type @samp{show c} for details.
@end smallexample
```

The hypothetical commands `@samp{show w}` and `@samp{show c}` should show the appropriate parts of the General Public License. Of course, 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 [@url{http://www.gnu.org/licenses/}](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 [@url{http://www.gnu.org/philosophy/why-not-lgpl.html}](http://www.gnu.org/philosophy/why-not-lgpl.html).

GNU LESSER GENERAL PUBLIC LICENSE

Version 3, 29 June 2007

Copyright (C) 2007 Free Software Foundation, Inc. [<http://fsf.org/>](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.

## 0. Additional Definitions.

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

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

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

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

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

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

## 1. Exception to Section 3 of the GNU GPL.

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

## 2. Conveying Modified Versions.

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

version:

a) under this License, provided that you make a good faith effort to ensure that, in the event an Application does not supply the function or data, the facility still operates, and performs whatever part of its purpose remains meaningful, or

b) under the GNU GPL, with none of the additional permissions of this License applicable to that copy.

### 3. Object Code Incorporating Material from Library Header Files.

The object code form of an Application may incorporate material from a header file that is part of the Library. You may convey such object code under terms of your choice, provided that, if the incorporated material is not limited to numerical parameters, data structure layouts and accessors, or small macros, inline functions and templates (ten or fewer lines in length), you do both of the following:

a) Give prominent notice with each copy of the object code that the Library is used in it and that the Library and its use are covered by this License.

b) Accompany the object code with a copy of the GNU GPL and this license document.

### 4. Combined Works.

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

a) Give prominent notice with each copy of the Combined Work that the Library is used in it and that the Library and its use are covered by this License.

b) Accompany the Combined Work with a copy of the GNU GPL and this license document.

c) For a Combined Work that displays copyright notices during execution, include the copyright notice for the Library among these notices, as well as a reference directing the user to the copies of the GNU GPL and this license document.



d) Do one of the following:

0) Convey the Minimal Corresponding Source under the terms of this License, and the Corresponding Application Code in a form suitable for, and under terms that permit, the user to recombine or relink the Application with a modified version of the Linked Version to produce a modified Combined Work, in the manner specified by section 6 of the GNU GPL for conveying Corresponding Source.

1) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (a) uses at run time a copy of the Library already present on the user's computer system, and (b) will operate properly with a modified version of the Library that is interface-compatible

with the Linked  
Version.

e) Provide Installation Information, but only if you would otherwise be required to provide such information under section 6 of the GNU GPL, and only to the extent that such information is necessary to install and execute a modified version of the Combined Work produced by recombining or relinking the Application with a modified version of the Linked Version. (If you use option 4d0, the Installation Information must accompany the Minimal Corresponding Source and Corresponding Application Code. If you use option 4d1, you must provide the Installation Information in the manner specified by section 6 of the GNU GPL for conveying Corresponding Source.)

## 5. Combined Libraries.

You may place library facilities that are a work based on the Library side by side in a single library together with other library facilities that are not Applications and are not covered by this License, and convey such a combined library under terms of your choice, if you do both of the following:

a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities, conveyed under the terms of this License.

b) Give prominent notice with the combined library that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

## 6. Revised Versions of the GNU Lesser General Public License.

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

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

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

## 1.22 ncurses 6.2

### 1.22.1 Available under license :

Upstream source <https://invisible-island.net/ncurses/ncurses-examples.html>

Current ncurses maintainer: Thomas Dickey <[dickey@invisible-island.net](mailto:dickey@invisible-island.net)>

-----  
Files: \*

Copyright: 1998-2019,2020 Free Software Foundation, Inc.

Licence: X11

Files: alocal.m4 package

Copyright: 2003-2019,2020 by Thomas E. Dickey

Licence: X11

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, distribute with modifications, 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 ABOVE COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Except as contained in this notice, the name(s) of the above copyright holders shall not be used in advertising or otherwise to promote the sale, use or other dealings in this Software without prior written authorization.

-----  
Files: install-sh

Copyright: 1994 X Consortium

Licence: X11

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 X CONSORTIUM BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Except as contained in this notice, the name of the X Consortium shall not be used in advertising or otherwise to promote the sale, use or other dealings in this Software without prior written authorization from the X Consortium.

FSF changes to this file are in the public domain.

Calling this script install-sh is preferred over install.sh, to prevent  
`make` implicit rules from creating a file called install from it  
when there is no Makefile.

This script is compatible with the BSD install script, but was written  
from scratch. It can only install one file at a time, a restriction  
shared with many OS's install programs.

On Debian systems, the complete text of the GNU General  
Public License can be found in '/usr/share/common-licenses/GPL-2'

-- vile:txtmode file-encoding=utf-8

Copyright 2018-2019,2020 Thomas E. Dickey

Copyright 1998-2017,2018 Free Software Foundation, Inc.

Permission is hereby granted, free of charge, to any person obtaining a  
copy of this software and associated documentation files (the  
"Software"), to deal in the Software without restriction, including  
without limitation the rights to use, copy, modify, merge, publish,  
distribute, distribute with modifications, 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 ABOVE COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM,  
DAMAGES OR OTHER LIABILITY, WHETHER  
IN AN ACTION OF CONTRACT, TORT OR  
OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR  
THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Except as contained in this notice, the name(s) of the above copyright  
holders shall not be used in advertising or otherwise to promote the  
sale, use or other dealings in this Software without prior written  
authorization.

-- vile:txtmode fc=72

-- \$Id: COPYING,v 1.9 2020/02/08 13:34:12 tom Exp \$

Upstream source <https://invisible-island.net/ncurses/ncurses.html>

This package is used for testing builds of ncurses.

Current ncurses maintainer: Thomas Dickey <[dickey@invisible-island.net](mailto:dickey@invisible-island.net)>

-----

Files: \*

Copyright: 1998-2019,2020 Free Software Foundation, Inc.

Licence: X11

Files: aclocal.m4 package

Copyright: 1996-2019,2020 by Thomas E. Dickey

Licence: X11

Files: doc/html/NCURSES-Programming-HOWTO.html

Copyright: 2001 by Pradeep Padala

Licence: X11

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, distribute with modifications, 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 ABOVE COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Except as contained in this notice, the name(s) of the above copyright holders shall not be used in advertising or otherwise to promote the sale, use or other dealings in this Software without prior written authorization.

-----  
Files: install-sh

Copyright: 1994

X Consortium

Licence: X11

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 X CONSORTIUM BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Except as contained in this notice, the name of the X Consortium shall not be used in advertising or otherwise to promote the sale, use or other dealings in this Software without prior written authorization from the X Consortium.

-----  
Files: progs/tset.c ncurses/tinfo/read\_termcap.c

Copyright: 1980,1991,1992,1993 The Regents of the University of California.

License: BSD

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

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

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

-- vile: txtmode file-encoding=utf-8

Upstream source <https://invisible-island.net/ncurses/ncurses-examples.html>

Current ncurses maintainer: Thomas Dickey <[dickey@invisible-island.net](mailto:dickey@invisible-island.net)>

-----  
Files: \*

Copyright: 1998-2019,2020 Free Software Foundation, Inc.

Licence: X11

Files: alocal.m4 package

Copyright: 2010-2019,2020 by Thomas E. Dickey

Licence: X11

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, distribute with modifications, 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 ABOVE COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Except as contained in this notice, the name(s) of the above copyright holders shall not be used in advertising or otherwise to promote the sale, use or other dealings in this Software without prior written authorization.

-----  
Files: install-sh

Copyright: 1994 X Consortium

Licence: X11

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 X CONSORTIUM BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Except as contained in this notice, the name of the X Consortium shall not be used in advertising or otherwise to promote the sale, use or other dealings in this Software without prior written authorization from the X Consortium.

FSF changes to this file are in the public domain.

Calling this script `install-sh` is preferred over `install.sh`, to prevent ``make'` implicit rules from creating a file called `install` from it when there is no `Makefile`.

This script is compatible with the BSD `install` script, but was written from scratch. It can only install one file at a time, a restriction shared with many OS's `install` programs.

On Debian systems, the complete text of the GNU General Public License can be found in `'/usr/share/common-licenses/GPL-2'`

-- vile: txtmode file-encoding=utf-8

## 1.23 grep 3.4

### 1.23.1 Available under license :

GNU GENERAL PUBLIC LICENSE

Version 3, 29 June 2007

Copyright (C) 2007 Free Software Foundation, Inc. <<https://fsf.org/>>  
Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.



## Preamble

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

The licenses for most software and other practical works are designed to take away your freedom to share and change the works. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change all versions of a program--to make sure it remains free software for all its users. We, the Free Software Foundation, use the GNU General Public License for most of our software; it applies also to any other work released this way by its authors. You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for them if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs, and that you know you can do these things.

To protect your rights, we need to prevent others from denying you these rights or asking you to surrender the rights. Therefore, you have certain responsibilities if you distribute copies of the software, or if you modify it: responsibilities to respect the freedom of others.

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

Developers that use the GNU GPL protect your rights with two steps:

- (1) assert copyright on the software, and
- (2) offer you this License giving you legal permission to copy, distribute and/or modify it.

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

Some devices are designed to deny users access to install or run modified versions of the software inside them, although the manufacturer can do so. This is fundamentally incompatible with the aim of protecting users' freedom to change the software. The systematic

pattern of such abuse occurs in the area of products for individuals to use, which is precisely where it is most unacceptable. Therefore, we have designed this version of the GPL to prohibit the practice for those products. If such problems arise substantially in other domains, we stand

ready to extend this provision to those domains in future versions of the GPL, as needed to protect the freedom of users.

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

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

## TERMS AND CONDITIONS

### 0. Definitions.

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

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

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

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

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

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

To "convey" a work means any kind of propagation that enables other

parties to make or receive copies. Mere interaction with a user through a computer network, with no transfer of a copy, is not conveying.

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

#### 1. Source Code.

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

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

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

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

subprograms and other parts of the work.

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

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

## 2. Basic Permissions.

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

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

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

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

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

When you convey a covered work, you waive any legal power to forbid circumvention of technological measures to the extent such circumvention is effected by exercising rights under this License with respect to the covered work, and you disclaim any intention to limit operation or

modification of the work as a means of enforcing, against the work's users, your or third parties' legal rights to forbid circumvention of technological measures.

#### 4. Conveying Verbatim Copies.

You may convey verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately

- publish on each copy an appropriate copyright notice;
- keep intact all notices stating that this License and any non-permissive terms added in accord with section 7 apply to the code;
- keep intact all notices of the absence of any warranty; and give all recipients a copy of this License along with the Program.

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

#### 5. Conveying Modified Source Versions.

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

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

A compilation of a covered work with other separate and independent works, which are not by their nature extensions of the covered work,

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

#### 6. Conveying Non-Source Forms.

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

- a) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by the Corresponding Source fixed on a durable physical medium customarily used for software interchange.
- b) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by a written offer, valid for at least three years and valid for as long as you offer spare parts or customer support for that product model, to give anyone who possesses the object code either (1) a copy of the Corresponding Source for all the software in the product that is covered by this License, on a durable physical medium customarily used for software interchange, for a price no more than your reasonable cost of physically performing this conveying of source, or (2) access to copy the Corresponding Source from a network server at no charge.
- c) Convey individual copies of the object code with a copy of the written offer to provide the Corresponding Source. This alternative is allowed only occasionally and noncommercially, and only if you received the object code with such an offer, in accord with subsection 6b.
- d) Convey the object code by offering access from a designated place (gratis or for a charge), and offer equivalent access to the Corresponding Source in the same way through the same place at no further charge. You need not require recipients to copy the Corresponding Source along with the object code. If the place to copy the object code is a network server, the Corresponding Source may be on a different server (operated by you or a third party)

that supports equivalent copying facilities, provided you maintain clear directions next to the object code saying where to find the Corresponding Source. Regardless of what server hosts the Corresponding Source, you remain obligated to ensure that it is available for as long as needed to satisfy these requirements.

e) Convey the object code using peer-to-peer transmission, provided you inform other peers where the object code and Corresponding Source of the work are being offered to the general public at no charge under subsection 6d.

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

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

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

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

ROM).

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

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

## 7. Additional Terms.

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

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

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

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



requiring that modified versions of such material be marked in reasonable ways as different from the original version; or

d) Limiting the use for publicity purposes of names of licensors or authors of the material; or

e) Declining to grant rights under trademark law for use of some trade names, trademarks, or service marks; or

f) Requiring indemnification of licensors and authors of that material by anyone who conveys the material (or modified versions of it) with contractual assumptions of liability to the recipient, for any liability that these contractual assumptions directly impose on

those licensors and authors.

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

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

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

## 8. Termination.

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

However, if you cease all violation of this License, then your license from a particular copyright holder is reinstated (a) provisionally, unless and until the copyright holder explicitly and finally terminates your license, and (b) permanently, if the copyright

holder fails to notify you of the violation by some reasonable means prior to 60 days after the cessation.

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

holder, and you cure the violation prior to 30 days after your receipt of the notice.

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

#### 9. Acceptance Not Required for Having Copies.

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

#### 10. Automatic Licensing of Downstream Recipients.

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

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

You may not impose any further restrictions on the exercise of the rights

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

#### 11. Patents.

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

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

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

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

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

in a country, would infringe one or more identifiable patents in that country that you have reason to believe are valid.

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

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

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

#### 12. No Surrender of Others' Freedom.

If conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot convey a covered work so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not convey it at all. For example, if you agree to terms that obligate you to collect a royalty for further conveying from those to whom you convey the Program, the only way you could satisfy both those terms and this License would be to refrain entirely from conveying the Program.

#### 13. Use with the GNU Affero General Public License.

Notwithstanding any other provision of this License, you have

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

#### 14. Revised Versions of this License.

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

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

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

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

#### 15. Disclaimer of Warranty.

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

#### 16. Limitation of Liability.

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

17.

Interpretation of Sections 15 and 16.

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

#### END OF TERMS AND CONDITIONS

#### How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively state the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

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

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

This program is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program. If not, see <https://www.gnu.org/licenses/>.

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

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

```
<program> Copyright (C) <year> <name of author>  
This program comes with ABSOLUTELY NO WARRANTY; for details type `show w'.  
This is free software, and you are welcome to redistribute it  
under certain conditions; type `show c' for details.
```

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, your program's commands might be different; for a GUI interface, you would use an "about box".

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

The GNU General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Lesser General Public License instead of this License. But first, please read <https://www.gnu.org/licenses/why-not-lgpl.html>.

## 1.24 parted 3.3

### 1.24.1 Available under license :

GNU 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.

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:

```
<program> Copyright (C) <year> <name of author>  
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>.

## 1.25 cpio 2.13

### 1.25.1 Available under license :

GNU 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.

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:

```
<program> Copyright (C) <year> <name of author>
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>.

## 1.26 xz 5.2.5

### 1.26.1 Available under license :

GNU GENERAL PUBLIC LICENSE  
Version 2, June 1991

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

#### Preamble

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

General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Lesser General Public License instead.) You can apply it to your programs, too.

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

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

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

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

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

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

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

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

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

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

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

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

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

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

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

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

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a

notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

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

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

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

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

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

b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

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



an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

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

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

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

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

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues),

conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For

example, if a patent

license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

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

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

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

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

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any

later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

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

#### NO WARRANTY

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

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

#### END OF TERMS AND CONDITIONS

##### How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively

convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

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

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

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

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

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

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

```
Gnomovision version 69, Copyright (C) year name of author  
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.  
This is free software, and you are welcome to redistribute  
it  
under certain conditions; type `show c' for details.
```

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

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

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

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

This General Public License does not permit incorporating your program into

proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Lesser General Public License instead of this License.

## GNU 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.

### 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:

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

```
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>>.

XZ Utils Licensing

=====

Different licenses apply to different files in this package. Here

is a rough summary of which licenses apply to which parts of this package (but check the individual files to be sure!):

- liblzma is in the public domain.
- xz, xzdec, and lzmadec command line tools are in the public domain unless GNU getopt\_long had to be compiled and linked in from the lib directory. The getopt\_long code is under GNU LGPLv2.1+.
- The scripts to grep, diff, and view compressed files have been adapted from gzip. These scripts and their documentation are under GNU GPLv2+.
- All the documentation in the doc directory and most of the XZ Utils specific documentation files in other directories are in the public domain.
- Translated messages are in the public domain.
- The build system contains public domain files, and files that are under GNU GPLv2+ or GNU GPLv3+. None of these files end up in the binaries being built.
- Test files and test code in the tests directory, and debugging utilities in the debug directory are in the public domain.
- The extra directory may contain public domain files, and files that are under various free software licenses.

You can do whatever you want with the files that have been put into the public domain. If you find public domain legally problematic, take the previous sentence as a license grant. If you still find the lack of copyright legally problematic, you have too many lawyers.

As usual, this software is provided "as is", without any warranty.

If you copy significant amounts of public domain code from XZ Utils into your project, acknowledging this somewhere in your software is polite (especially if it is proprietary, non-free software), but naturally it is not legally required. Here is an example of a good notice to put into "about box" or into documentation:

This software includes code from XZ Utils <<https://tukaani.org/xz/>>.

The following license texts are included in the following files:

- COPYING.LGPLv2.1: GNU Lesser General Public License version 2.1
- COPYING.GPLv2: GNU General Public License version 2
- COPYING.GPLv3: GNU General Public License version 3

Note that the toolchain (compiler, linker etc.) may add some code pieces that are copyrighted. Thus, it is possible that e.g. liblzma binary wouldn't actually be in the public domain in its entirety even though it contains no copyrighted code from the XZ Utils source package.

If you have questions, don't hesitate to ask the author(s) for more information.

## 1.27 netcat 0.7.1

### 1.27.1 Available under license :

GNU GENERAL PUBLIC LICENSE

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.

59 Temple Place, Suite 330, Boston, MA 02111-1307 USA

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

#### Preamble

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

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights.

These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

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

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

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

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

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

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

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

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the

Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

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

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

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

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

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

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

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of

this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

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

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

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

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

b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

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

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering



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

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

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

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

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

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

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

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

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

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

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

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

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

## NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW.

EXCEPT WHEN

OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

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

IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS

### How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

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

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

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License,

or

(at your option) any later version.

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

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

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA

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

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

```
Gnomovision version 69, Copyright (C) year name of author
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute it
under certain conditions; type `show c' for details.
```

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

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

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

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

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

## 1.28 coreutils 8.32

### 1.28.1 Available under license :

GNU GENERAL PUBLIC LICENSE  
Version 3, 29 June 2007

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

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

## Preamble

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

The licenses for most software and other practical works are designed to take away your freedom to share and change the works. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change all versions of a program--to make sure it remains free software for all its users. We, the Free Software Foundation, use the GNU General Public License for most of our software; it applies also to any other work released this way by its authors. You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for them if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs, and that you know you can do these things.

To protect your rights, we need to prevent others from denying you these rights or asking you to surrender the rights. Therefore, you have certain responsibilities if you distribute copies of the software, or if you modify it: responsibilities to respect the freedom of others.

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

Developers that use the GNU GPL protect your rights with two steps:

(1) assert copyright on the software, and (2) offer you this License giving you legal permission to copy, distribute and/or modify it.

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

Some devices are designed to deny users access to install or run

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

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

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

## TERMS AND CONDITIONS

### 0. Definitions.

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

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

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

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

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

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

public, and in some countries other activities as well.

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

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

#### 1. Source Code.

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

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

The

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

The "Corresponding Source" for a work in object code form means all the source code needed to generate, install, and (for an executable work) run the object code and to modify the work, including scripts to control those activities. However, it does not include the work's System Libraries, or general-purpose tools or generally available free programs which are used unmodified in performing those activities but which are not part of the work. For example, Corresponding Source includes interface definition files associated with source files for

the work, and the source code for shared libraries and dynamically linked subprograms that the work is specifically designed to require, such as by intimate data communication or control flow between those subprograms and other parts of the work.

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

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

## 2. Basic Permissions.

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

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

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

Conveying under any other circumstances is permitted solely under the conditions stated below. Sublicensing is not allowed;

section 10  
makes it unnecessary.

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

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

When you convey a covered work, you waive any legal power to forbid



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

#### 4. Conveying Verbatim Copies.

You may convey verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice; keep intact all notices stating that this License and any non-permissive terms added in accord with section 7 apply to the code; keep intact all notices of the absence of any warranty; and give all recipients a copy of this License along with the Program.

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

#### 5. Conveying Modified Source Versions.

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

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

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

#### 6. Conveying Non-Source Forms.

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

- a) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by the Corresponding Source fixed on a durable physical medium customarily used for software interchange.
- b) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by a written offer, valid for at least three years and valid for as long as you offer spare parts or customer support for that product model, to give anyone who possesses the object code either (1) a copy of the Corresponding Source for all the software in the product that is covered by this License, on a durable physical medium customarily used for software interchange, for a price no more than your reasonable cost of physically performing this conveying of source, or (2) access to copy the Corresponding Source from a network server at no charge.
- c) Convey individual copies of the object code with a copy of the written offer to provide the Corresponding Source. This alternative is allowed only occasionally and noncommercially, and only if you received the object code with such an offer, in accord with subsection 6b.
- d) Convey the object code by offering access from a designated place (gratis or for a charge), and offer equivalent access to the Corresponding Source in the same way through the same place at no further charge. You need not require recipients to copy the

Corresponding Source along with the object code. If the place to copy the object code is a network server, the Corresponding Source may be on a different server (operated by you or a third party) that supports equivalent copying facilities, provided you maintain clear directions next to the object code saying where to find the Corresponding Source. Regardless of what server hosts the Corresponding Source, you remain obligated to ensure that it is available for as long as needed to satisfy these requirements.

e) Convey the object code using peer-to-peer transmission, provided you inform other peers where the object code and Corresponding Source of the work are being offered to the general public at no charge under subsection 6d.

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

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

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

If you convey an object code work under this section in, or with, or specifically for use in, a User Product, and the conveying occurs as part of a transaction in which the right of possession and use of the User Product is transferred to the recipient in perpetuity or for a fixed term (regardless of how the transaction is characterized), the Corresponding Source conveyed under this section must be accompanied by the Installation Information. But this requirement does not apply

if neither you nor any third party retains the ability to install modified object code on the User Product (for example, the work has been installed in ROM).

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

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

#### 7. Additional Terms.

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

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

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

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

Notices displayed by works containing it; or

c) Prohibiting misrepresentation of the origin of that material, or requiring that modified versions of such material be marked in reasonable ways as different from the original version; or

d) Limiting the use for publicity purposes of names of licensors or authors of the material; or

e) Declining to grant rights under trademark law for use of some trade names, trademarks, or service marks; or

f) Requiring indemnification of licensors and authors of that material by anyone who conveys the material (or modified versions of it) with contractual assumptions of liability to the recipient, for any liability that these contractual assumptions directly impose on

those licensors and authors.

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

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

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

## 8. Termination.

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

However, if you cease all violation of this License, then your

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

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

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

#### 9. Acceptance Not Required for Having Copies.

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

#### 10. Automatic Licensing of Downstream Recipients.

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

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

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

#### 11. Patents.

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

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

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

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

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

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

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

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

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

#### 12. No Surrender of Others' Freedom.

If conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot convey a covered work so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not convey it at all. For example, if you agree to terms that obligate you to collect a royalty for further conveying from those to whom you convey the Program, the only way you could satisfy both those terms and this License would be to refrain entirely from conveying the Program.

#### 13. Use with the GNU Affero General Public



License.

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

#### 14. Revised Versions of this License.

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

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

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

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

#### 15. Disclaimer of Warranty.

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

ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16. Limitation of Liability.

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

17.

Interpretation of Sections 15 and 16.

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

END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively state the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

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

This program is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

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

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

You should have received a copy of the GNU General Public License along with this program. If not, see <https://www.gnu.org/licenses/>.

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

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

```
<program> Copyright (C) <year> <name of author>
This program comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute it
under certain conditions; type `show c' for details.
```

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, your program's commands might be different; for a GUI interface, you would use an "about box".

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

The GNU General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Lesser General Public License instead of this License. But first, please read <https://www.gnu.org/licenses/why-not-lgpl.html>.

## 1.29 sed 4.8

### 1.29.1 Available under license :

GNU GENERAL PUBLIC LICENSE

Version 3, 29 June 2007

Copyright (C) 2007 Free Software Foundation, Inc. <https://fsf.org/>  
Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

Preamble

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

The licenses for most software and other practical works are designed to take away your freedom to share and change the works. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change all versions of a program--to make sure it remains free software for all its users. We, the Free Software Foundation, use the GNU General Public License for most of our software; it applies also to any other work released this way by its authors. You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for them if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs, and that you know you can do these things.

To protect your rights, we need to prevent others from denying you these rights or asking you to surrender the rights. Therefore, you have certain responsibilities if you distribute copies of the software, or if you modify it: responsibilities to respect the freedom of others.

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

Developers that use the GNU GPL protect your rights with two steps:

(1) assert copyright on the software, and (2) offer you this License giving you legal permission to copy, distribute and/or modify it.

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

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

stand

ready to extend this provision to those domains in future versions of the GPL, as needed to protect the freedom of users.

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

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

## TERMS AND CONDITIONS

### 0. Definitions.

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

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

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

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

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

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

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

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

#### 1. Source Code.

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

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

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

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

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

Source.

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

## 2. Basic Permissions.

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

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

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

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

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

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

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

#### 4. Conveying Verbatim Copies.

You may convey verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately  
publish on each copy an appropriate copyright notice;  
keep intact all notices stating that this License and any  
non-permissive terms added in accord with section 7 apply to the code;  
keep intact all notices of the absence of any warranty; and give all  
recipients a copy of this License along with the Program.

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

#### 5. Conveying Modified Source Versions.

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

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

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



used to limit the access or legal rights of the compilation's users beyond what the individual works permit. Inclusion of a covered work in an aggregate does not cause this License to apply to the other parts of the aggregate.

#### 6. Conveying Non-Source Forms.

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

a) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by the Corresponding Source fixed on a durable physical medium customarily used for software interchange.

b) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by a written offer, valid for at least three years and valid for as

long as you offer spare parts or customer support for that product model, to give anyone who possesses the object code either (1) a copy of the Corresponding Source for all the software in the product that is covered by this License, on a durable physical medium customarily used for software interchange, for a price no more than your reasonable cost of physically performing this conveying of source, or (2) access to copy the Corresponding Source from a network server at no charge.

c) Convey individual copies of the object code with a copy of the written offer to provide the Corresponding Source. This alternative is allowed only occasionally and noncommercially, and only if you received the object code with such an offer, in accord with subsection 6b.

d) Convey the object code by offering access from a designated place (gratis or for a charge), and offer equivalent access to the Corresponding Source in the same way through the same place at no further charge. You need not require recipients to copy the Corresponding Source along with the object code. If the place to copy the object code is a network server, the Corresponding Source may be on a different server (operated by you or a third party) that supports equivalent copying facilities, provided you maintain clear directions next to the object code saying where to find the Corresponding Source. Regardless of what server hosts the Corresponding Source, you remain obligated to ensure that it is

available for as long as needed to satisfy these requirements.

e) Convey the object code using peer-to-peer transmission, provided you inform other peers where the object code and Corresponding Source of the work are being offered to the general public at no charge under subsection 6d.

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

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

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

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

The requirement to provide Installation Information does not include a requirement to continue to provide support service, warranty, or updates

for a work that has been modified or installed by the recipient, or for the User Product in which it has been modified or installed. Access to a network may be denied when the modification itself materially and adversely affects the operation of the network or violates the rules and protocols for communication across the network.

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

## 7. Additional Terms.

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

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

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

- a) Disclaiming warranty or limiting liability differently from the terms of sections 15 and 16 of this License; or
- b) Requiring preservation of specified reasonable legal notices or author attributions in that material or in the Appropriate Legal Notices displayed by works containing it; or
- c) Prohibiting misrepresentation of the origin of that material, or requiring that modified versions of such material be marked in reasonable ways as different from the original version; or
- d) Limiting the use for publicity purposes of names of licensors or

authors of the material; or

e) Declining to grant rights under trademark law for use of some trade names, trademarks, or service marks; or

f) Requiring indemnification of licensors and authors of that material by anyone who conveys the material (or modified versions of it) with contractual assumptions of liability to the recipient, for any liability that these contractual assumptions directly impose on

those licensors and authors.

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

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

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

## 8. Termination.

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

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

Moreover, your license from a particular copyright holder is

reinstated permanently if the copyright holder notifies you of the violation by some reasonable means, this is the first time you have received notice of violation of this License (for any work) from that copyright

holder, and you cure the violation prior to 30 days after your receipt of the notice.

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

#### 9. Acceptance Not Required for Having Copies.

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

#### 10. Automatic Licensing of Downstream Recipients.

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

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

You may not impose any further restrictions on the exercise of the rights

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

sale, or importing the Program or any portion of it.

## 11. Patents.

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

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

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

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

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

If, pursuant to or in connection with a single transaction or arrangement, you convey, or propagate by procuring conveyance of, a

covered work, and grant a patent license to some of the parties receiving the covered work authorizing them to use, propagate, modify or convey a specific copy of the covered work, then the patent license you grant is automatically extended to all recipients of the covered work and works based on it.

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

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

#### 12. No Surrender of Others' Freedom.

If conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot convey a covered work so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not convey it at all. For example, if you agree to terms that obligate you to collect a royalty for further conveying from those to whom you convey the Program, the only way you could satisfy both those terms and this License would be to refrain entirely from conveying the Program.

#### 13. Use with the GNU Affero General Public License.

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

section 13, concerning interaction through a network will apply to the combination as such.

#### 14. Revised Versions of this License.

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

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

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

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

#### 15. Disclaimer of Warranty.

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

#### 16. Limitation of Liability.

IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MODIFIES AND/OR CONVEYS THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE



USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

17.

Interpretation of Sections 15 and 16.

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

## END OF TERMS AND CONDITIONS

### How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively state the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

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

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

This program is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program. If not, see <<https://www.gnu.org/licenses/>>.

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

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

```
<program> Copyright (C) <year> <name of author>  
This program comes with ABSOLUTELY NO WARRANTY; for details type `show w'.  
This is free software, and you are welcome to redistribute it  
under certain conditions; type `show c' for details.
```

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, your program's commands might be different; for a GUI interface, you would use an "about box".

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

The GNU General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Lesser General Public License instead of this License. But first, please read <https://www.gnu.org/philosophy/why-not-lgpl.html>.

## 1.30 libtasn 4.16.0

### 1.30.1 Available under license :

GNU LESSER GENERAL PUBLIC LICENSE  
Version 2.1, February 1999

Copyright (C) 1991, 1999 Free Software Foundation, Inc.  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA  
Everyone is permitted to copy and distribute verbatim copies  
of this license document, but changing it is not allowed.

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

#### Preamble

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

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

When we speak of free software, we are referring to freedom of use, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish); that you receive source code or can get it if you want it; that you can change the software and use pieces of it in new free programs; and that you are informed that you can do these things.

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

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

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

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

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

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

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

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

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

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

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

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a

"work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

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

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

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

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

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

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

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

Library.

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

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

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

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

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest

your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may opt to apply the terms of the ordinary GNU General Public

License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it

contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

- a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified



executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:

a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.

b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

8. You may not copy, modify, sublicense, link with, or distribute the Library except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the Library is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

9. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Library or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Library (or any work based on the Library), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Library or works based on it.

10. Each time you redistribute the Library (or any work based on the Library), the recipient automatically receives a license from the original licensor to copy, distribute, link with or modify the Library subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties with this License.

11. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Library at all. For example, if a patent license would not permit royalty-free redistribution of the Library by all those who receive copies directly or indirectly through you, then

the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Library.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

12. If the distribution and/or use of the Library is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Library under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

13. The Free Software Foundation may publish revised and/or new versions of the Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Library does not specify a license version number, you may choose any version ever published by the Free Software Foundation.

14. If you wish to incorporate parts of the Library into other free programs whose distribution conditions are incompatible with these, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free

Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

15. BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE LIBRARY "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE LIBRARY AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE LIBRARY (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

#### END OF TERMS AND CONDITIONS

##### How to Apply These Terms to Your New Libraries

If you develop a new library, and you want it to be of the greatest possible use to the public, we recommend making it free software that everyone can redistribute and change. You can do so by permitting redistribution under these terms (or, alternatively, under the terms of the ordinary General Public License).

To apply these terms, attach the following notices to the library. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the library's name and a brief idea of what it does.>

Copyright (C) <year> <name of author>

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

You should have received a copy of the GNU Lesser General Public License along with this library; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA

Also add information on how to contact you by electronic and paper mail.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the library, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the library `Frob' (a library for tweaking knobs) written by James Random Hacker.

<signature of Ty Coon>, 1 April 1990  
Ty Coon, President of Vice

That's all there is to it!

GNU GENERAL PUBLIC LICENSE  
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.

#### 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:

<program> Copyright (C) <year> <name of author>

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>.

© The GNU Free Documentation License.  
@center Version 1.3, 3 November 2008

© This file is intended to be included within another document,  
© hence no sectioning command or @node.

@display  
Copyright © 2000, 2001, 2002, 2007, 2008 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.  
@end display

@enumerate 0  
@item  
PREAMBLE

The purpose of this License is to make a manual, textbook, or other functional and useful document [@dfn{free}](#) in the sense of freedom: to assure everyone the effective freedom to copy and redistribute it, with or without modifying it, either commercially or noncommercially. Secondly, this License preserves for the author and publisher a way to get credit for their work, while not being considered responsible for modifications made by others.

This License is a kind of "copyleft", which means that derivative works of the document must themselves be free in the same sense. It complements the GNU General Public License, which is a copyleft

license designed for free software.

We have designed this License in order to use it for manuals for free software, because free software needs free documentation: a free program should come with manuals providing the same freedoms that the software does. But this License is not limited to software manuals; it can be used for any textual work, regardless of subject matter or whether it is published as a printed book. We recommend this License principally for works whose purpose is instruction or reference.

@item

## APPLICABILITY AND DEFINITIONS

This License applies to any manual or other work, in any medium, that contains a notice placed by the copyright holder saying it can be distributed under the terms of this License. Such a notice grants a world-wide, royalty-free license, unlimited in duration, to use that work under the conditions stated herein. The ``Document'', below, refers

to any such manual or work. Any member of the public is a licensee, and is addressed as ``you''. You accept the license if you copy, modify or distribute the work in a way requiring permission under copyright law.

A ``Modified Version'' of the Document means any work containing the Document or a portion of it, either copied verbatim, or with modifications and/or translated into another language.

A ``Secondary Section'' is a named appendix or a front-matter section of the Document that deals exclusively with the relationship of the publishers or authors of the Document to the Document's overall subject (or to related matters) and contains nothing that could fall directly within that overall subject. (Thus, if the Document is in part a textbook of mathematics, a Secondary Section may not explain any mathematics.) The relationship could be a matter of historical connection with the subject or with related matters, or of legal, commercial, philosophical, ethical or political position regarding them.

The ``Invariant Sections'' are certain Secondary Sections whose titles are designated, as being those of Invariant Sections, in the notice that says that the Document is released under this License. If a section does not fit the above definition of Secondary then it is not allowed to be designated as Invariant. The Document may contain zero Invariant Sections. If the Document does not identify any Invariant Sections then there are none.

The ``Cover Texts" are certain short passages of text that are listed, as Front-Cover Texts or Back-Cover Texts, in the notice that says that the Document is released under this License. A Front-Cover Text may be at most 5 words, and a Back-Cover Text may be at most 25 words.

A ``Transparent" copy of the Document means a machine-readable copy, represented in a format whose specification is available to the general public, that is suitable for revising the document straightforwardly with generic text editors or (for images composed of pixels) generic paint programs or (for drawings) some widely available drawing editor, and that is suitable for input to text formatters or for automatic translation to a variety of formats suitable for input to text formatters. A copy made in an otherwise Transparent file format whose markup, or absence of markup, has been arranged to thwart or discourage subsequent modification by readers is not Transparent. An image format is not Transparent if used for any substantial amount of text. A copy that is not ``Transparent" is called ``Opaque".

Examples of suitable formats for Transparent copies include plain ASCII without markup, Texinfo input format, La@TeX{ } input format, SGML or XML using a publicly available DTD, and standard-conforming simple HTML, PostScript or PDF designed for human modification. Examples of transparent image formats include PNG, XCF and JPG@. Opaque formats include proprietary formats that can be read and edited only by proprietary word processors, SGML or XML for which the DTD and/or processing tools are not generally available, and the machine-generated HTML, PostScript or PDF produced by some word processors for output purposes only.

The ``Title Page" means, for a printed book, the title page itself, plus such following pages as are needed to hold, legibly, the material this License requires to appear in the title page. For works in formats which do not have any title page as such, ``Title Page" means the text near the most prominent appearance of the work's title, preceding the beginning of the body of the text.

The ``publisher" means any person or entity that distributes copies of the Document to the public.

A section ``Entitled XYZ" means a named subunit of the Document whose title either is precisely XYZ or contains XYZ in parentheses following text that translates XYZ in another language. (Here XYZ stands for a specific section name mentioned below, such as ``Acknowledgements", ``Dedications", ``Endorsements",

or ``History".) To ``Preserve the Title"  
of such a section when you modify the Document means that it remains a  
section ``Entitled XYZ" according to this definition.

The Document may include Warranty Disclaimers next to the notice which  
states that this License applies to the Document. These Warranty  
Disclaimers are considered to be included by reference in this  
License, but only as regards disclaiming warranties: any other  
implication that these Warranty Disclaimers may have is void and has  
no effect on the meaning of this License.

@item

#### VERBATIM COPYING

You may copy and distribute the Document in any medium, either  
commercially or noncommercially, provided that this License, the  
copyright notices, and the license notice saying this License applies  
to the Document are reproduced in all copies, and that you add no other  
conditions whatsoever to those of this License. You may not use  
technical measures to obstruct or control the reading or further  
copying of the copies  
you make or distribute. However, you may accept  
compensation in exchange for copies. If you distribute a large enough  
number of copies you must also follow the conditions in section 3.

You may also lend copies, under the same conditions stated above, and  
you may publicly display copies.

@item

#### COPYING IN QUANTITY

If you publish printed copies (or copies in media that commonly have  
printed covers) of the Document, numbering more than 100, and the  
Document's license notice requires Cover Texts, you must enclose the  
copies in covers that carry, clearly and legibly, all these Cover  
Texts: Front-Cover Texts on the front cover, and Back-Cover Texts on  
the back cover. Both covers must also clearly and legibly identify  
you as the publisher of these copies. The front cover must present  
the full title with all words of the title equally prominent and  
visible. You may add other material on the covers in addition.  
Copying with changes limited to the covers, as long as they preserve  
the  
title of the Document and satisfy these conditions, can be treated  
as verbatim copying in other respects.

If the required texts for either cover are too voluminous to fit  
legibly, you should put the first ones listed (as many as fit  
reasonably) on the actual cover, and continue the rest onto adjacent

pages.

If you publish or distribute Opaque copies of the Document numbering more than 100, you must either include a machine-readable Transparent copy along with each Opaque copy, or state in or with each Opaque copy a computer-network location from which the general network-using public has access to download using public-standard network protocols a complete Transparent copy of the Document, free of added material.

If you use the latter option, you must take reasonably prudent steps, when you begin distribution of Opaque copies in quantity, to ensure that this Transparent copy will remain thus accessible at the stated location until at least one year after the last time you distribute an

Opaque copy (directly or through your agents or retailers) of that edition to the public.

It is requested, but not required, that you contact the authors of the Document well before redistributing any large number of copies, to give them a chance to provide you with an updated version of the Document.

@item

## MODIFICATIONS

You may copy and distribute a Modified Version of the Document under the conditions of sections 2 and 3 above, provided that you release the Modified Version under precisely this License, with the Modified Version filling the role of the Document, thus licensing distribution and modification of the Modified Version to whoever possesses a copy of it. In addition, you must do these things in the Modified Version:

@enumerate A

@item

Use in the Title Page (and on the covers, if any) a title distinct from that of the Document, and from those of previous versions (which should, if there were any, be listed in the History section of the Document). You may use the same title as a previous version

if the original publisher of that version gives permission.

@item

List on the Title Page, as authors, one or more persons or entities responsible for authorship of the modifications in the Modified Version, together with at least five of the principal authors of the Document (all of its principal authors, if it has fewer than five), unless they release you from this requirement.

@item

State on the Title page the name of the publisher of the



Modified Version, as the publisher.

@item

Preserve all the copyright notices of the Document.

@item

Add an appropriate copyright notice for your modifications adjacent to the other copyright notices.

@item

Include, immediately after the copyright notices, a license notice giving the public permission to use the Modified Version under the terms of this License, in the form shown in the Addendum below.

@item

Preserve in that license notice the full lists of Invariant Sections and required Cover Texts given in the Document's license notice.

@item

Include an unaltered copy of this License.

@item

Preserve the section Entitled ``History'', Preserve its Title, and add to it an item stating at least the title, year, new authors, and publisher of the Modified Version as given on the Title Page. If there is no section Entitled ``History'' in the Document, create one stating the title, year, authors, and publisher of the Document as given on its Title Page, then add an item describing the Modified Version as stated in the previous sentence.

@item

Preserve the network location, if any, given in the Document for public access to a Transparent copy of the Document, and likewise the network locations given in the Document for previous versions it was based on. These may be placed in the ``History'' section. You may omit a network location for a work that was published at least four years before the Document itself, or if the original publisher of the version it refers to gives permission.

@item

For any section Entitled ``Acknowledgements'' or ``Dedications'', Preserve the Title of the section, and preserve in the section all the substance and tone of each of the contributor acknowledgements and/or dedications given therein.

@item

Preserve all the Invariant Sections of the Document, unaltered in their text and in their titles. Section numbers or the equivalent are not considered part of the section titles.

@item

Delete any section Entitled ``Endorsements''. Such a section may not be included in the Modified Version.

@item

Do not retitle any existing section to be Entitled ``Endorsements'' or to conflict in title with any Invariant Section.

@item

Preserve any Warranty Disclaimers.

@end enumerate

If the Modified Version includes new front-matter sections or appendices that qualify as Secondary Sections and contain no material copied from the Document, you may at your option designate some or all of these sections as invariant. To do this, add their titles to the list of Invariant Sections in the Modified Version's license notice. These titles must be distinct from any other section titles.

You may add a section Entitled ``Endorsements'', provided it contains nothing but endorsements of your Modified Version by various parties---for example, statements of peer review or that the text has been approved by an organization as the authoritative definition of a standard.

You may add a passage of up to five words as a Front-Cover Text, and a passage of up to 25 words as a Back-Cover Text, to the end of the list of Cover Texts in the Modified Version. Only one passage of Front-Cover Text and one of Back-Cover Text may be added by (or through arrangements made by) any one entity. If the Document already includes a cover text for the same cover, previously added by you or by arrangement made by the same entity you are acting on behalf of, you may not add another; but you may replace the old one, on explicit permission from the previous publisher that added the old one.

The author(s) and publisher(s) of the Document do not by this License give permission to use their names for publicity for or to assert or imply endorsement of any Modified Version.

@item

COMBINING DOCUMENTS

You may combine the Document with other documents released under this License, under the terms defined in section 4 above for modified versions, provided that you include in the combination all of the Invariant Sections of all of the original documents, unmodified, and list them all as Invariant Sections of your combined work in its license notice, and that you preserve all their Warranty Disclaimers.

The combined work need only contain one copy of this License, and multiple identical Invariant Sections may be replaced with a single copy. If there are multiple Invariant Sections with the same name but different contents, make the title of each such section unique by adding at the end of it, in parentheses, the name of the original author or publisher of that section if

known, or else a unique number.

Make the same adjustment to the section titles in the list of Invariant Sections in the license notice of the combined work.

In the combination, you must combine any sections Entitled ``History" in the various original documents, forming one section Entitled ``History"; likewise combine any sections Entitled ``Acknowledgements", and any sections Entitled ``Dedications". You must delete all sections Entitled ``Endorsements."

@item

#### COLLECTIONS OF DOCUMENTS

You may make a collection consisting of the Document and other documents released under this License, and replace the individual copies of this License in the various documents with a single copy that is included in the collection, provided that you follow the rules of this License for verbatim copying of each of the documents in all other respects.

You may extract a single document from such a collection, and distribute it individually under this License, provided you insert a copy of this License

into the extracted document, and follow this License in all other respects regarding verbatim copying of that document.

@item

#### AGGREGATION WITH INDEPENDENT WORKS

A compilation of the Document or its derivatives with other separate and independent documents or works, in or on a volume of a storage or distribution medium, is called an ``aggregate" if the copyright resulting from the compilation is not used to limit the legal rights of the compilation's users beyond what the individual works permit.

When the Document is included in an aggregate, this License does not apply to the other works in the aggregate which are not themselves

derivative works of the Document.

If the Cover Text requirement of section 3 is applicable to these copies of the Document, then if the Document is less than one half of the entire aggregate, the Document's Cover Texts may be placed on covers that bracket the Document within the aggregate, or the electronic equivalent of covers if the Document is in electronic form.

Otherwise they must appear on printed covers that bracket the whole aggregate.

@item

## TRANSLATION

Translation is considered a kind of modification, so you may distribute translations of the Document under the terms of section 4. Replacing Invariant Sections with translations requires special permission from their copyright holders, but you may include translations of some or all Invariant Sections in addition to the original versions of these Invariant Sections. You may include a translation of this License, and all the license notices in the Document, and any Warranty Disclaimers, provided that you also include the original English version of this License and the original versions of those notices and disclaimers. In case of a disagreement between the translation and the original version of this License or a notice or disclaimer, the original version will prevail.

If a section in the Document is Entitled ``Acknowledgements'', ``Dedications'', or ``History'', the requirement (section 4) to Preserve its Title (section 1) will typically require changing the actual title.

@item

## TERMINATION

You may not copy, modify, sublicense, or distribute the Document except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, or distribute it is void, and will automatically terminate your rights under this License.

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, receipt of a copy of some or all of the same material does not give you any rights to use it.

@item

#### FUTURE REVISIONS OF THIS LICENSE

The Free Software Foundation may publish new, revised versions of the GNU Free Documentation 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. See <http://www.gnu.org/copyleft/>.

Each version of the License is given a distinguishing version number. If the Document specifies that a particular numbered version of this License "or any later version" applies to it, you have the option of following the terms and conditions either of that specified version or of any later version that has been published (not as a draft) by the Free Software Foundation. If the Document does not specify a version number of this License, you may choose any version ever published (not as a draft) by the Free Software Foundation. If the Document specifies that a proxy can decide which future versions of this License can be used, that proxy's public statement of acceptance of a version permanently authorizes you to choose that version for the Document.

@item

#### RELICENSING

"Massive Multiauthor Collaboration Site" (or "MMC Site") means any World Wide Web server that publishes copyrightable works and also provides prominent facilities for anybody to edit those works. A public wiki that anybody can edit is an example of such a server. A "Massive Multiauthor Collaboration" (or "MMC") contained in the site means any set of copyrightable works thus published on the MMC site.

``CC-BY-SA" means the Creative Commons

Attribution-Share Alike 3.0

license published by Creative Commons Corporation, a not-for-profit corporation with a principal place of business in San Francisco, California, as well as future copyleft versions of that license published by that same organization.

``Incorporate" means to publish or republish a Document, in whole or in part, as part of another Document.

An MMC is ``eligible for relicensing" if it is licensed under this License, and if all works that were first published under this License somewhere other than this MMC, and subsequently incorporated in whole or in part into the MMC, (1) had no cover texts or invariant sections, and (2) were thus incorporated prior to November 1, 2008.

The operator of an MMC Site may republish an MMC contained in the site under CC-BY-SA on the same site at any time before August 1, 2009, provided the MMC is eligible for relicensing.

@end enumerate

@page

@heading ADDENDUM: How to use this License for your documents

To use this License

in a document you have written, include a copy of the License in the document and put the following copyright and license notices just after the title page:

@smallexample

@group

Copyright (C) @var{year} @var{your name}.

Permission is granted to copy, distribute and/or modify this document under the terms of the GNU Free Documentation License, Version 1.3 or any later version published by the Free Software Foundation; with no Invariant Sections, no Front-Cover Texts, and no Back-Cover Texts. A copy of the license is included in the section entitled ``GNU Free Documentation License".

@end group

@end smallexample

If you have Invariant Sections, Front-Cover Texts and Back-Cover Texts, replace the ``with@dots{ }Texts."@: line with this:

@smallexample

@group

with the Invariant Sections being @var{list their titles}, with

the Front-Cover Texts being @var{list}, and with the Back-Cover Texts being @var{list}.

@end group

@end smallexample

If you have Invariant Sections without Cover Texts, or some other combination of the three, merge those two alternatives to suit the situation.

If your document contains nontrivial examples of program code, we recommend releasing these examples in parallel under your choice of free software license, such as the GNU General Public License, to permit their use in free software.

@c Local Variables:  
@c ispell-local-pdict: "ispell-dict"  
@c End:  
LICENSING  
=====

The libtasn1 library is released under the GNU Lesser General Public License (LGPL) version 2.1 or later; see [COPYING.LESSER](doc/COPYING.LESSER) for the license terms.

The GNU LGPL applies to the main libtasn1 library, while the included applications library are under the GNU GPL version 3. The libtasn1 library is located in the lib directory, while the applications in src/.

The documentation in doc/ is under the GNU FDL license 1.3.

For any copyright year range specified as YYYY-ZZZZ in this package note that the range specifies every single year in that closed interval.

## 1.31 libnl3 3.5.0

### 1.31.1 Available under license :

GNU LESSER GENERAL PUBLIC LICENSE  
Version 2.1, February 1999

Copyright (C) 1991, 1999 Free Software Foundation, Inc.  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA  
Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

[This is the first released version of the Lesser GPL. It also counts

as the successor of the GNU Library Public License, version 2, hence the version number 2.1.]

## Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public Licenses are intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users.

This license, the Lesser General Public License, applies to some specially designated software packages--typically libraries--of the Free Software Foundation and other authors who decide to use it. You can use it too, but we suggest you first think carefully about whether this license or the ordinary General Public License is the better strategy to use in any particular case, based on the explanations below.

When we speak of free software, we are referring to freedom of use, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish); that you receive source code or can get it if you want it; that you can change the software and use pieces of it in new free programs; and that you are informed that you can do these things.

To protect your rights, we need to make restrictions that forbid distributors to deny you these rights or to ask you to surrender these rights. These restrictions translate to certain responsibilities for you if you distribute copies of the library or if you modify it.

For example, if you distribute copies of the library, whether gratis or for a fee, you must give the recipients all the rights that we gave you. You must make sure that they, too, receive or can get the source code. If you link other code with the library, you must provide complete object files to the recipients, so that they can relink them with the library after making changes to the library and recompiling it. And you must show them these terms so they know their rights.

We protect your rights with a two-step method: (1) we copyright the library, and (2) we offer you this license, which gives you legal permission to copy, distribute and/or modify the library.

To protect each distributor, we want to make it very clear that there is no warranty for the free library. Also, if the library is modified by someone else and passed on, the recipients should know that what they have is not the original version, so that the original



author's reputation will not be affected by problems that might be introduced by others.

Finally, software patents pose a constant threat to the existence of any free program. We wish to make sure that a company cannot effectively restrict the users of a free program by obtaining a restrictive license from a patent holder. Therefore, we insist that any patent license obtained for a version of the library must be consistent with the full freedom of use specified in this license.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License. This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License. We use this license for certain libraries in order to permit linking those libraries into non-free programs.

When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.

We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU

operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

## GNU LESSER GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License Agreement applies to any software library or other program which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Lesser General Public License (also called "this License"). Each licensee is addressed as "you".

A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for

writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

1. You may copy and distribute verbatim copies of the Library's complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and distribute a copy of this License along with the Library.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

- a) The modified work must itself be a software library.
- b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.
- c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.
- d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be

reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

### 3. You may opt to apply the terms of the ordinary GNU General Public

License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

### 4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not

compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one

of these things:

a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally

accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:

a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.

b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

8. You may not copy, modify, sublicense, link with, or distribute the Library except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the Library is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

9. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Library or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Library (or any work based on the Library), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Library or works based on it.

10. Each time you redistribute the Library (or any work based on the Library), the recipient automatically receives a license from the original licensor to copy, distribute, link with or modify the Library subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties with this License.

11. If, as a consequence of a court judgment or allegation of patent

infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse

you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Library at all. For example, if a patent license would not permit royalty-free redistribution of the Library by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Library.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

12. If the distribution and/or use of the Library is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Library under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

13. The Free Software Foundation may publish revised and/or new versions of the Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library specifies a version number of this License which applies to it and



"any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Library does not specify a license version number, you may choose any version ever published by the Free Software Foundation.

14. If you wish to incorporate parts of the Library into other free programs whose distribution conditions are incompatible with these, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

15. BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE LIBRARY "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE LIBRARY AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE LIBRARY (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

#### END OF TERMS AND CONDITIONS

#### How to Apply These Terms to Your New Libraries

If you develop a new library, and you want it to be of the greatest possible use to the public, we recommend making it free software that everyone can redistribute and change. You can do so by permitting redistribution under these terms (or, alternatively, under the terms of the

ordinary General Public License).

To apply these terms, attach the following notices to the library. It is safest to attach them to the start of each source file to most effectively convey

the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the library's name and a brief idea of what it does.>

Copyright (C) <year> <name of author>

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

You should have received a copy of the GNU Lesser General Public License along with this library; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA

Also add information on how to contact you by electronic and paper mail.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the library, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the library `Frob' (a library for tweaking knobs) written by James Random Hacker.

<signature of Ty Coon>, 1 April 1990

Ty Coon, President of Vice

That's all there is to it!

GNU GENERAL PUBLIC LICENSE

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.

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:

```
<program> Copyright (C) <year> <name of author>
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>.

## 1.32 libbsd 0.10.0

### 1.32.1 Available under license :

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Files:

\*

Copyright:

Copyright 2004-2006, 2008-2018 Guillem Jover <guillem@hadrons.org>

License: BSD-3-clause

Files:

man/arc4random.3bsd

man/tree.3bsd

Copyright:

Copyright 1997 Niels Provos <provos@physnet.uni-hamburg.de>

All rights reserved.

License: BSD-4-clause-Niels-Provos

Redistribution and use in source and binary forms, with or without

modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. All advertising materials mentioning features or use of this software must display the following acknowledgement:  
This product includes software developed by Niels Provos.
4. The name of the author may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Files:

man/getprogname.3bsd

Copyright:

Copyright 2001 Christopher G. Demetriou

All rights

reserved.

License: BSD-4-clause-Christopher-G-Demetriou

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. All advertising materials mentioning features or use of this software must display the following acknowledgement:  
This product includes software developed for the NetBSD Project. See <http://www.netbsd.org/> for information about NetBSD.
4. The name of the author may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED  
BY THE AUTHOR ``AS IS" AND ANY EXPRESS OR  
IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES  
OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED.  
IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT,  
INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT  
NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE,  
DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY  
THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT  
(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF  
THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Files:

include/bsd/err.h  
include/bsd/stdlib.h  
include/bsd/sys/param.h  
include/bsd/unistd.h  
src/bsd\_getopt.c  
src/err.c  
src/fgetln.c  
src/progname.c

Copyright:

Copyright 2005, 2008-2012, 2019 Guillem Jover <guillem@hadrons.org>

Copyright 2005 Hector Garcia Alvarez

Copyright 2005 Aurelien Jarno

Copyright

2006 Robert Millan

Copyright 2018 Facebook, Inc.

License: BSD-3-clause

Files:

include/bsd/netinet/ip\_icmp.h  
include/bsd/sys/bitstring.h  
include/bsd/sys/queue.h  
include/bsd/sys/time.h  
include/bsd/timeconv.h  
include/bsd/vis.h  
man/bitstring.3bsd  
man/errc.3bsd  
man/explicit\_bzero.3bsd  
man/fgetln.3bsd  
man/fgetwln.3bsd  
man/fpurge.3bsd  
man/funopen.3bsd  
man/getbsize.3bsd  
man/heapsort.3bsd  
man/nlist.3bsd  
man/queue.3bsd

man/radixsort.3bsd  
man/reallocarray.3bsd  
man/reallocf.3bsd  
man/setmode.3bsd  
man/strmode.3bsd  
man/strnstr.3bsd  
man/strtoi.3bsd  
man/strtou.3bsd  
man/unvis.3bsd  
man/vis.3bsd  
man/wcslcpy.3bsd  
src/getbsize.c  
src/heapsort.c  
src/merge.c  
src/nlist.c  
src/radixsort.c  
src/setmode.c  
src/strmode.c  
src/strnstr.c  
src/strtoi.c  
src/strtou.c  
src/unvis.c

Copyright:

Copyright 1980, 1982, 1986, 1989-1994

The Regents of the University of California. All rights reserved.

Copyright 2001 Mike Barcroft <mike@FreeBSD.org>

.

Some code is derived from  
software contributed to Berkeley by  
the American National Standards Committee X3, on Information  
Processing Systems.

.

Some code is derived from software contributed to Berkeley by  
Peter McIlroy.

.

Some code is derived from software contributed to Berkeley by  
Ronnie Kon at Mindcraft Inc., Kevin Lew and Elmer Yglesias.

.

Some code is derived from software contributed to Berkeley by  
Dave Borman at Cray Research, Inc.

.

Some code is derived from software contributed to Berkeley by  
Paul Vixie.

.

Some code is derived from software contributed to Berkeley by  
Chris Torek.

.

Copyright UNIX System Laboratories, Inc.

All or some portions of this file are derived from material licensed to the University of California by American Telephone and Telegraph Co. or Unix System Laboratories, Inc. and are reproduced herein with the permission of UNIX System Laboratories, Inc.

License: BSD-3-clause-Regents

Files:

src/vis.c

Copyright:

Copyright 1989, 1993

The Regents of  
the University of California. All rights reserved.

Copyright 1999, 2005 The NetBSD Foundation, Inc.

All rights reserved.

License: BSD-3-clause-Regents and BSD-2-clause-NetBSD

Files:

include/bsd/libutil.h

Copyright:

Copyright 1996 Peter Wemm <peter@FreeBSD.org>.

All rights reserved.

Copyright 2002 Networks Associates Technology, Inc.

All rights reserved.

License: BSD-3-clause-author

Files:

man/timeradd.3bsd

Copyright:

Copyright 2009 Jukka Ruohonen <jruohonen@iki.fi>

Copyright 1999 Kelly Yancey <kbyanc@posi.net>

All rights reserved.

License: BSD-3-clause-John-Birrell

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 author nor the names of any co-contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY JOHN BIRRELL AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE

IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Files:

man/setproctitle.3bsd

Copyright:

Copyright 1995 Peter Wemm <peter@FreeBSD.org>

All rights reserved.

License: BSD-5-clause-Peter-Wemm

Redistribution and use in source and binary forms, with or without modification, is permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice immediately at the beginning of the file, without modification, 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. This work was done expressly for inclusion into FreeBSD. Other use is permitted provided this notation is included.
4. Absolutely no warranty of function or purpose is made by the author Peter Wemm.
5. Modifications may be freely made to this file providing the above conditions are met.

Files:

include/bsd/stringlist.h

man/fmtcheck.3bsd

man/humanize\_number.3bsd

man/stringlist.3bsd

man/timeval.3bsd

src/fmtcheck.c

src/humanize\_number.c

src/stringlist.c

src/strtonum.c

Copyright:

Copyright 1994, 1997-2000, 2002, 2008, 2010, 2014

The NetBSD Foundation, Inc.

Copyright 2013 John-Mark Gurney <jmg@FreeBSD.org>

All rights reserved.

.  
Some code was contributed to The NetBSD Foundation by Allen Briggs.

.  
Some code was contributed to The NetBSD Foundation by Luke Mewburn.

.  
Some code is derived from software contributed to The NetBSD Foundation by Jason R. Thorpe of the Numerical Aerospace Simulation Facility, NASA Ames Research Center, by Luke Mewburn and by Tomas Svensson.

.  
Some code is derived from software contributed to The NetBSD Foundation by Julio M. Merino Vidal, developed as part of Google's Summer of Code 2005 program.

.  
Some code is derived from software contributed to The NetBSD Foundation by Christos Zoulas.

.  
Some code is derived from software contributed to The NetBSD Foundation by Jukka Ruohonen.

License: BSD-2-clause-NetBSD

Files:

include/bsd/sys/endian.h

man/byteorder.3bsd

man/closefrom.3bsd

man/expand\_number.3bsd

man/flopen.3bsd

man/getpeereid.3bsd

man/pidfile.3bsd

src/expand\_number.c

src/hash/sha512.h

src/hash/sha512c.c

src/pidfile.c

src/reallocf.c

src/timeconv.c

Copyright:

Copyright 1998, M. Warner Losh <imp@freebsd.org>

All rights reserved.

.  
Copyright 2001 Dima Dorfman.

All rights reserved.

.  
Copyright 2001 FreeBSD Inc.

All rights reserved.

.  
Copyright 2002 Thomas Moestl <tmm@FreeBSD.org>

All rights reserved.

Copyright 2002 Mike Barcroft <mike@FreeBSD.org>

All rights reserved.

.

Copyright 2005 Pawel Jakub Dawidek <pjd@FreeBSD.org>

All rights reserved.

.

Copyright 2005 Colin Percival

All rights reserved.

.

Copyright 2007 Eric Anderson <anderson@FreeBSD.org>

Copyright 2007 Pawel Jakub Dawidek <pjd@FreeBSD.org>

All rights reserved.

.

Copyright 2007 Dag-Erling Codan Smrgrav

All rights reserved.

.

Copyright 2009 Advanced Computing Technologies LLC

Written by: John H. Baldwin <jhb@FreeBSD.org>

All rights reserved.

.

Copyright 2011 Guillem Jover <guillem@hadrons.org>

License: BSD-2-clause

Files:

src/flopen.c

Copyright:

Copyright 2007-2009 Dag-Erling Codan Smrgrav

All rights reserved.

License: BSD-2-clause-verbatim

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 in this position and unchanged.
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 AUTHOR

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 AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT



LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Files:

include/bsd/sys/tree.h

man/fparsefn.3bsd

src/fparsefn.c

Copyright:

Copyright 1997 Christos Zoulas.

All rights reserved.

.

Copyright 2002 Niels Provos <provos@citi.umich.edu>

All rights reserved.

License: BSD-2-clause-author

Files:

include/bsd/readpassphrase.h

man/readpassphrase.3bsd

man/strncpy.3bsd

man/strtonum.3bsd

src/arc4random.c

src/arc4random\_linux.h

src/arc4random\_openbsd.h

src/arc4random\_uniform.c

src/arc4random\_unix.h

src/arc4random\_win.h

src/closefrom.c

src/getentropy\_aix.c

src/getentropy\_bsd.c

src/getentropy\_hpux.c

src/getentropy\_hurd.c

src/getentropy\_linux.c

src/getentropy\_osx.c

src/getentropy\_solaris.c

src/getentropy\_win.c

src/readpassphrase.c

src/reallocarray.c

src/strlcat.c

src/strncpy.c

Copyright:

Copyright 2004 Ted Unangst and Todd Miller

All rights reserved.

.

Copyright 1996 David Mazieres <dm@uun.org>

Copyright 1998, 2000-2002, 2004-2005, 2007, 2010, 2012-2015

Todd C. Miller <Todd.Miller@courtesan.com>

Copyright 2004 Ted Unangst

Copyright 2008 Damien Miller <djm@openbsd.org>  
Copyright 2008 Otto Moerbeek <otto@drijf.net>  
Copyright 2013 Markus Friedl <markus@openbsd.org>  
Copyright 2014 Bob Beck <beck@obtuse.com>  
Copyright 2014 Brent Cook <bcook@openbsd.org>  
Copyright 2014 Pawel Jakub  
Dawidek <pjd@FreeBSD.org>  
Copyright 2014 Theo de Raadt <deraadt@openbsd.org>  
Copyright 2015 Michael Felt <aixtools@gmail.com>  
Copyright 2015 Guillem Jover <guillem@hadrons.org>

License: ISC

Permission to use, copy, modify, and distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies.

.  
THE SOFTWARE IS PROVIDED "AS IS" AND THE AUTHOR DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

Files:

src/inet\_net\_pton.c

Copyright:

Copyright 1996 by Internet Software Consortium.

License:

ISC-Original

Permission to use, copy, modify, and distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies.

.  
THE SOFTWARE IS PROVIDED "AS IS" AND INTERNET SOFTWARE CONSORTIUM DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL INTERNET SOFTWARE CONSORTIUM BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

Files:

src/setproctitle.c

Copyright:

Copyright 2010 William Ahern

Copyright 2012 Guillem Jover <guillem@hadrons.org>

License: Expat

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.

Files:

include/bsd/md5.h

src/hash/md5.c

Copyright:

None

License:

public-domain-Colin-Plumb

This code implements the MD5 message-digest algorithm.

The algorithm is due to Ron Rivest. This code was written by Colin Plumb in 1993, no copyright is claimed.

This code is in the public domain; do with it what you wish.

Files:

src/explicit\_bzero.c

src/chacha\_private.h

Copyright:

None

License: public-domain

Public domain.

Files:

man/mdX.3bsd

src/hash/md5hl.c

src/hash/helper.c

Copyright:

None

License: Beerware

"THE BEER-WARE LICENSE" (Revision 42):

<phk@login.dkuug.dk> wrote this file. As long as you retain this notice you can do whatever you want with this stuff. If we meet some day, and you think this stuff is worth it, you can buy me a beer in return. Poul-Henning Kamp

License: BSD-3-clause-Regents

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of the University nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

License: BSD-3-clause-author

Redistribution and use in source and binary forms, with or without modification, is 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 THE AUTHOR 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 AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

License: BSD-3-clause

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 ``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.

License:

BSD-2-clause-NetBSD

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 NETBSD FOUNDATION, INC. 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 FOUNDATION 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.

License: BSD-2-clause-author

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 AUTHOR ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED.

IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

License: BSD-2-clause

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 AUTHOR 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 AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)

HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

## 1.33 iptables 1.8.5

### 1.33.1 Available under license :

GNU GENERAL PUBLIC LICENSE

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.,  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA  
Everyone is permitted to copy and distribute verbatim copies  
of this license document, but changing it is not allowed.

#### Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Lesser General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price.

Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

## GNU GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License



along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of

a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

- a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under

this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to

decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING,

## REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

## END OF TERMS AND CONDITIONS

### How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the program's name and a brief idea of what it does.>  
Copyright (C) <year> <name of author>

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA.

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

Gnomovision version 69, Copyright (C) year name of author  
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.  
This is free software, and you are welcome to redistribute  
it  
under certain conditions; type `show c' for details.

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the program  
`Gnomovision' (which makes passes at compilers) written by James Hacker.

<signature of Ty Coon>, 1 April 1989  
Ty Coon, President of Vice

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Lesser General Public License instead of this License.

## 1.34 nghttp2 1.41.0

### 1.34.1 Available under license :

LEGAL NOTICE INFORMATION

-----

All the files in this distribution are covered under the MIT license  
(see the file LICENSE) except some files mentioned below:  
The MIT License

Copyright (c) 2012, 2014, 2015, 2016 Tatsuhiro Tsujikawa  
Copyright (c) 2012, 2014, 2015, 2016 nghttp2 contributors

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.

set yrange [0:]

set terminal pngcairo font 'Sans, 8' lw 1 size 1400,1024

set xtics rotate by -45

set style histogram errorbars gap 2 lw 1

set style fill solid border -1

Copyright (c) 2019 mruby developers

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.

If not otherwise noted, the extensions in this package are licensed under the following license.

Copyright (c) 2010 by the contributors (see AUTHORS file).

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

\* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

\* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

## 1.35 libidn 2.3.0

### 1.35.1 Available under license :

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.

0. Additional Definitions.

As used herein, "this License" refers to version 3 of the GNU Lesser General Public License, and the "GNU GPL" refers to version 3 of the GNU General Public License.

"The Library" refers to a covered work governed by this License, other than an Application or a Combined Work as defined below.

An "Application" is any work that makes use of an interface provided by the Library, but which is not otherwise based on the Library.



Defining a subclass of a class defined by the Library is deemed a mode of using an interface provided by the Library.

A "Combined Work" is a work produced by combining or linking an Application with the Library. The particular version of the Library with which the Combined Work was made is also called the "Linked Version".

The "Minimal Corresponding Source" for a Combined Work means the Corresponding Source for the Combined Work, excluding any source code for portions of the Combined Work that, considered in isolation, are based on the Application, and not on the Linked Version.

The "Corresponding Application Code" for a Combined Work means the object code and/or source code for the Application, including any data and utility programs needed for reproducing the Combined Work from the Application, but excluding the System Libraries of the Combined Work.

#### 1. Exception to Section 3 of the GNU GPL.

You may convey a covered work under sections 3 and 4 of this License without being bound by section 3 of the GNU GPL.

#### 2. Conveying Modified Versions.

If you modify a copy of the Library, and, in your modifications, a facility refers to a function or data to be supplied by an Application that uses the facility (other than as an argument passed when the facility is invoked), then you may convey a copy of the modified version:

- a) under this License, provided that you make a good faith effort to ensure that, in the event an Application does not supply the function or data, the facility still operates, and performs whatever part of its purpose remains meaningful, or
- b) under the GNU GPL, with none of the additional permissions of this License applicable to that copy.

#### 3. Object Code Incorporating Material from Library Header Files.

The object code form of an Application may incorporate material from a header file that is part of the Library. You may convey such object code under terms of your choice, provided that, if the incorporated material is not limited to numerical parameters, data structure layouts and accessors, or small macros, inline functions and templates

(ten or fewer lines in length), you do both of the following:

- a) Give prominent notice with each copy of the object code that the Library is used in it and that the Library and its use are covered by this License.
- b) Accompany the object code with a copy of the GNU GPL and this license document.

#### 4. Combined Works.

You may convey a Combined Work under terms of your choice that, taken together, effectively do not restrict modification of the portions of the Library contained in the Combined Work and reverse engineering for debugging such modifications, if you also do each of the following:

- a) Give prominent notice with each copy of the Combined Work that the Library is used in it and that the Library and its use are covered by this License.
- b) Accompany the Combined Work with a copy of the GNU GPL and this license document.
- c) For a Combined Work that displays copyright notices during execution, include the copyright notice for the Library among these notices, as well as a reference directing the user to the copies of the GNU GPL and this license document.

d) Do one of the following:

0) Convey the Minimal Corresponding Source under the terms of this License, and the Corresponding Application Code in a form suitable for, and under terms that permit, the user to recombine or relink the Application with a modified version of the Linked Version to produce a modified Combined Work, in the manner specified by section 6 of the GNU GPL for conveying Corresponding Source.

1) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (a) uses at run time a copy of the Library already present on the user's computer system, and (b) will operate properly with a modified version of the Library that is interface-compatible with the Linked Version.

e) Provide Installation Information, but only if you would otherwise be required to provide such information under section 6 of the GNU GPL, and only to the extent that such information is necessary to install and execute a modified version of the Combined Work produced by recombining or relinking the Application with a modified version of the Linked Version. (If you use option 4d0, the Installation Information must accompany the Minimal Corresponding Source and Corresponding Application Code. If you use option 4d1, you must provide the Installation Information in the manner specified by section 6 of the GNU GPL for conveying Corresponding Source.)

## 5. Combined Libraries.

You may place library facilities that are a work based on the Library side by side in a single library together with other library facilities that are not Applications and are not covered by this License, and convey such a combined library under terms of your choice, if you do both of the following:

- a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities, conveyed under the terms of this License.
- b) Give prominent notice with the combined library that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

## 6. Revised Versions of the GNU Lesser General Public License.

The Free Software Foundation may publish revised and/or new versions of the GNU Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library as you received it specifies that a certain numbered version of the GNU Lesser General Public License "or any later version" applies to it, you have the option of following the terms and conditions either of that published version or of any later version published by the Free Software Foundation. If the Library as you received it does not specify a version number of the GNU Lesser General Public License, you may choose any version of the GNU Lesser General Public License ever published by the Free Software Foundation.

If the Library as you received it specifies that a proxy can decide

whether future versions of the GNU Lesser General Public License shall apply, that proxy's public statement of acceptance of any version is permanent authorization for you to choose that version for the Library.

## GNU GENERAL PUBLIC LICENSE

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.,  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA  
Everyone is permitted to copy and distribute verbatim copies  
of this license document, but changing it is not allowed.

### Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Lesser General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price.

Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

## GNU GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of

Sections 1 and 2 above provided that you also do one of the following:

- a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or

distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to



be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES,

INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR

THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

## END OF TERMS AND CONDITIONS

### How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

```
<one line to give the program's name and a brief idea of what it does.>  
Copyright (C) <year> <name of author>
```

```
This program is free software; you can redistribute it and/or modify  
it under the terms of the GNU  
General Public License as published by  
the Free Software Foundation; either version 2 of the License, or  
(at your option) any later version.
```

```
This program is distributed in the hope that it will be useful,  
but WITHOUT ANY WARRANTY; without even the implied warranty of  
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the  
GNU General Public License for more details.
```

```
You should have received a copy of the GNU General Public License along  
with this program; if not, write to the Free Software Foundation, Inc.,  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA.
```

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

```
Gnomovision version 69, Copyright (C) year name of author  
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.  
This is free software, and you are welcome to redistribute
```

it

under certain conditions; type `show c' for details.

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the program  
`Gnomovision' (which makes passes at compilers) written by James Hacker.

<signature of Ty Coon>, 1 April 1989

Ty Coon, President of Vice

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this

is what you want to do, use the GNU Lesser General Public License instead of this License.

Libidn2 COPYING -- Licensing information.                    -\*- outline -\*-

Copyright (C) 2011-2016 Simon Josefsson

See the end for copying conditions.

The source code for the C library (libidn2.a or libidn.so) are licensed under the terms of either the GNU General Public License version 2.0 or later (see the file COPYINGv2) or the GNU Lesser General Public License version 3.0 or later (see the file COPYING.LESSERv3), or both in parallel as here.

The command line tool, self tests, examples, and other auxiliary files, are licensed under the GNU General Public License version 3.0 or later.

The license of the Unicode character data files (which are parsed into static storage in the library) are documented in COPYING.unicode.

Other files are licensed as indicated in each file.

There may be exceptions to these general rules, see each file for precise information.

-----  
This file 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 file 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 file. If not, see <<http://www.gnu.org/licenses/>>.

#### A. Unicode Copyright.

Copyright 1991-2016 Unicode, Inc. All rights reserved.

Certain documents and files on this website contain a legend indicating that "Modification is permitted." Any person is hereby authorized, without fee, to modify such documents and files to create derivative works conforming to the Unicode Standard, subject to Terms and Conditions herein.

Any person is hereby authorized, without fee, to view, use, reproduce, and distribute all documents and files solely for informational purposes and in the creation of products supporting the Unicode Standard, subject to the Terms and Conditions herein.

Further specifications of rights and restrictions pertaining to the use of the particular set of data files known as the "Unicode Character Database" can be found in the License.

Each version of the Unicode Standard has further specifications of rights and restrictions of use. For the book editions (Unicode 5.0 and earlier), these are found on the back of the title page. The online code charts carry specific restrictions. All other files, including online documentation of the core specification for Unicode 6.0 and later, are covered under these general Terms of Use.

No license is granted to "mirror" the Unicode website where a fee is charged for access to the "mirror" site.

Modification is not permitted with respect to this document. All copies of this document must be verbatim.

#### B. Restricted Rights Legend.

Any technical data or software which is licensed to the United States of America, its agencies and/or instrumentalities under this Agreement is commercial technical data or commercial computer software developed exclusively at private expense as defined in FAR 2.101, or DFARS 252.227-7014 (June 1995), as applicable. For technical data, use, duplication, or disclosure by the Government is subject to restrictions as set forth in DFARS 202.227-7015 Technical Data, Commercial and Items (Nov 1995) and this Agreement. For Software, in accordance with FAR 12-212 or DFARS 227-7202, as applicable, use, duplication or disclosure by the Government is subject to the restrictions set forth in this Agreement.

#### C. Warranties and Disclaimers.

This publication and/or website may include technical or typographical errors or other inaccuracies. Changes are periodically added to the information herein; these changes will be incorporated in new editions of the publication and/or website. Unicode may make improvements and/or changes in the product(s) and/or program(s) described in this publication and/or website at any time.

If this file has been purchased on magnetic or optical media from Unicode, Inc. the sole and exclusive remedy for any claim will be exchange of the defective media within ninety (90) days of original purchase.

EXCEPT AS PROVIDED IN SECTION C.2, THIS PUBLICATION AND/OR SOFTWARE IS PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND EITHER EXPRESS, IMPLIED, OR STATUTORY, INCLUDING,

BUT NOT LIMITED TO,

ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT. UNICODE AND ITS LICENSORS ASSUME NO RESPONSIBILITY FOR ERRORS OR OMISSIONS IN THIS PUBLICATION AND/OR SOFTWARE OR OTHER DOCUMENTS WHICH ARE REFERENCED BY OR LINKED TO THIS PUBLICATION OR THE UNICODE WEBSITE.

D. Waiver of Damages.

In no event shall Unicode or its licensors be liable for any special, incidental, indirect or consequential damages of any kind, or any damages whatsoever, whether or not Unicode was advised of the possibility of the damage, including, without limitation, those resulting from the following: loss of use, data or profits, in connection with the use, modification or distribution of this information or its derivatives.

E. Trademarks & Logos.

The Unicode Word Mark and the Unicode Logo are trademarks of Unicode, Inc. The Unicode Consortium and Unicode, Inc. are trade names of Unicode, Inc. Use of the information and materials found on this website indicates your acknowledgement of Unicode, Inc.'s exclusive worldwide rights in the Unicode Word Mark, the Unicode Logo, and the Unicode trade names.

The Unicode Consortium Name and Trademark Usage Policy (Trademark Policy) are incorporated herein by reference and you agree to abide by the provisions of the Trademark Policy, which may be changed from time to time in the sole discretion of Unicode, Inc.

All third party trademarks referenced herein are the property of their respective owners.

F. Miscellaneous.

Jurisdiction and Venue. This server is operated from a location in the State of California, United States of America. Unicode makes no representation that the materials are appropriate for use in other locations. If you access this server from other locations, you are responsible for compliance with local laws. This Agreement, all use of this site and any claims and damages resulting from use of this site are governed solely by the laws of the State of California without regard to any principles

which would apply the laws of a different jurisdiction. The user agrees that any disputes regarding this site shall be resolved solely in the courts located in Santa Clara County, California. The user agrees said courts have personal jurisdiction and agree to waive any right to transfer the dispute to any other forum.

Modification by Unicode Unicode shall have the right to modify this Agreement at any time by posting it to this site. The user may not assign any part of this Agreement without Unicode's prior written consent.

Taxes. The user agrees to pay any taxes arising from access to this website or use of the information herein, except for those based on Unicode's net income.

Severability. If any provision of this Agreement is declared invalid or unenforceable, the remaining provisions of this Agreement shall remain in effect.

Entire Agreement. This Agreement constitutes the entire agreement between the parties.

EXHIBIT 1

Unicode Data Files include all data files under the directories

<http://www.unicode.org/Public/>, <http://www.unicode.org/reports/>,  
<http://www.unicode.org/cldr/data/>, <http://source.icu-project.org/repos/icu/>, and  
<http://www.unicode.org/utility/trac/browser/>.

Unicode Data Files do not include PDF online code charts under the directory <http://www.unicode.org/Public/>.

Software includes any source code published in the Unicode Standard or under the directories <http://www.unicode.org/Public/>, <http://www.unicode.org/reports/>, <http://www.unicode.org/cldr/data/>, <http://source.icu-project.org/repos/icu/>, and <http://www.unicode.org/utility/trac/browser/>.

NOTICE TO USER: Carefully read the following legal agreement.  
BY DOWNLOADING, INSTALLING, COPYING OR OTHERWISE USING UNICODE INC.'S DATA FILES ("DATA FILES"), AND/OR SOFTWARE ("SOFTWARE"),  
YOU UNEQUIVOCALLY ACCEPT, AND AGREE TO BE BOUND BY, ALL OF THE TERMS AND CONDITIONS OF THIS AGREEMENT.  
IF YOU DO NOT AGREE, DO NOT DOWNLOAD, INSTALL, COPY, DISTRIBUTE OR USE THE DATA FILES OR SOFTWARE.

#### COPYRIGHT AND PERMISSION NOTICE

Copyright 1991-2016 Unicode, Inc. All rights reserved.  
Distributed under the Terms of Use in <http://www.unicode.org/copyright.html>.

Permission is hereby granted, free of charge, to any person obtaining a copy of the Unicode data files and any associated documentation (the "Data Files") or Unicode software and any associated documentation (the "Software") to deal in the Data Files or Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, and/or sell copies of the Data Files or Software, and to permit persons to whom the Data Files or Software are furnished to do so, provided that either  
(a) this copyright and permission notice appear with all copies of the Data Files or Software, or  
(b) this copyright and permission notice appear in associated Documentation.

THE DATA FILES AND SOFTWARE ARE PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF THIRD PARTY RIGHTS.  
IN NO EVENT SHALL THE COPYRIGHT HOLDER OR HOLDERS INCLUDED IN THIS NOTICE BE LIABLE FOR ANY CLAIM, OR ANY SPECIAL INDIRECT OR CONSEQUENTIAL DAMAGES, OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THE DATA FILES OR SOFTWARE.

Except as contained in this notice, the name of a copyright holder shall not be used in advertising or otherwise to promote the sale, use or other dealings in these Data Files or Software without prior written authorization of the copyright holder.

## 1.36 libvirt 5.5.0

### 1.36.1 Available under license :

GNU GENERAL PUBLIC LICENSE

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.,  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA  
Everyone is permitted to copy and distribute verbatim copies  
of this license document, but changing it is not allowed.

#### Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Lesser General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price.

Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

#### GNU GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty;



and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program

with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License.

However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that

system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE

PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

#### END OF TERMS AND CONDITIONS

#### How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

```
<one line to give the program's name and a brief idea of what it does.>  
Copyright (C) <year> <name of author>
```

```
This program is free software; you can redistribute it and/or modify  
it under the terms of the GNU  
General Public License as published by  
the Free Software Foundation; either version 2 of the License, or  
(at your option) any later version.
```

```
This program is distributed in the hope that it will be useful,  
but WITHOUT ANY WARRANTY; without even the implied warranty of  
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the  
GNU General Public License for more details.
```

```
You should have received a copy of the GNU General Public License along  
with this program; if not, write to the Free Software Foundation, Inc.,  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA.
```

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this

when it starts in an interactive mode:

```
Gnomovision version 69, Copyright (C) year name of author
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute
it
under certain conditions; type `show c' for details.
```

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

```
Yoyodyne, Inc., hereby disclaims all copyright interest in the program
`Gnomovision' (which makes passes at compilers) written by James Hacker.
```

```
<signature of Ty Coon>, 1 April 1989
Ty Coon, President of Vice
```

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Lesser General Public License instead of this License.

GNU LESSER GENERAL PUBLIC LICENSE  
Version 2.1, February 1999

Copyright (C) 1991, 1999 Free Software Foundation, Inc.  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA  
Everyone is permitted to copy and distribute verbatim copies  
of this license document, but changing it is not allowed.

[This is the first released version of the Lesser GPL. It also counts as the successor of the GNU Library Public License, version 2, hence the version number 2.1.]

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public Licenses are intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users.

This license, the Lesser General Public License, applies to some specially designated software packages--typically libraries--of the Free Software Foundation and other authors who decide to use it. You can use it too, but we suggest you first think carefully about whether this license or the ordinary General Public License is the better strategy to use in any particular case, based on the explanations below.

When we speak of free software, we are referring to freedom of use, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish); that you receive source code or can get it if you want it; that you can change the software and use pieces of it in new free programs; and that you are informed that you can do these things.

To protect your rights, we need to make restrictions that forbid distributors to deny you these rights or to ask you to surrender these rights. These restrictions translate to certain responsibilities for you if you distribute copies of the library or if you modify it.

For example, if you distribute copies of the library, whether gratis or for a fee, you must give the recipients all the rights that we gave you. You must make sure that they, too, receive or can get the source code. If you link other code with the library, you must provide complete object files to the recipients, so that they can relink them with the library after making changes to the library and recompiling it. And you must show them these terms so they know their rights.

We protect your rights with a two-step method: (1) we copyright the library, and (2) we offer you this license, which gives you legal permission to copy, distribute and/or modify the library.

To protect each distributor, we want to make it very clear that there is no warranty for the free library. Also, if the library is modified by someone else and passed on, the recipients should know that what they have is not the original version, so that the original author's reputation will not be affected by problems that might be introduced by others.

Finally, software patents pose a constant threat to the existence of any free program. We wish to make sure that a company cannot effectively restrict the users of a free program by obtaining a restrictive license from a patent holder. Therefore, we insist that any patent license obtained for a version of the library must be consistent with the full freedom of use specified in this license.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License. This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License. We use this license for certain libraries in order to permit linking those libraries into non-free programs.

When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.

We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a



"work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

## GNU LESSER GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License Agreement applies to any software library or other program which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Lesser General Public License (also called "this License"). Each licensee is addressed as "you".

A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

1. You may copy and distribute verbatim copies of the Library's complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and distribute a copy of this License along with the

Library.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

- a) The modified work must itself be a software library.
- b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.
- c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.
- d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest

your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may opt to apply the terms of the ordinary GNU General Public

License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it

contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

- a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified

executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:

a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.

b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

8. You may not copy, modify, sublicense, link with, or distribute the Library except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the Library is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

9. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Library or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Library (or any work based on the Library), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Library or works based on it.

10. Each time you redistribute the Library (or any work based on the Library), the recipient automatically receives a license from the original licensor to copy, distribute, link with or modify the Library subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties with this License.

11. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Library at all. For example, if a patent license would not permit royalty-free redistribution of the Library by all those who receive copies directly or indirectly through you, then

the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Library.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

12. If the distribution and/or use of the Library is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Library under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

13. The Free Software Foundation may publish revised and/or new versions of the Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Library does not specify a license version number, you may choose any version ever published by the Free Software Foundation.

14. If you wish to incorporate parts of the Library into other free programs whose distribution conditions are incompatible with these, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free

Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

15. BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE LIBRARY "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE LIBRARY AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE LIBRARY (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

#### END OF TERMS AND CONDITIONS

##### How to Apply These Terms to Your New Libraries

If you develop a new library, and you want it to be of the greatest possible use to the public, we recommend making it free software that everyone can redistribute and change. You can do so by permitting redistribution under these terms (or, alternatively, under the terms of the ordinary General Public License).

To apply these terms, attach the following notices to the library. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the library's name and a brief 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!

## 1.37 busybox 1.32.0

### 1.37.1 Available under license :

bzip2 applet in busybox is based on lightly-modified source of bzip2 version 1.0.4. bzip2 source is distributed under the following conditions (copied verbatim from LICENSE file)

=====

This program, "bzip2", the associated library "libbzip2", and all documentation, are copyright (C) 1996-2006 Julian R Seward. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required.
3. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
4. The name of the author may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Julian Seward, Cambridge, UK.

[jseward@bzip.org](mailto:jseward@bzip.org)

bzip2/libbzip2 version 1.0.4 of 20 December 2006

--- A note on GPL versions

BusyBox is distributed under version 2 of the General Public License (included in its entirety, below). Version 2 is the only version of this license which this version of BusyBox (or modified versions derived from this one) may be distributed under.

-----  
GNU GENERAL PUBLIC LICENSE

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.

51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Library General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

GNU GENERAL PUBLIC LICENSE  
TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this

License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

- a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.
- b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third

parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed

under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to

these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

#### END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Programs



If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

```
<one line to give the program's name and a brief idea of what it does.>  
Copyright (C) <year> <name of author>
```

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

```
Gnomovision version 69, Copyright (C) year name of author  
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.  
This is free software, and you are welcome to redistribute it  
under certain conditions; type `show c' for details.
```

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the program  
'Gnomovision' (which makes passes at compilers) written by James Hacker.

<signature of Ty Coon>, 1 April 1989

Ty Coon, President of

Vice

This General Public License does not permit incorporating your program into  
proprietary programs. If your program is a subroutine library, you may  
consider it more useful to permit linking proprietary applications with the  
library. If this is what you want to do, use the GNU Library General  
Public License instead of this License.

## 1.38 libssh2 1.9.0

### 1.38.1 Available under license :

```
/* Copyright (c) 2004-2007 Sara Golemon <sarag@libssh2.org>
* Copyright (c) 2005,2006 Mikhail Gusarov <dottedmag@dottedmag.net>
* Copyright (c) 2006-2007 The Written Word, Inc.
* Copyright (c) 2007 Eli Fant <elifantu@mail.ru>
* Copyright (c) 2009-2014 Daniel Stenberg
* Copyright (C) 2008, 2009 Simon Josefsson
* All rights reserved.
*
* Redistribution and use in source and binary forms,
* with or without modification, are permitted provided
* that the following conditions are met:
*
* Redistributions of source code must retain the above
* copyright notice, this list of conditions and the
* following disclaimer.
*
* Redistributions in binary form must reproduce the above
* copyright notice, this list of conditions and the following
* disclaimer in the documentation and/or other materials
* provided with the distribution.
*
* Neither the name of the copyright holder nor the names
* of any other contributors may be used to endorse or
* promote products
derived from this software without
* specific prior written permission.
*
* THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND
* CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES,
* INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES
```

\* OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE  
\* ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR  
\* CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL,  
\* SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING,  
\* BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR  
\* SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS  
\* INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY,  
\* WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING  
\* NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE  
\* USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY  
\* OF SUCH DAMAGE.  
\*/

## 1.39 file 5.39

### 1.39.1 Available under license :

Copyright (c) Ian F. Darwin 1986-1995.

Software written by Ian F. Darwin and others;

maintained 1995-present by Christos Zoulas and others.

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 immediately at the beginning of the file, without modification, 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 AUTHOR 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 AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

\$File: COPYING,v 1.2 2018/09/09 20:33:28 christos Exp \$

Copyright (c) Ian F. Darwin 1986, 1987, 1989, 1990, 1991, 1992, 1994, 1995.

Software written by Ian F. Darwin and others;

maintained 1994- Christos Zoulas.

This software is not subject to any export provision of the United States Department of Commerce, and may be exported to any country or planet.

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 immediately at the beginning of the file, without modification, 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 AUTHOR 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 AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

## 1.40 traceroute 2.1.0-r0

### 1.40.1 Available under license :

GNU LESSER GENERAL PUBLIC LICENSE  
Version 2.1, February 1999

Copyright (C) 1991, 1999 Free Software Foundation, Inc.  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA  
Everyone is permitted to copy and distribute verbatim copies  
of this license document, but changing it is not allowed.

[This is the first released version of the Lesser GPL. It also counts  
as the successor of the GNU Library Public License, version 2, hence  
the version number 2.1.]

#### Preamble

The licenses for most software are designed to take away your  
freedom to share and change it. By contrast, the GNU General Public  
Licenses are intended to guarantee your freedom to share and change  
free software--to make sure the software is free for all its users.

This license, the Lesser General Public License, applies to some specially designated software packages--typically libraries--of the Free Software Foundation and other authors who decide to use it. You can use it too, but we suggest you first think carefully about whether this license or the ordinary General Public License is the better strategy to use in any particular case, based on the explanations below.

When we speak of free software, we are referring to freedom of use, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish); that you receive source code or can get it if you want it; that you can change the software and use pieces of it in new free programs; and that you are informed that you can do these things.

To protect your rights, we need to make restrictions that forbid distributors to deny you these rights or to ask you to surrender these rights. These restrictions translate to certain responsibilities for you if you distribute copies of the library or if you modify it.

For example, if you distribute copies of the library, whether gratis or for a fee, you must give the recipients all the rights that we gave you. You must make sure that they, too, receive or can get the source code. If you link other code with the library, you must provide complete object files to the recipients, so that they can relink them with the library after making changes to the library and recompiling it. And you must show them these terms so they know their rights.

We protect your rights with a two-step method: (1) we copyright the library, and (2) we offer you this license, which gives you legal permission to copy, distribute and/or modify the library.

To protect each distributor, we want to make it very clear that there is no warranty for the free library. Also, if the library is modified by someone else and passed on, the recipients should know that what they have is not the original version, so that the original author's reputation will not be affected by problems that might be introduced by others.

Finally, software patents pose a constant threat to the existence of any free program. We wish to make sure that a company cannot effectively restrict the users of a free program by obtaining a restrictive license from a patent holder. Therefore, we insist that any patent license obtained for a version of the library must be

consistent with the full freedom of use specified in this license.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License. This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License. We use this license for certain libraries in order to permit linking those libraries into non-free programs.

When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.

We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.

The precise terms and conditions for copying, distribution and

modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

## GNU LESSER GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License Agreement applies to any software library or other program which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Lesser General Public License (also called "this License"). Each licensee is addressed as "you".

A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

1. You may copy and distribute verbatim copies of the Library's complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any

warranty; and distribute a copy of this License along with the Library.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

- a) The modified work must itself be a software library.
- b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.
- c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.
- d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.



Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may opt to apply the terms of the ordinary GNU General Public

License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library

creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

- a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the

user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

- b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.
- c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.
- d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.
- e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise

permitted, and provided that you do these two things:

a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any

other library

facilities. This must be distributed under the terms of the Sections above.

b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

8. You may not copy, modify, sublicense, link with, or distribute the Library except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the Library is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

9. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Library or its derivative works. These actions are prohibited by law if

you do not accept this License. Therefore, by modifying or distributing the Library (or any work based on the Library), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Library or works based on it.

10. Each time you redistribute the Library (or any work based on the Library), the recipient automatically receives a license from the original licensor to copy, distribute, link with or modify the Library subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties with this License.

11. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse

you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Library at all. For example, if a patent license would not permit royalty-free redistribution of the Library by

all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Library.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

12. If the distribution and/or use of the Library is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Library under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

13. The Free Software Foundation may publish revised and/or new versions of the Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Library does not specify a license version number, you may choose any version ever published by the Free Software Foundation.

14. If you wish to incorporate parts of the Library into other free programs whose distribution conditions are incompatible with these, write to the author to ask for permission. For software which is

copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision

will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

15. BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE LIBRARY "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE LIBRARY AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE LIBRARY (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

#### END OF TERMS AND CONDITIONS

##### How to Apply These Terms to Your New Libraries

If you develop a new library, and you want it to be of the greatest possible use to the public, we recommend making it free software that everyone can redistribute and change. You can do so by permitting redistribution under these terms (or, alternatively, under the terms of the ordinary General Public License).

To apply these terms, attach the following notices to the library. It is safest to attach them to the start of each source file to most effectively convey

the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the library's name and a brief idea of what it does.>

Copyright (C) <year> <name of author>

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

You should have received a copy of the GNU Lesser General Public License along with this library; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA

Also add information on how to contact you by electronic and paper mail.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the library, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the library `Frob' (a library for tweaking knobs) written by James Random Hacker.

<signature of Ty Coon>, 1 April 1990  
Ty Coon, President of Vice

That's all there is to it!

GNU GENERAL PUBLIC LICENSE  
Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.,  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA  
Everyone is permitted to copy and distribute verbatim copies  
of this license document, but changing it is not allowed.

#### Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Lesser General Public License instead.) You can apply it to

your programs, too.

When we speak of free software, we are referring to freedom, not price.

Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

## GNU GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below,



refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but

does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

- a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source

code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this

License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software

Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

#### END OF TERMS AND CONDITIONS

##### How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the program's name and a brief idea of what it does.>

Copyright (C) <year> <name of author>

This program is free software; you can redistribute it and/or modify it under the terms of the GNU

General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA.

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

```
Gnomovision version 69, Copyright (C) year name of author
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute
it
under certain conditions; type `show c' for details.
```

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

```
Yoyodyne, Inc., hereby disclaims all copyright interest in the program
`Gnomovision' (which makes passes at compilers) written by James Hacker.
```

```
<signature of Ty Coon>, 1 April 1989
Ty Coon, President of Vice
```

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this

is what you want to do, use the GNU Lesser General Public License instead of this License.

## 1.41 sqlite 3.33.0

### 1.41.1 Available under license :

The author disclaims copyright to this source code. In place of a legal notice, here is a blessing:

May you do good and not evil.  
May you find forgiveness for yourself and forgive others.  
May you share freely, never taking more than you give.

## 1.42 glibc 2.32

### 1.42.1 Available under license :

@c The GNU Lesser General Public License.  
@center Version 2.1, February 1999

@c This file is intended to be included within another document,  
@c hence no sectioning command or @node.

@display  
Copyright @copyright{ } 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.]  
@end display

@subheading 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---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 @dfn{Lesser} General Public License because it does @emph{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.

@enumerate 0

@item

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.

@item

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.

@item

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:

@enumerate a

@item

The modified work must itself be a software library.

@item

You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.

@item

You must

cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.

@item

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.)

@end enumerate

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.

@item

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.

@item

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.

@item

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.

@item

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:

@enumerate a

@item

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.)

@item

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.

@item

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.

@item

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.

@item

Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

@end enumerate

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.

@item

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:

@enumerate a

@item

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.

@item

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.

@end enumerate

@item

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.

@item

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.

@item

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.

@item

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.

@item

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.

@item

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.

@item

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.

@center @b{NO WARRANTY}

@item

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.

@item

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 enumerate

@subheading END OF TERMS AND CONDITIONS

@page

@subheading 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.

@smallexample

@var{one line to give the library's name and an idea of what it does.}

Copyright (C) @var{year} @var{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.

@end

smallexample

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:

@smallexample

Yoyodyne, Inc., hereby disclaims all copyright interest in the library  
`Frob' (a library for tweaking knobs) written by James Random Hacker.

@var{signature of Ty Coon}, 1 April 1990

Ty Coon, President of Vice

@end smallexample

That's all there is to it!

Copyright 1992, 1993, 1994, 1997 Henry Spencer. All rights reserved.  
This software is not subject to any license of the American Telephone  
and Telegraph Company or of the Regents of the University of California.

Permission is granted to anyone to use this software for any purpose on  
any computer system, and to alter it and redistribute it, subject  
to the following restrictions:

1. The author is not responsible for the consequences of use of this software, no matter how awful, even if they arise from flaws in it.
2. The origin of this software must not be misrepresented, either by explicit claim or by omission. Since few users ever read sources, credits must appear in the documentation.
3. Altered versions must be plainly marked as such, and must not be misrepresented as being the original software. Since few users ever read sources, credits must appear in the documentation.
4. This notice may not be removed or altered.

#### GNU LESSER GENERAL PUBLIC LICENSE

Version 2.1, February 1999

Copyright (C) 1991, 1999 Free Software Foundation, Inc.  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA  
Everyone is permitted to copy and distribute verbatim copies  
of this license document, but changing it is not allowed.

[This is the first released version of the Lesser GPL. It also counts  
as the successor of the GNU Library Public License, version 2, hence  
the version number 2.1.]

## Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public Licenses are intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users.

This license, the Lesser General Public License, applies to some specially designated software packages--typically libraries--of the Free Software Foundation and other authors who decide to use it. You can use it too, but we suggest you first think carefully about whether this license or the ordinary General Public License is the better strategy to use in any particular case, based on the explanations below.

When we speak of free software, we are referring to freedom of use, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish); that you receive source code or can get it if you want it; that you can change the software and use pieces of it in new free programs; and that you are informed that you can do these things.

To protect your rights, we need to make restrictions that forbid distributors to deny you these rights or to ask you to surrender these rights. These restrictions translate to certain responsibilities for you if you distribute copies of the library or if you modify it.

For example, if you distribute copies of the library, whether gratis or for a fee, you must give the recipients all the rights that we gave you. You must make sure that they, too, receive or can get the source code. If you link other code with the library, you must provide complete object files to the recipients, so that they can relink them with the library after making changes to the library and recompiling it. And you must show them these terms so they know their rights.

We protect your rights with a two-step method: (1) we copyright the library, and (2) we offer you this license, which gives you legal permission to copy, distribute and/or modify the library.

To protect each distributor, we want to make it very clear that there is no warranty for the free library. Also, if the library is modified by someone else and passed on, the recipients should know that what they have is not the original version, so that the original author's reputation will not be affected by problems that might be introduced by others.

Finally, software patents pose a constant threat to the existence of any free program. We wish to make sure that a company cannot effectively restrict the users of a free program by obtaining a restrictive license from a patent holder. Therefore, we insist that any patent license obtained for a version of the library must be consistent with the full freedom of use specified in this license.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License. This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License. We use this license for certain libraries in order to permit linking those libraries into non-free programs.

When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.

We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

## GNU LESSER GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License Agreement applies to any software library or other program which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Lesser General Public License (also called "this License"). Each licensee is addressed as "you".

A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

1. You may copy and distribute verbatim copies of the Library's complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and distribute a copy of this License along with the Library.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

- a) The modified work must itself be a software library.
- b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.
- c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.
- d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be

reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those

sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may opt to apply the terms of the ordinary  
GNU General Public

License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.



5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you

distribute.

7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:

a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.

b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

8. You may not copy, modify, sublicense, link with, or distribute the Library except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the Library is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

9. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Library or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Library (or any work based on the Library), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Library or works based on it.

10. Each time you redistribute the Library (or any work based on the Library), the recipient automatically receives a license from the original licensor to copy, distribute, link with or modify the Library subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties with this License.

11. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or

otherwise) that contradict the conditions of this License, they do not excuse

you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Library at all. For example, if a patent license would not permit royalty-free redistribution of the Library by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Library.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system

which is

implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

12. If the distribution and/or use of the Library is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Library under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

13. The Free Software Foundation may publish revised and/or new versions of the Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by

the Free Software Foundation. If the Library does not specify a license version number, you may choose any version ever published by the Free Software Foundation.

14. If you wish to incorporate parts of the Library into other free programs whose distribution conditions are incompatible with these, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

15. BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE LIBRARY "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE LIBRARY AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE LIBRARY (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

#### END OF TERMS AND CONDITIONS

#### How to Apply These Terms to Your New Libraries

If you develop a new library, and you want it to be of the greatest possible use to the public, we recommend making it free software that everyone can redistribute and change. You can do so by permitting redistribution under these terms (or, alternatively, under the terms of the ordinary General Public License).

To apply these terms, attach the following notices to the library. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the library's name and a brief idea of what it does.>  
Copyright (C) <year> <name of author>

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

You should have received a copy of the GNU Lesser General Public License along with this library; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA

Also add information on how to contact you by electronic and paper mail.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the library, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the library `Frob' (a library for tweaking knobs) written by James Random Hacker.

<signature of Ty Coon>, 1 April 1990  
Ty Coon, President of Vice

That's all there is to it!

GNU GENERAL PUBLIC LICENSE  
Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.,  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA  
Everyone is permitted to copy and distribute verbatim copies  
of this license document, but changing it is not allowed.

Preamble

The licenses for most software are designed to take away your

freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Lesser General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price.

Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

GNU GENERAL PUBLIC LICENSE  
TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c) If the modified program normally reads commands interactively



when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is

allowed only for noncommercial distribution  
and only if you  
received the program in object code or executable form with such  
an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

#### END OF TERMS AND CONDITIONS

#### How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

```
<one line to give the program's name and a brief idea of what it does.>  
Copyright (C) <year> <name of author>
```

```
This program is free software; you can redistribute it and/or modify  
it under the terms of the GNU  
General Public License as published by  
the Free Software Foundation; either version 2 of the License, or  
(at your option) any later version.
```

```
This program is distributed in the hope that it will be useful,  
but WITHOUT ANY WARRANTY; without even the implied warranty of  
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the  
GNU General Public License for more details.
```

```
You should have received a copy of the GNU General Public License along  
with this program; if not, write to the Free Software Foundation, Inc.,  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA.
```

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

```
Gnomovision version 69, Copyright (C) year name of author  
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.  
This is free software, and you are welcome to redistribute  
it  
under certain conditions; type `show c' for details.
```

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

```
Yoyodyne, Inc., hereby disclaims all copyright interest in the program  
'Gnomovision' (which makes passes at compilers) written by James Hacker.
```

```
<signature of Ty Coon>, 1 April 1989
```

Ty Coon, President of Vice

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this

is what you want to do, use the GNU Lesser General Public License instead of this License.

@c The GNU Free Documentation License.

@center Version 1.3, 3 November 2008

@c This file is intended to be included within another document,

@c hence no sectioning command or @node.

@display

Copyright @copyright{ } 2000, 2001, 2002, 2007, 2008 Free Software Foundation, Inc.

@uref{http://fsf.org/}

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

@end display

@enumerate 0

@item

PREAMBLE

The purpose of this License is to make a manual, textbook, or other functional and useful document @dfn{free} in the sense of freedom: to assure everyone the effective freedom to copy and redistribute it, with or without modifying it, either commercially or noncommercially. Secondly, this License preserves for the author and publisher a way to get credit for their work, while not being considered responsible for modifications made by others.

This License is a kind of ``copyleft'', which means that derivative works of the document

must themselves be free in the same sense. It complements the GNU General Public License, which is a copyleft license designed for free software.

We have designed this License in order to use it for manuals for free software, because free software needs free documentation: a free program should come with manuals providing the same freedoms that the software does. But this License is not limited to software manuals; it can be used for any textual work, regardless of subject matter or whether it is published as a printed book. We recommend this License principally for works whose purpose is instruction or reference.

@item

## APPLICABILITY AND DEFINITIONS

This License applies to any manual or other work, in any medium, that contains a notice placed by the copyright holder saying it can be distributed under the terms of this License. Such a notice grants a world-wide, royalty-free license, unlimited in duration, to use that work under the conditions stated herein. The ``Document'', below, refers

to any such manual or work. Any member of the public is a licensee, and is addressed as ``you''. You accept the license if you copy, modify or distribute the work in a way requiring permission under copyright law.

A ``Modified Version'' of the Document means any work containing the Document or a portion of it, either copied verbatim, or with modifications and/or translated into another language.

A ``Secondary Section'' is a named appendix or a front-matter section of the Document that deals exclusively with the relationship of the publishers or authors of the Document to the Document's overall subject (or to related matters) and contains nothing that could fall directly within that overall subject. (Thus, if the Document is in part a textbook of mathematics, a Secondary Section may not explain any mathematics.) The relationship could be a matter of historical connection with the subject or with related matters, or of legal, commercial, philosophical, ethical or political position regarding them.

The ``Invariant Sections'' are certain Secondary Sections whose titles are designated, as being those of Invariant Sections, in the notice that says that the Document is released under this License. If a section does not fit the above definition of Secondary then it is not allowed to be designated as Invariant. The Document may contain zero Invariant Sections. If the Document does not identify any Invariant Sections then there are none.

The ``Cover Texts'' are certain short passages of text that are listed, as Front-Cover Texts or Back-Cover Texts, in the notice that says that the Document is released under this License. A Front-Cover Text may be at most 5 words, and a Back-Cover Text may be at most 25 words.

A ``Transparent'' copy of the Document means a machine-readable copy, represented in a format whose specification is available to the general public, that is suitable for revising the document straightforwardly with generic text editors or (for

images composed of pixels) generic paint programs or (for drawings) some widely available drawing editor, and that is suitable for input to text formatters or for automatic translation to a variety of formats suitable for input to text formatters. A copy made in an otherwise Transparent file format whose markup, or absence of markup, has been arranged to thwart or discourage subsequent modification by readers is not Transparent. An image format is not Transparent if used for any substantial amount of text. A copy that is not "Transparent" is called "Opaque".

Examples of suitable formats for Transparent copies include plain ASCII without markup, Texinfo input format, LaTeX input format, SGML or XML using a publicly available DTD, and standard-conforming simple HTML, PostScript or PDF designed for human modification. Examples of transparent image formats include PNG, XCF and JPG. Opaque formats include proprietary formats that can be read and edited only by proprietary word processors, SGML or XML for which the DTD and/or processing tools are not generally available, and the machine-generated HTML, PostScript or PDF produced by some word processors for output purposes only.

The "Title Page" means, for a printed book, the title page itself, plus such following pages as are needed to hold, legibly, the material this License requires to appear in the title page. For works in formats which do not have any title page as such, "Title Page" means the text near the most prominent appearance of the work's title, preceding the beginning of the body of the text.

The "publisher" means any person or entity that distributes copies of the Document to the public.

A section "Entitled XYZ" means a named subunit of the Document whose title either is precisely XYZ or contains XYZ in parentheses following text that translates XYZ in another language. (Here XYZ stands for a specific section name mentioned below, such as "Acknowledgements", "Dedications", "Endorsements", or "History".) To "Preserve the Title" of such a section when you modify the Document means that it remains a section "Entitled XYZ" according to this definition.

The Document may include Warranty Disclaimers next to the notice which states that this License applies to the Document. These Warranty Disclaimers are considered to be included by reference in this License, but only as regards disclaiming warranties: any other implication that these Warranty Disclaimers may have is void and has



no effect on the meaning of this License.

@item

#### VERBATIM COPYING

You may copy and distribute the Document in any medium, either commercially or noncommercially, provided that this License, the copyright notices, and the license notice saying this License applies to the Document are reproduced in all copies, and that you add no other conditions whatsoever to those of this License. You may not use technical measures to obstruct or control the reading or further copying of the copies

you make or distribute. However, you may accept compensation in exchange for copies. If you distribute a large enough number of copies you must also follow the conditions in section 3.

You may also lend copies, under the same conditions stated above, and you may publicly display copies.

@item

#### COPYING IN QUANTITY

If you publish printed copies (or copies in media that commonly have printed covers) of the Document, numbering more than 100, and the Document's license notice requires Cover Texts, you must enclose the copies in covers that carry, clearly and legibly, all these Cover Texts: Front-Cover Texts on the front cover, and Back-Cover Texts on the back cover. Both covers must also clearly and legibly identify you as the publisher of these copies. The front cover must present the full title with all words of the title equally prominent and visible. You may add other material on the covers in addition.

Copying with changes limited to the covers, as long as they preserve the

title of the Document and satisfy these conditions, can be treated as verbatim copying in other respects.

If the required texts for either cover are too voluminous to fit legibly, you should put the first ones listed (as many as fit reasonably) on the actual cover, and continue the rest onto adjacent pages.

If you publish or distribute Opaque copies of the Document numbering more than 100, you must either include a machine-readable Transparent copy along with each Opaque copy, or state in or with each Opaque copy a computer-network location from which the general network-using public has access to download using public-standard network protocols a complete Transparent copy of the Document, free of added material.

If you use the latter option, you must take reasonably prudent steps,

when you begin distribution of Opaque copies in quantity, to ensure that this Transparent copy will remain thus accessible at the stated location until at least one year after the last time you distribute an Opaque copy (directly or through your agents or retailers) of that edition to the public.

It is requested, but not required, that you contact the authors of the Document well before redistributing any large number of copies, to give them a chance to provide you with an updated version of the Document.

@item

## MODIFICATIONS

You may copy and distribute a Modified Version of the Document under the conditions of sections 2 and 3 above, provided that you release the Modified Version under precisely this License, with the Modified Version filling the role of the Document, thus licensing distribution and modification of the Modified Version to whoever possesses a copy of it. In addition, you must do these things in the Modified Version:

@enumerate A

@item

Use in the Title Page (and on the covers, if any) a title distinct from that of the Document, and from those of previous versions (which should, if there were any, be listed in the History section of the Document). You may use the same title as a previous version if the original publisher of that version gives permission.

@item

List on the Title Page, as authors, one or more persons or entities responsible for authorship of the modifications in the Modified Version, together with at least five of the principal authors of the Document (all of its principal authors, if it has fewer than five), unless they release you from this requirement.

@item

State on the Title page the name of the publisher of the Modified Version, as the publisher.

@item

Preserve all the copyright notices of the Document.

@item

Add an appropriate copyright notice for your modifications adjacent to the other copyright notices.

@item

Include, immediately after the copyright notices, a license notice giving the public permission to use the Modified Version under the terms of this License, in the form shown in the Addendum below.

@item

Preserve in that license notice the full lists of Invariant Sections and required Cover Texts given in the Document's license notice.

@item

Include an unaltered copy of this License.

@item

Preserve the section Entitled ``History'', Preserve its Title, and add to it an item stating at least the title, year, new authors, and publisher of the Modified Version as given on the Title Page. If there is no section Entitled ``History'' in the Document, create one stating the title, year, authors, and publisher of the Document as given on its Title Page, then add an item describing the Modified Version as stated in the previous sentence.

@item

Preserve the network location, if any, given in the Document for public access to a Transparent copy of the Document, and likewise the network locations given in the Document for previous versions it was based on. These may be placed in the ``History'' section. You may omit a network location for a work that was published at least four years before the Document itself, or if the original publisher of the version it refers to gives permission.

@item

For any section Entitled ``Acknowledgements'' or ``Dedications'', Preserve the Title of the section, and preserve in the section all the substance and tone of each of the contributor acknowledgements and/or dedications given therein.

@item

Preserve all the Invariant Sections of the Document, unaltered in their text and in their titles. Section numbers or the equivalent are not considered part of the section titles.

@item

Delete any section Entitled ``Endorsements''. Such a section may not be included in the Modified Version.

@item

Do not retitle any existing section to be Entitled ``Endorsements" or to conflict in title with any Invariant Section.

@item

Preserve any Warranty Disclaimers.

@end enumerate

If the Modified Version includes new front-matter sections or appendices that qualify as Secondary Sections and contain no material copied from the Document, you may at your option designate some or all of these sections as invariant. To do this, add their titles to the list of Invariant

Sections in the Modified Version's license notice.

These titles must be distinct from any other section titles.

You may add a section Entitled ``Endorsements", provided it contains nothing but endorsements of your Modified Version by various parties---for example, statements of peer review or that the text has been approved by an organization as the authoritative definition of a standard.

You may add a passage of up to five words as a Front-Cover Text, and a passage of up to 25 words as a Back-Cover Text, to the end of the list of Cover Texts in the Modified Version. Only one passage of Front-Cover Text and one of Back-Cover Text may be added by (or through arrangements made by) any one entity. If the Document already includes a cover text for the same cover, previously added by you or by arrangement made by the same entity you are acting on behalf of, you may not add another; but you may replace the old one, on explicit permission from the previous publisher that added the old one.

The author(s) and publisher(s) of the Document do not by this License give permission to use their names for publicity for or to assert or imply endorsement of any Modified Version.

@item

## COMBINING DOCUMENTS

You may combine the Document with other documents released under this License, under the terms defined in section 4 above for modified versions, provided that you include in the combination all of the Invariant Sections of all of the original documents, unmodified, and list them all as Invariant Sections of your combined work in its license notice, and that you preserve all their Warranty Disclaimers.

The combined work need only contain one copy of this License, and multiple identical Invariant Sections may be replaced with a single

copy. If there are multiple Invariant Sections with the same name but different contents, make the title of each such section unique by adding at the end of it, in parentheses, the name of the original author or publisher of that section if known, or else a unique number.

Make the same adjustment to the section titles in the list of Invariant Sections in the license notice of the combined work.

In the combination, you must combine any sections Entitled ``History'' in the various original documents, forming one section Entitled ``History''; likewise combine any sections Entitled ``Acknowledgements'', and any sections Entitled ``Dedications''. You must delete all sections Entitled ``Endorsements.''

@item

## COLLECTIONS OF DOCUMENTS

You may make a collection consisting of the Document and other documents released under this License, and replace the individual copies of this License in the various documents with a single copy that is included in the collection, provided that you follow the rules of this License for verbatim copying of each of the documents in all other respects.

You may extract a single document from such a collection, and distribute it individually under this License, provided you insert a copy of this License into the extracted document, and follow this License in all other respects regarding verbatim copying of that document.

@item

## AGGREGATION WITH INDEPENDENT WORKS

A compilation of the Document or its derivatives with other separate and independent documents or works, in or on a volume of a storage or distribution medium, is called an ``aggregate'' if the copyright resulting from the compilation is not used to limit the legal rights of the compilation's users beyond what the individual works permit. When the Document is included in an aggregate, this License does not apply to the other works in the aggregate which are not themselves derivative works of the Document.

If the Cover Text requirement of section 3 is applicable to these copies of the Document, then if the Document is less than one half of the entire aggregate, the Document's Cover Texts may be placed on covers that bracket the Document within the aggregate, or the electronic equivalent of covers if the Document is in electronic form.

Otherwise they must appear on printed covers that bracket the whole

aggregate.

@item

## TRANSLATION

Translation is considered a kind of modification, so you may distribute translations of the Document under the terms of section 4. Replacing Invariant Sections with translations requires special permission from their copyright holders, but you may include translations of some or all Invariant Sections in addition to the original versions of these Invariant Sections. You may include a translation of this License, and all the license notices in the Document, and any Warranty Disclaimers, provided that you also include the original English version of this License and the original versions of those notices and disclaimers. In case of a disagreement between the translation and the original version of this License or a notice or disclaimer, the original version will prevail.

If a section in the Document is Entitled ``Acknowledgements'', ``Dedications'', or ``History'', the requirement (section 4) to Preserve its Title (section 1) will typically require changing the actual title.

@item

## TERMINATION

You may not copy, modify, sublicense, or distribute the Document except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, or distribute it is void, and will automatically terminate your rights under this License.

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, receipt of a copy of some or all of the same material does not give you any rights to use it.

@item

#### FUTURE REVISIONS OF THIS LICENSE

The Free Software Foundation may publish new, revised versions of the GNU Free Documentation 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. See [@uref{http://www.gnu.org/copyleft/}](http://www.gnu.org/copyleft/).

Each version of the License is given a distinguishing version number. If the Document specifies that a particular numbered version of this License "or any later version" applies to it, you have the option of following the terms and conditions either of that specified version or of any later version that has been published (not as a draft) by the Free Software Foundation. If the Document does not specify a version number of this License, you may choose any version ever published (not as a draft) by the Free Software Foundation. If the Document specifies that a proxy can decide which future versions of this License can be used, that proxy's public statement of acceptance of a version permanently authorizes you to choose that version for the Document.

@item

#### RELICENSING

"Massive Multiauthor Collaboration Site" (or "MMC Site") means any World Wide Web server that publishes copyrightable works and also provides prominent facilities for anybody to edit those works. A public wiki that anybody can edit is an example of such a server. A "Massive Multiauthor Collaboration" (or "MMC") contained in the site means any set of copyrightable works thus published on the MMC site.

"CC-BY-SA" means the Creative Commons

Attribution-Share Alike 3.0

license published by Creative Commons Corporation, a not-for-profit corporation with a principal place of business in San Francisco, California, as well as future copyleft versions of that license published by that same organization.

"Incorporate" means to publish or republish a Document, in whole or in part, as part of another Document.

An MMC is ``eligible for relicensing" if it is licensed under this License, and if all works that were first published under this License somewhere other than this MMC, and subsequently incorporated in whole or in part into the MMC, (1) had no cover texts or invariant sections, and (2) were thus incorporated prior to November 1, 2008.

The operator of an MMC Site may republish an MMC contained in the site under CC-BY-SA on the same site at any time before August 1, 2009, provided the MMC is eligible for relicensing.

@end enumerate

@page

@heading ADDENDUM: How to use this License for your documents

To use this License in a document you have written, include a copy of the License in the document and put the following copyright and license notices just after the title page:

@smallexample

@group

Copyright (C) @var{year} @var{your name}.

Permission is granted to copy, distribute and/or modify this document under the terms of the GNU Free Documentation License, Version 1.3 or any later version published by the Free Software Foundation; with no Invariant Sections, no Front-Cover Texts, and no Back-Cover Texts. A copy of the license is included in the section entitled ``GNU Free Documentation License".

@end group

@end smallexample

If you have Invariant Sections, Front-Cover Texts and Back-Cover Texts, replace the ``with@dots{ }Texts."@: line with this:

@smallexample

@group

with the Invariant Sections being @var{list their titles}, with the Front-Cover Texts being @var{list}, and with the Back-Cover Texts being @var{list}.

@end group

@end smallexample

If you have Invariant Sections without Cover Texts, or some other combination of the three, merge those two alternatives to suit the situation.



If your document contains nontrivial examples of program code, we recommend releasing these examples in parallel under your choice of free software license, such as the GNU General Public License, to permit their use in free software.

@c Local Variables:

@c ispell-local-pdict: "ispell-dict"

@c End:

## UNICODE, INC. LICENSE AGREEMENT - DATA FILES AND SOFTWARE

Unicode Data Files include all data files under the directories <http://www.unicode.org/Public/>, <http://www.unicode.org/reports/>, and <http://www.unicode.org/cldr/data/>. Unicode Data Files do not include PDF online code charts under the directory <http://www.unicode.org/Public/>. Software includes any source code published in the Unicode Standard or under the directories <http://www.unicode.org/Public/>, <http://www.unicode.org/reports/>, and <http://www.unicode.org/cldr/data/>.

NOTICE TO USER: Carefully read the following legal agreement. BY DOWNLOADING, INSTALLING, COPYING OR OTHERWISE USING UNICODE INC.'S DATA FILES ("DATA FILES"), AND/OR SOFTWARE ("SOFTWARE"), YOU UNEQUIVOCALLY ACCEPT, AND AGREE TO BE BOUND BY, ALL OF THE TERMS AND CONDITIONS OF THIS AGREEMENT. IF YOU DO NOT AGREE, DO NOT DOWNLOAD, INSTALL, COPY, DISTRIBUTE OR USE THE DATA FILES OR SOFTWARE.

### COPYRIGHT AND PERMISSION NOTICE

Copyright 1991-2013 Unicode, Inc. All rights reserved. Distributed under the Terms of Use in <http://www.unicode.org/copyright.html>.

Permission is hereby granted, free of charge, to any person obtaining a copy of the Unicode data files and any associated documentation (the "Data Files") or Unicode software and any associated documentation (the "Software") to deal in the Data Files or Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, and/or sell copies of the Data Files or Software, and to permit persons to whom the Data Files or Software are furnished to do so, provided that (a) the above copyright notice(s) and this permission notice appear with all copies of the Data Files or Software, (b) both the above copyright notice(s) and this permission notice appear in associated documentation, and (c) there is clear notice in each modified Data File or in the Software as well as in the documentation associated with the Data File(s) or Software that the data or software has been modified.

THE DATA FILES AND SOFTWARE ARE PROVIDED "AS IS", WITHOUT WARRANTY OF ANY

KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF THIRD PARTY RIGHTS. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR HOLDERS INCLUDED IN THIS NOTICE BE LIABLE FOR ANY CLAIM, OR ANY SPECIAL INDIRECT OR CONSEQUENTIAL DAMAGES, OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THE DATA FILES OR SOFTWARE.

Except as contained in this notice, the name of a copyright holder shall not be used in advertising or otherwise to promote the sale, use or other dealings in these Data Files or Software without prior written authorization of the copyright holder.

This file contains the copying permission notices for various files in the GNU C Library distribution that have copyright owners other than the Free Software Foundation. These notices all require that a copy of the notice be included in the accompanying documentation and be distributed with binary distributions of the code, so be sure to include this file along with any binary distributions derived from the GNU C Library.

All code incorporated from 4.4 BSD is distributed under the following license:

Copyright (C) 1991 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. [This condition was removed.]
4. Neither the name of the University nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS

OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)  
HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT  
LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY  
OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED  
OF THE POSSIBILITY OF  
SUCH DAMAGE.

The DNS resolver code, taken from BIND 4.9.5, is copyrighted by UC  
Berkeley, by Digital Equipment Corporation and by Internet Software  
Consortium. The DEC portions are under the following license:

Portions Copyright (C) 1993 by Digital Equipment Corporation.

Permission to use, copy, modify, and distribute this software for any  
purpose with or without fee is hereby granted, provided that the above  
copyright notice and this permission notice appear in all copies, and  
that the name of Digital Equipment Corporation not be used in  
advertising or publicity pertaining to distribution of the document or  
software without specific, written prior permission.

THE SOFTWARE IS PROVIDED ``AS IS" AND DIGITAL EQUIPMENT CORP.  
DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL  
IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL  
DIGITAL EQUIPMENT CORPORATION BE LIABLE FOR ANY SPECIAL, DIRECT,  
INDIRECT, OR CONSEQUENTIAL DAMAGES  
OR ANY DAMAGES WHATSOEVER RESULTING  
FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT,  
NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION  
WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

The ISC portions are under the following license:

Portions Copyright (c) 1996-1999 by Internet Software Consortium.

Permission to use, copy, modify, and distribute this software for any  
purpose with or without fee is hereby granted, provided that the above  
copyright notice and this permission notice appear in all copies.

THE SOFTWARE IS PROVIDED "AS IS" AND INTERNET SOFTWARE CONSORTIUM DISCLAIMS  
ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES  
OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL INTERNET SOFTWARE  
CONSORTIUM BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL  
DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR  
PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS  
ACTION, ARISING  
OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS  
SOFTWARE.

The Sun RPC support (from rpcsrc-4.0) is covered by the following license:

Copyright (c) 2010, Oracle America, Inc.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- \* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- \* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- \* Neither the name of the "Oracle America, Inc." nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The following CMU license covers some of the support code for Mach, derived from Mach 3.0:

Mach Operating System  
Copyright (C) 1991,1990,1989 Carnegie Mellon University  
All Rights Reserved.

Permission to use, copy, modify and distribute this software and its documentation is hereby granted, provided that both the copyright notice and this permission notice appear in all copies of the software, derivative works or modified versions, and any portions thereof, and that both notices appear in supporting documentation.

CARNEGIE MELLON ALLOWS FREE USE OF THIS SOFTWARE IN ITS ``AS IS" CONDITION. CARNEGIE MELLON DISCLAIMS ANY LIABILITY OF ANY KIND FOR ANY DAMAGES WHATSOEVER RESULTING FROM THE USE OF THIS SOFTWARE.

Carnegie Mellon requests users of this software to return to

Software Distribution Coordinator  
School of Computer Science  
Carnegie Mellon University  
Pittsburgh PA 15213-3890

or Software.Distribution@CS.CMU.EDU any improvements or extensions that they make and grant Carnegie Mellon the rights to redistribute these changes.

The file if\_ppp.h is under the following CMU license:

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 CARNEGIE MELLON UNIVERSITY 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 UNIVERSITY 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 following license covers the files from Intel's "Highly Optimized Mathematical Functions for Itanium" collection:

Intel License Agreement

Copyright (c) 2000, Intel Corporation

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- \* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- \* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- \* The name of Intel Corporation may not 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 INTEL 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 files `inet/getnameinfo.c` and `sysdeps/posix/getaddrinfo.c` are copyright (C) by Craig Metz and are distributed under the following license:

```
/* The Inner Net License,  
Version 2.00
```

The author(s) grant permission for redistribution and use in source and binary forms, with or without modification, of the software and documentation provided that the following conditions are met:

0. If you receive a version of the software that is specifically labelled as not being for redistribution (check the version message and/or README), you are not permitted to redistribute that version of the software in any way or form.
1. All terms of the all other applicable copyrights and licenses must be

followed.

2. Redistributions of source code must retain the authors' copyright notice(s), this list of conditions, and the following disclaimer.
3. Redistributions in binary form must reproduce the authors' copyright notice(s), this list of conditions, and the following disclaimer in the documentation and/or other materials provided with the distribution.
4. [The copyright holder has authorized the removal of this clause.]
5. Neither the name(s)  
of the author(s) 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 ITS AUTHORS 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 AUTHORS 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.

If these license terms cause you a real problem, contact the author. \*/

The file sunrpc/des\_impl.c  
is copyright Eric Young:

Copyright (C) 1992 Eric Young  
Collected from libdes and modified for SECURE RPC by Martin Kuck 1994  
This file is distributed under the terms of the GNU Lesser General  
Public License, version 2.1 or later - see the file COPYING.LIB for details.  
If you did not receive a copy of the license with this program, please  
see <<https://www.gnu.org/licenses/>> to obtain a copy.

The file inet/rcmd.c is under a UCB copyright and the following:

Copyright (C) 1998 WIDE Project.  
All rights reserved.

Redistribution and use in source and binary forms, with or without  
modification, are permitted provided that the following conditions  
are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with

the distribution.

3. Neither the name of the project nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE PROJECT AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE PROJECT OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The file posix/runtests.c is copyright Tom Lord:

Copyright  
1995 by Tom Lord

All Rights Reserved

Permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of the copyright holder not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission.

Tom Lord DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS, IN NO EVENT SHALL TOM LORD BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

The posix/rxspencer tests  
are copyright Henry Spencer:

Copyright 1992, 1993, 1994, 1997 Henry Spencer. All rights reserved.  
This software is not subject to any license of the American Telephone and Telegraph Company or of the Regents of the University of California.

Permission is granted to anyone to use this software for any purpose on



any computer system, and to alter it and redistribute it, subject to the following restrictions:

1. The author is not responsible for the consequences of use of this software, no matter how awful, even if they arise from flaws in it.
2. The origin of this software must not be misrepresented, either by explicit claim or by omission. Since few users ever read sources, credits must appear in the documentation.
3. Altered versions must be plainly marked as such, and must not be misrepresented as being the original software. Since few users ever read sources, credits must appear in the documentation.
4. This notice may not be removed or altered.

The file `posix/PCRE.tests`  
is copyright University of Cambridge:

Copyright (c) 1997-2003 University of Cambridge

Permission is granted to anyone to use this software for any purpose on any computer system, and to redistribute it freely, subject to the following restrictions:

1. This software 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**.
2. The origin of this software must not be misrepresented, either by explicit claim or by omission. In practice, this means that if you use PCRE in software that you distribute to others, commercially or otherwise, you must put a sentence like this

Regular expression support is provided by the PCRE library package, which is open source software, written by Philip Hazel, and copyright by the University of Cambridge, England.

somewhere reasonably visible in your documentation and in any relevant files or online

help data or similar. A reference to the ftp site for the source, that is, to

`ftp://ftp.csx.cam.ac.uk/pub/software/programming/pcre/`

should also be given in the documentation. However, this condition is not intended to apply to whole chains of software. If package A includes PCRE, it must acknowledge it, but if package B is software that includes package

A, the condition is not imposed on package B (unless it uses PCRE independently).

3. Altered versions must be plainly marked as such, and must not be misrepresented as being the original software.

4. If PCRE is embedded in any software that is released under the GNU General Purpose Licence (GPL), or Lesser General Purpose Licence (LGPL), then the terms of that licence shall supersede any condition above with which it is incompatible.

Files from Sun fdlibm are copyright Sun Microsystems, Inc.:

Copyright (C) 1993 by Sun Microsystems, Inc. All rights reserved.

Developed at SunPro, a Sun Microsystems, Inc. business.

Permission to use, copy, modify, and distribute this software is freely granted, provided that this notice is preserved.

Various long double libm functions are copyright Stephen L. Moshier:

Copyright 2001 by Stephen L. Moshier <moshier@na-net.ornl.gov>

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, see <<https://www.gnu.org/licenses/>>. \*/

## 1.43 fdisk 2.36.0

### 1.43.1 Available under license :

```
7zXZF!t/5]oK3&K6Y^
CP#vMOoYL?6]2z({CLYj0
LFIU<>Q& }7!C}e6]]e`M,J}.dE,4hVmp
RsTk!|r!Quo1OE|FfP+A}XBT9 \<
0<P9{>s\36R)m.S(bCb7S<DP(`ka")^oy`r)7I%tU6@AS.SMoOf3whA!!WIMcK')e/eJ1F
```

g\BI'W|j>jf\_{Jp}oMd3rfQ+\_3<%<6jx{)11D5eg;NtD+~R]w[xiue@F#Em0hu;,x{R7V2!Vq~AG{EX -  
"0h\*5x)\*x\n)#l\$\*w!:499X1il:"P+=22cmr3J}/0o9nlB?N&(q=\$pPc!ab,6f&v/RS>O./OW[INy(BM~)~uf\$Ngl"\_W[0;  
OXY[aB\*"/\_U~fQHO(3[b%o )+lq#+\_d<QdLd=\$1p!h0h6nfN=I+GNRk gKOL3\N3"uGxfIC  
zCTJtjSN:\$gE11QQ\$7\*5++V=4Xt9V?r3\_Vd2o8h"F8~qM,ZI6=Qgtw|11np#\_(+?)zp(;H!E2Nz'WW\_WmA,  
FSYZE\*-exTWFt#|  
rd>k\R>aXrvXS~"9=U\$puaqQb;k,RD5(fu&#  
?)w!nz>SbvY[R+t[ BS=)d ;\*!;\_>KfBqxY(F|0.Ve%S61opMG  
1%QsS|11np#\_(~\*uM%S61opMG`YfRXvY[R+t[ BS=)d ;\*!;\_>KfBqxY(F|0.Ve%S61opMG`YfRXvY[R+t[  
BS=)d ;\*!;\_>KfB }&ea)F~H#@|DExb  
Fw=|  
;}8SPT"\_p;27 \*D-sS|11np#\_(~\*uM%S61opMG`B=gD7~rFTvDY(F|0.Ve%S61opMG`YfRXvY[R+t[ BS=)d  
;\*!;\_>KfBqxY(F|0.Ve%S61opMG`YfRXx+sS|11np#\_(~\*uM%S61opMG`YfRXvY[R+t[ BS=)d  
;\*!;\_>KfBqxY(F|0.Ve%S61opMG`YfRXvY[R+t[ BS=)d ;\*!;\_>KfBqxY(F|0.Ve%Q?f\_{+T@Uo)2fgYZ

## GNU GENERAL PUBLIC LICENSE

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.,  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA  
Everyone is permitted to copy and distribute verbatim copies  
of this license document, but changing it is not allowed.

### Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Lesser General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price.

Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that

you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

## GNU GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you

conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or

collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

- a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program

except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is

implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED



OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

#### END OF TERMS AND CONDITIONS

#### How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the program's name and a brief idea of what it does.>  
Copyright (C) <year> <name of author>

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA.

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

```
Gnomovision version 69, Copyright (C) year name of author
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute
it
under certain conditions; type `show c' for details.
```

The hypothetical commands ``show w'` and ``show c'` should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than ``show w'` and ``show c'`; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

```
Yoyodyne, Inc., hereby disclaims all copyright interest in the program
`Gnomovision' (which makes passes at compilers) written by James Hacker.
```

```
<signature of Ty Coon>, 1 April 1989
Ty Coon, President of Vice
```

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this

is what you want to do, use the GNU Lesser General Public License instead of this License.

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

The complete text of the license is available in the `../Documentation/licenses/COPYING.LGPLv2.1` file.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, and the entire permission notice in its entirety, including the disclaimer of warranties.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the

documentation and/or other materials provided with the distribution.

3. The name of the author may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ALL OF WHICH ARE HEREBY DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL

DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF NOT ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Permission to use, copy, modify, and/or distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies.

THE SOFTWARE IS PROVIDED "AS IS" AND THE AUTHOR DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

/\*

- \* Copyright (c) 1989 The Regents of the University of California.
- \* All rights reserved.
- \*
- \* Redistribution and use in source and binary forms, with or without
- \* modification, are permitted provided that the following conditions
- \* are met:
- \* 1. Redistributions of source code must retain the above copyright
- \* notice, this list of conditions and the following disclaimer.
- \* 2. Redistributions in binary form must reproduce the above copyright
- \* notice, this list of conditions and the following disclaimer in the
- \* documentation and/or other materials provided with the distribution.
- \* 3. All advertising materials mentioning features or use of this software
- \* must display the following acknowledgement:
- \* This product includes software developed by the University of
- \* California, Berkeley and its contributors.
- \* 4. Neither the name of the University nor the names of its contributors
- \* may be used to endorse or promote products derived from this software
- \*

without specific prior written permission.

\*

\* THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS ``AS IS'' AND  
\* ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE  
\* IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE  
\* ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE  
\* FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL  
\* DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS  
\* OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)  
\* HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT  
\* LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY  
\* OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF  
\* SUCH DAMAGE.

\*/

7zXZF!t/o."w[7gp<G

H:Oed 18uyMQ9]FO6

87I8.mhGl^eb\_X/UQKuB

)Cdk!B\_M/tw|11np#\_(~\*uM%S61opMG`YfRXvY[R+t[ BS=)d

;\*!;\_>KfBqxY(F|0.Ve%S61opMG`YfRXvY[R+t[ BS=)d

;\*!;\_>KfBqxYm+sS|11np#\_(~\*uM%S61opMG`YfRXvY[R+t[ BS=)d

;\*!;\_>KfBqxY(F|0.Ve%S61opMG`YfRXvY[R+t[ BS=)d ;\*!;\_>KfBqxY(F|0.Ve%Q?

\*sS|11np#\_(~\*u7gi}[IgYZ

This library is free software; you can redistribute it and/or  
modify it under the terms of the Modified BSD License.

The complete text of the license is available in the  
../Documentation/licenses/COPYING.BSD-3 file.

## 1.44 ethtool 5.8

### 1.44.1 Available under license :

ethtool is available under the terms of the GNU Public License version 2.

See COPYING for details.

GNU GENERAL PUBLIC LICENSE

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.,  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA

Everyone is permitted to copy and distribute verbatim copies  
of this license document, but changing it is not allowed.

Preamble

The licenses for most software are designed to take away your  
freedom to share and change it. By contrast, the GNU General Public  
License is intended to guarantee your freedom to share and change free

software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Lesser General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price.

Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

GNU GENERAL PUBLIC LICENSE

## TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an

announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

- a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution)

and only if you

received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.



7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing

version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

#### END OF TERMS AND CONDITIONS

#### How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the program's name and a brief idea of what it does.>  
Copyright (C) <year> <name of author>

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA.

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

```
Gnomovision version 69, Copyright (C) year name of author
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute
it
under certain conditions; type `show c' for details.
```

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

```
Yoyodyne, Inc., hereby disclaims all copyright interest in the program
`Gnomovision' (which makes passes at compilers) written by James Hacker.
```

```
<signature of Ty Coon>, 1 April 1989
Ty Coon, President of Vice
```

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Lesser General Public License instead of this License.

## 1.45 json-c 0.15

### 1.45.1 Available under license :

Copyright (c) 2009-2012 Eric Haszlakiewicz

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

-----  
Copyright (c) 2004, 2005 Metaparadigm Pte Ltd

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

## 1.46 libcap 2.26-4.el8

### 1.46.1 Available under license :

Unless otherwise \*explicitly\* stated the following text describes the licensed conditions under which the contents of this module release may be distributed:

-----  
Redistribution and use in source and binary forms of this module, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain any existing copyright notice, and this entire permission notice in its entirety, including the disclaimer of warranties.
2. Redistributions in binary form must reproduce all prior and current copyright notices, this list of conditions, and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. The name of any author may not be used to endorse or promote products derived from this software without their specific prior written permission.

ALTERNATIVELY, this product may be distributed under the terms of the GNU Library General Public License, in which case the provisions of the GNU LGPL are required INSTEAD OF the above restrictions. (This clause is necessary due to a potential conflict between the GNU LGPL and the restrictions contained in a BSD-style copyright.)

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(S) BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS

OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

-----  
Unless otherwise \*explicitly\* stated, the following text describes the licensed conditions under which the contents of this libcap release may be used and distributed:

-----  
Redistribution and use in source and binary forms of libcap, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain any existing copyright notice, and this entire permission notice in its entirety, including the disclaimer of warranties.
2. Redistributions in binary form must reproduce all prior and current copyright notices, this list of conditions, and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. The name of any author may not be used to endorse or promote products derived from this software without their specific prior written permission.

ALTERNATIVELY, this product may be distributed under the terms of the GNU General Public License (v2.0 - see below), in which case the provisions of the GNU GPL are required INSTEAD OF the above restrictions. (This clause is necessary due to a potential conflict between the GNU GPL and the restrictions contained in a BSD-style copyright.)

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(S) BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

-----  
Full  
text of gpl-2.0.txt:  
-----

GNU GENERAL PUBLIC LICENSE  
Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.,  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA  
Everyone is permitted to copy and distribute verbatim copies  
of this license document, but changing it is not allowed.

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Lesser General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy,

distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

## GNU GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.



You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a)

You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program

(or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under

the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

- a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access

to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such

parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing

to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT

OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

#### END OF TERMS AND CONDITIONS

#### How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the program's name and a brief idea of what it does.>  
Copyright (C) <year> <name of author>

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA.

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

Gnomovision version 69, Copyright (C) year

name of author

Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.  
This is free software, and you are welcome to redistribute it  
under certain conditions; type `show c' for details.

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the program  
'Gnomovision' (which makes passes at compilers) written by James Hacker.

<signature of Ty Coon>, 1 April 1989  
Ty Coon, President of Vice

This General Public License does not permit incorporating your program into proprietary programs.

If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Lesser General Public License instead of this License.

## 1.47 gnutls 3.6.14

### 1.47.1 Available under license :

GNU LESSER GENERAL PUBLIC LICENSE  
Version 2.1, February 1999

Copyright (C) 1991, 1999 Free Software Foundation, Inc.  
51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA  
Everyone is permitted to copy and distribute verbatim copies  
of this license document, but changing it is not allowed.

[This is the first released version of the Lesser GPL. It also counts  
as the successor of the GNU Library Public License, version 2, hence  
the version number 2.1.]

Preamble

The licenses for most software are designed to take away your  
freedom to share and change it. By contrast, the GNU General Public  
Licenses are intended to guarantee your freedom to share and change

free software--to make sure the software is free for all its users.

This license, the Lesser General Public License, applies to some specially designated software packages--typically libraries--of the Free Software Foundation and other authors who decide to use it. You can use it too, but we suggest you first think carefully about whether this license or the ordinary General Public License is the better strategy to use in any particular case, based on the explanations below.

When we speak of free software, we are referring to freedom of use, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish); that you receive source code or can get it if you want it; that you can change the software and use pieces of it in new free programs; and that you are informed that you can do these things.

To protect your rights, we need to make restrictions that forbid distributors to deny you these rights or to ask you to surrender these rights. These restrictions translate to certain responsibilities for you if you distribute copies of the library or if you modify it.

For example, if you distribute copies of the library, whether gratis or for a fee, you must give the recipients all the rights that we gave you. You must make sure that they, too, receive or can get the source code. If you link other code with the library, you must provide complete object files to the recipients, so that they can relink them with the library after making changes to the library and recompiling it. And you must show them these terms so they know their rights.

We protect your rights with a two-step method: (1) we copyright the library, and (2) we offer you this license, which gives you legal permission to copy, distribute and/or modify the library.

To protect each distributor, we want to make it very clear that there is no warranty for the free library. Also, if the library is modified by someone else and passed on, the recipients should know that what they have is not the original version, so that the original author's reputation will not be affected by problems that might be introduced by others.

Finally, software patents pose a constant threat to the existence of any free program. We wish to make sure that a company cannot effectively restrict the users of a free program by obtaining a restrictive license from a patent holder. Therefore, we insist that

any patent license obtained for a version of the library must be consistent with the full freedom of use specified in this license.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License. This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License. We use this license for certain libraries in order to permit linking those libraries into non-free programs.

When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.

We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.



The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

GNU LESSER GENERAL PUBLIC LICENSE  
TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License Agreement applies to any software library or other program which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Lesser General Public License (also called "this License"). Each licensee is addressed as "you".

A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

1. You may copy and distribute verbatim copies of the Library's complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any

warranty; and distribute a copy of this License along with the Library.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) The modified work must itself be a software library.

b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.

c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.

d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves,

then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library

creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License.

Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6.

Any executables

containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

- a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the

user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise

permitted, and provided that you do these two things:

a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.

b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

8. You may not copy, modify, sublicense, link with, or distribute the Library except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the Library is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

9. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Library or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Library (or any work based on the Library), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Library or works based on it.

10. Each time you redistribute the Library (or any work based on the Library), the recipient automatically receives a license from the original licensor to copy, distribute, link with or modify the Library subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties with this License.

11. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Library at all. For example, if a patent license would not permit royalty-free redistribution of the Library by

all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Library.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

12. If the distribution and/or use of the Library is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Library under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

13. The Free Software Foundation may publish revised and/or new versions of the Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Library does not specify a license version number, you may choose any version ever published by the Free Software Foundation.

14. If you wish to incorporate parts of the Library into other free programs whose distribution conditions are incompatible with these, write to the author to ask for permission. For software which is

copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

15. BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE LIBRARY "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE LIBRARY AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE LIBRARY (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

#### END OF TERMS AND CONDITIONS

##### How to Apply These Terms to Your New Libraries

If you develop a new library, and you want it to be of the greatest possible use to the public, we recommend making it free software that everyone can redistribute and change. You can do so by permitting redistribution under these terms (or, alternatively, under the terms of the ordinary General Public License).

To apply these terms, attach the following notices to the library. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the library's name and a brief 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 St, Fifth Floor, Boston, MA 02110-1301 USA

Also add information on how to contact you by electronic and paper mail.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the library, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the library `Frob' (a library for tweaking knobs) written by James Random Hacker.

<signature of Ty Coon>, 1 April 1990  
Ty Coon, President of Vice

That's all there is to it!  
Statement of Purpose

The laws of most jurisdictions throughout the world automatically confer exclusive Copyright and Related Rights (defined below) upon the creator and subsequent owner(s) (each and all, an "owner") of an original work of authorship and/or a database (each, a "Work").

Certain owners wish to permanently relinquish those rights to a Work for the purpose of contributing to a commons of creative, cultural and scientific works ("Commons") that the public can reliably and without fear of later claims of infringement build upon, modify, incorporate in other works, reuse and redistribute as freely as possible in any form whatsoever and for any purposes, including without limitation commercial purposes. These owners may contribute to the Commons to promote the ideal of a free culture and the further production of creative, cultural and scientific works, or to gain reputation or greater distribution for their Work in part through the use and efforts of others.

For these and/or other purposes and motivations, and without any expectation of additional consideration or compensation, the person associating CC0 with a Work (the "Affirmer"), to the extent that he or she is an owner of Copyright and Related Rights in the Work, voluntarily elects to apply CC0 to the Work and publicly distribute the Work under its terms, with knowledge of his or her Copyright and Related Rights in the Work and the meaning and intended legal

effect of CC0 on those rights.

1. Copyright and Related Rights. A Work made available under CC0 may be protected by copyright and related or neighboring rights ("Copyright and Related Rights"). Copyright and Related Rights include, but are not limited to, the following:

the right to reproduce, adapt, distribute, perform, display, communicate, and translate a Work;  
moral rights retained by the original author(s) and/or performer(s);  
publicity and privacy rights pertaining to a person's image or likeness depicted in a Work;  
rights  
protecting against unfair competition in regards to a Work, subject to the limitations in paragraph 4(a), below;  
rights protecting the extraction, dissemination, use and reuse of data in a Work;  
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  
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.

No trademark or patent rights held by Affirmer are waived, abandoned, surrendered, licensed or otherwise affected by this document.

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.

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.

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.

The "inih" library is distributed under the New BSD license:

Copyright (c) 2009, Ben Hoyt  
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- \* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- \* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- \* Neither the name of Ben Hoyt 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 BEN HOYT "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 BEN HOYT 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.

LICENSING

=====

Since GnuTLS version 3.1.10, the core library is released under the GNU Lesser General Public License (LGPL) version 2.1 or later (see doc/COPYING.LESSER for the license terms).

The GNU LGPL applies to the main GnuTLS library, while the

included applications as well as gnutls-openssl library are under the GNU GPL version 3. The gnutls library is located in the lib/ and libdane/ directories, while the applications in src/ and, the gnutls-openssl library is at extra/.

The documentation in doc/ is under the GNU FDL license 1.3.

Note, however, that the nettle and the gmp libraries which are GnuTLS dependencies, they are distributed under a LGPLv3+ or GPLv2+ dual license. As such binaries linking to them need to adhere to either LGPLv3+ or the GPLv2+ license.

For any copyright year range specified as YYYY-ZZZZ in this package note that the range specifies every single year in that closed interval.

#### GNU LESSER GENERAL PUBLIC LICENSE

Version 3, 29 June 2007

Copyright (C) 1992-2015 by Bruce Korb - all rights reserved  
Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

This version of the GNU Lesser General Public License incorporates the terms and conditions of version 3 of the GNU General Public License, supplemented by the additional permissions listed below.

#### 0. Additional Definitions.

As used herein, "this License" refers to version 3 of the GNU Lesser General Public License, and the "GNU GPL" refers to version 3 of the GNU General Public License.

"The Library" refers to a covered work governed by this License, other than an Application or a Combined Work as defined below.

An "Application" is any work that makes use of an interface provided by the Library, but which is not otherwise based on the Library. Defining a subclass of a class defined by the Library is deemed a mode of using an interface provided by the Library.

A "Combined Work" is a work produced by combining or linking an Application with the Library. The particular version of the Library with which the Combined Work was made is also called the "Linked Version".

The "Minimal Corresponding Source" for a Combined Work means the

Corresponding Source for the Combined Work, excluding any source code for portions of the Combined Work that, considered in isolation, are based on the Application, and not on the Linked Version.

The "Corresponding Application Code" for a Combined Work means the object code and/or source code for the Application, including any data and utility programs needed for reproducing the Combined Work from the Application, but excluding the System Libraries of the Combined Work.

#### 1. Exception to Section 3 of the GNU GPL.

You may convey a covered work under sections 3 and 4 of this License without being bound by section 3 of the GNU GPL.

#### 2. Conveying Modified Versions.

If you modify a copy of the Library, and, in your modifications, a facility refers to a function or data to be supplied by an Application that uses the facility (other than as an argument passed when the facility is invoked), then you may convey a copy of the modified version:

- a) under this License, provided that you make a good faith effort to ensure that, in the event an Application does not supply the function or data, the facility still operates, and performs whatever part of its purpose remains meaningful, or
- b) under the GNU GPL, with none of the additional permissions of this License applicable to that copy.

#### 3. Object Code Incorporating Material from Library Header Files.

The object code form of an Application may incorporate material from a header file that is part of the Library. You may convey such object code under terms of your choice, provided that, if the incorporated material is not limited to numerical parameters, data structure layouts and accessors, or small macros, inline functions and templates (ten or fewer lines in length), you do both of the following:

- a) Give prominent notice with each copy of the object code that the Library is used in it and that the Library and its use are covered by this License.
- b) Accompany the object code with a copy of the GNU GPL and this license document.

#### 4. Combined Works.

You may convey a Combined Work under terms of your choice that, taken together, effectively do not restrict modification of the portions of the Library contained in the Combined Work and reverse engineering for debugging such modifications, if you also do each of the following:

- a) Give prominent notice with each copy of the Combined Work that the Library is used in it and that the Library and its use are covered by this License.
- b) Accompany the Combined Work with a copy of the GNU GPL and this license document.
- c) For a Combined Work that displays copyright notices during execution, include the copyright notice for the Library among these notices, as well as a reference directing the user to the copies of the GNU GPL and this license document.
- d) Do one of the following:
  - 0) Convey the Minimal Corresponding Source under the terms of this License, and the Corresponding Application Code in a form suitable for, and under terms that permit, the user to recombine or relink the Application with a modified version of the Linked Version to produce a modified Combined Work, in the manner specified by section 6 of the GNU GPL for conveying Corresponding Source.
  - 1) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (a) uses at run time a copy of the Library already present on the user's computer system, and (b) will operate properly with a modified version of the Library that is interface-compatible with the Linked Version.
- e) Provide Installation Information, but only if you would otherwise be required to provide such information under section 6 of the GNU GPL, and only to the extent that such information is necessary to install and execute a modified version of the Combined Work produced by recombining or relinking the Application with a modified version of the Linked Version. (If you use option 4d0, the Installation Information must accompany the Minimal Corresponding Source and Corresponding Application Code. If you use option 4d1, you must provide the Installation

Information in the manner specified by section 6 of the GNU GPL for conveying Corresponding Source.)

#### 5. Combined Libraries.

You may place library facilities that are a work based on the Library side by side in a single library together with other library facilities that are not Applications and are not covered by this License, and convey such a combined library under terms of your choice, if you do both of the following:

- a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities, conveyed under the terms of this License.
- b) Give prominent notice with the combined library that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

#### 6. Revised Versions of the GNU Lesser General Public License.

The Free Software Foundation may publish revised and/or new versions of the GNU Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library as you received it specifies that a certain numbered version of the GNU Lesser General Public License "or any later version" applies to it, you have the option of following the terms and conditions either of that published version or of any later version published by the Free Software Foundation. If the Library as you received it does not specify a version number of the GNU Lesser General Public License, you may choose any version of the GNU Lesser General Public License ever published by the Free Software Foundation.

If the Library as you received it specifies that a proxy can decide whether future versions of the GNU Lesser General Public License shall apply, that proxy's public statement of acceptance of any version is permanent authorization for you to choose that version for the Library.

=====  
Written by Andy Polyakov <appro@fy.chalmers.se> for the OpenSSL project. The module is, however, dual licensed under OpenSSL and CRYPTOGAMS licenses depending on where you obtain it. For further details see <https://www.openssl.org/~appro/cryptogams/>.

=====  
Copyright (c) 2006-2012, CRYPTOGRAMS by <appro@openssl.org>  
All rights reserved.

Redistribution and use in source and binary forms, with or without  
modification, are permitted provided that the following conditions  
are met:

\* Redistributions of source code must retain copyright notices,  
this list of conditions and the following disclaimer.

\* Redistributions in binary form must reproduce the above  
copyright notice, this list of conditions and the following  
disclaimer in the documentation and/or other materials  
provided with the distribution.

\* Neither the name of the CRYPTOGRAMS nor  
the names of its  
copyright holder and contributors may be used to endorse or  
promote products derived from this software without specific  
prior written permission.

ALTERNATIVELY, provided that this notice is retained in full, this  
product may be distributed under the terms of the GNU General Public  
License (GPL), in which case the provisions of the GPL apply INSTEAD OF  
those given above.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDER AND CONTRIBUTORS  
"AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT  
LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR  
A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT  
OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL,  
SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT  
LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE,  
DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY  
THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY,  
OR TORT  
(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE  
OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

```
#####  
## Constant-time SSSE3 AES core implementation.  
## version 0.1  
##  
## By Mike Hamburg (Stanford University), 2009  
## Public domain.
```



##

## For details see [https://shiftleft.org/papers/vector\\_aes/](https://shiftleft.org/papers/vector_aes/) and

## <https://crypto.stanford.edu/vpaes/>.

Copyright (C) 1992-2015 by Bruce Korb - 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 THE AUTHOR ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The MIT License (MIT)

Copyright (c) 2016 Wrymouth Innovation Ltd

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL

THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

GNU GENERAL PUBLIC LICENSE

Version 3, 29 June 2007

Copyright (C) 1992-2015 by Bruce Korb - all rights reserved  
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) by Bruce Korb - all rights reserved
```

This program is free software: you can redistribute it and/or modify

it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program. If not, see <<https://www.gnu.org/licenses/>>.

Also add information on how to contact you by electronic and paper mail.

If the program does terminal interaction, make it output a short notice like this when it starts in an interactive mode:

```
<program> Copyright (C) by Bruce Korb - all rights reserved
This program comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute it
under certain conditions; type `show c' for details.
```

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, your program's commands might be different; for a GUI interface, you would use an "about box".

You should also get your employer (if you work as a programmer) or school, if any, to sign a "copyright disclaimer" for the program, if necessary. For more information on this, and how to apply and follow the GNU GPL, see <<https://www.gnu.org/licenses/>>.

The GNU General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is

what you want to do, use the GNU Lesser General Public License instead of this License. But first, please read <<https://www.gnu.org/philosophy/why-not-lgpl.html>>.

GNU GENERAL PUBLIC LICENSE  
Version 3, 29 June 2007

Copyright (C) 2007 Free Software Foundation, Inc. <<https://fsf.org/>>  
Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

Preamble

The GNU General Public License is a free, copyleft license for



software and other kinds of works.

The licenses for most software and other practical works are designed to take away your freedom to share and change the works. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change all versions of a program--to make sure it remains free software for all its users. We, the Free Software Foundation, use the GNU General Public License for most of our software; it applies also to any other work released this way by its authors. You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for them if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs, and that you know you can do these things.

To protect your rights, we need to prevent others from denying you these rights or asking you to surrender the rights. Therefore, you have certain responsibilities if you distribute copies of the software, or if you modify it: responsibilities to respect the freedom of others.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must pass on to the recipients the same freedoms that you received. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

Developers that use the GNU GPL protect your rights with two steps: (1) assert copyright on the software, and (2) offer you this License giving you legal permission to copy, distribute and/or modify it.

For the developers' and authors' protection, the GPL clearly explains that there is no warranty for this free software. For both users' and authors' sake, the GPL requires that modified versions be marked as changed, so that their problems will not be attributed erroneously to authors of previous versions.

Some devices are designed to deny users access to install or run modified versions of the software inside them, although the manufacturer can do so. This is fundamentally incompatible with the aim of protecting users' freedom to change the software. The systematic pattern of such abuse occurs in the area of products for individuals to use, which is precisely where it is most unacceptable. Therefore, we have designed this version of the GPL to prohibit the practice for those

products. If such problems arise substantially in other domains, we stand ready to extend this provision to those domains in future versions of the GPL, as needed to protect the freedom of users.

Finally, every program is threatened constantly by software patents. States should not allow patents to restrict development and use of software on general-purpose computers, but in those that do, we wish to avoid the special danger that patents applied to a free program could make it effectively proprietary. To prevent this, the GPL assures that patents cannot be used to render the program non-free.

The precise terms and conditions for copying, distribution and modification follow.

## TERMS AND CONDITIONS

### 0. Definitions.

"This License" refers to version 3 of the GNU General Public License.

"Copyright" also means copyright-like laws that apply to other kinds of works, such as semiconductor masks.

"The Program" refers to any copyrightable work licensed under this License. Each licensee is addressed as "you". "Licensees" and "recipients" may be individuals or organizations.

To "modify" a work means to copy from or adapt all or part of the work in a fashion requiring copyright permission, other than the making of an exact copy. The resulting work is called a "modified version" of the earlier work or a work "based on" the earlier work.

A "covered work" means either the unmodified Program or a work based on the Program.

To "propagate" a work means to do anything with it that, without permission, would make you directly or secondarily liable for infringement under applicable copyright law, except executing it on a computer or modifying a private copy. Propagation includes copying, distribution (with or without modification), making available to the public, and in some countries other activities as well.

To "convey" a work means any kind of propagation that enables other parties to make or receive copies. Mere interaction with a user through a computer network, with no transfer of a copy,

is not conveying.

An interactive user interface displays "Appropriate Legal Notices" to the extent that it includes a convenient and prominently visible feature that (1) displays an appropriate copyright notice, and (2) tells the user that there is no warranty for the work (except to the extent that warranties are provided), that licensees may convey the work under this License, and how to view a copy of this License. If the interface presents a list of user commands or options, such as a menu, a prominent item in the list meets this criterion.

#### 1. Source Code.

The "source code" for a work means the preferred form of the work for making modifications to it. "Object code" means any non-source form of a work.

A "Standard Interface" means an interface that either is an official standard defined by a recognized standards body, or, in the case of interfaces specified for a particular programming language, one that is widely used among developers working in that language.

The

"System Libraries" of an executable work include anything, other than the work as a whole, that (a) is included in the normal form of packaging a Major Component, but which is not part of that Major Component, and (b) serves only to enable use of the work with that Major Component, or to implement a Standard Interface for which an implementation is available to the public in source code form. A "Major Component", in this context, means a major essential component (kernel, window system, and so on) of the specific operating system (if any) on which the executable work runs, or a compiler used to produce the work, or an object code interpreter used to run it.

The "Corresponding Source" for a work in object code form means all the source code needed to generate, install, and (for an executable work) run the object code and to modify the work, including scripts to control those activities. However, it does not include the work's System Libraries, or general-purpose tools or generally available free programs which are used unmodified in performing those activities but which are not part of the work. For example, Corresponding Source includes interface definition files associated with source files for the work, and the source code for shared libraries and dynamically linked subprograms that the work is specifically designed to require, such as by intimate data communication or control flow between those subprograms and other parts of the work.

The Corresponding Source need not include anything that users can regenerate automatically from other parts of the Corresponding Source.

The Corresponding Source for a work in source code form is that same work.

## 2. Basic Permissions.

All rights granted under this License are granted for the term of copyright on the Program, and are irrevocable provided the stated conditions are met. This License explicitly affirms your unlimited permission to run the unmodified Program. The output from running a covered work is

covered by this License only if the output, given its content, constitutes a covered work. This License acknowledges your rights of fair use or other equivalent, as provided by copyright law.

You may make, run and propagate covered works that you do not convey, without conditions so long as your license otherwise remains in force. You may convey covered works to others for the sole purpose of having them make modifications exclusively for you, or provide you with facilities for running those works, provided that you comply with the terms of this License in conveying all material for which you do not control copyright. Those thus making or running the covered works for you must do so exclusively on your behalf, under your direction and control, on terms that prohibit them from making any copies of your copyrighted material outside their relationship with you.

Conveying under any other circumstances is permitted solely under the conditions stated below. Sublicensing is not allowed; section 10 makes it unnecessary.

## 3. Protecting Users' Legal Rights From Anti-Circumvention Law.

No covered work shall be deemed part of an effective technological measure under any applicable law fulfilling obligations under article 11 of the WIPO copyright treaty adopted on 20 December 1996, or similar laws prohibiting or restricting circumvention of such measures.

When you convey a covered work, you waive any legal power to forbid circumvention of technological measures to the extent such circumvention is effected by exercising rights under this License with respect to the covered work, and you disclaim any intention to limit operation or modification of the work as a means of enforcing, against the work's users, your or third parties' legal rights to forbid circumvention of

technological measures.

#### 4. Conveying Verbatim Copies.

You may convey verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice; keep intact all notices stating that this License and any non-permissive terms added in accord with section 7 apply to the code; keep intact all notices of the absence of any warranty; and give all recipients a copy of this License along with the Program.

You may charge any price or no price for each copy that you convey, and you may offer support or warranty protection for a fee.

#### 5. Conveying Modified Source Versions.

You may convey a work based on the Program, or the modifications to produce it from the Program, in the form of source code under the terms of section 4, provided that you also meet all of these conditions:

- a) The work must carry prominent notices stating that you modified it, and giving a relevant date.
- b) The work must carry prominent notices stating that it is released under this License and any conditions added under section 7. This requirement modifies the requirement in section 4 to "keep intact all notices".
- c) You must license the entire work, as a whole, under this License to anyone who comes into possession of a copy. This License will therefore apply, along with any applicable section 7 additional terms, to the whole of the work, and all its parts, regardless of how they are packaged. This License gives no permission to license the work in any other way, but it does not invalidate such permission if you have separately received it.
- d) If the work has interactive user interfaces, each must display Appropriate Legal Notices; however, if the Program has interactive interfaces that do not display Appropriate Legal Notices, your work need not make them do so.

A compilation of a covered work with other separate and independent works, which are not by their nature extensions of the covered work, and which are not combined with it such as to form a larger program, in or on a volume of a storage or distribution

medium, is called an "aggregate" if the compilation and its resulting copyright are not used to limit the access or legal rights of the compilation's users beyond what the individual works permit. Inclusion of a covered work in an aggregate does not cause this License to apply to the other parts of the aggregate.

#### 6. Conveying Non-Source Forms.

You may convey a covered work in object code form under the terms of sections 4 and 5, provided that you also convey the machine-readable Corresponding Source under the terms of this License, in one of these ways:

- a) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by the Corresponding Source fixed on a durable physical medium customarily used for software interchange.
- b) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by a written offer, valid for at least three years and valid for as long as you offer spare parts or customer support for that product model, to give anyone who possesses the object code either (1) a copy of the Corresponding Source for all the software in the product that is covered by this License, on a durable physical medium customarily used for software interchange, for a price no more than your reasonable cost of physically performing this conveying of source, or (2) access to copy the Corresponding Source from a network server at no charge.
- c) Convey individual copies of the object code with a copy of the written offer to provide the Corresponding Source. This alternative is allowed only occasionally and noncommercially, and only if you received the object code with such an offer, in accord with subsection 6b.
- d) Convey the object code by offering access from a designated place (gratis or for a charge), and offer equivalent access to the Corresponding Source in the same way through the same place at no further charge. You need not require recipients to copy the Corresponding Source along with the object code. If the place to copy the object code is a network server, the Corresponding Source may be on a different server (operated by you or a third party) that supports equivalent copying facilities, provided you maintain clear directions next to the object code saying where to find the

Corresponding Source. Regardless of what server hosts the Corresponding Source, you remain obligated to ensure that it is available for as long as needed to satisfy these requirements.

e) Convey the object code using peer-to-peer transmission, provided you inform other peers where the object code and Corresponding Source of the work are being offered to the general public at no charge under subsection 6d.

A separable portion of the object code, whose source code is excluded from the Corresponding Source as a System Library, need not be included in conveying the object code work.

A "User Product" is either (1) a "consumer product", which means any tangible personal property which is normally used for personal, family, or household purposes, or (2) anything designed or sold for incorporation into a dwelling. In determining whether a product is a consumer product, doubtful cases shall be resolved in favor of coverage. For a particular product received by a particular user, "normally used" refers to a typical or common use of that class of product, regardless of the status of the particular user or of the way in which the particular user actually uses, or expects or is expected to use, the product. A product is a consumer product regardless of whether the product has substantial commercial, industrial or non-consumer uses, unless such uses represent the only significant mode of use of the product.

"Installation Information" for a User Product means any methods, procedures, authorization keys, or other information required to install and execute modified versions of a covered work in that User Product from a modified version of its Corresponding Source. The information must suffice to ensure that the continued functioning of the modified object code is in no case prevented or interfered with solely because modification has been made.

If you convey an object code work under this section in, or with, or specifically for use in, a User Product, and the conveying occurs as part of a transaction in which the right of possession and use of the User Product is transferred to the recipient in perpetuity or for a fixed term (regardless of how the transaction is characterized), the Corresponding Source conveyed under this section must be accompanied by the Installation Information. But this requirement does not apply if neither you nor any third party retains the ability to install modified object code on the User Product (for example, the work has been installed in ROM).

The requirement to provide Installation Information does not include a requirement to continue to provide support service, warranty, or updates for a work that has been modified or installed by the recipient, or for the User Product in which it has been modified or installed. Access to a network may be denied when the modification itself materially and adversely affects the operation of the network or violates the rules and protocols for communication across the network.

Corresponding Source conveyed, and Installation Information provided, in accord with this section must be in a format that is publicly documented (and with an implementation available to the public in source code form), and must require no special password or key for unpacking, reading or copying.

#### 7. Additional Terms.

"Additional permissions" are terms that supplement the terms of this License by making exceptions from one or more of its conditions. Additional permissions that are applicable to the entire Program shall be treated as though they were included in this License, to the extent that they are valid under applicable law. If additional permissions apply only to part of the Program, that part may be used separately under those permissions, but the entire Program remains governed by this License without regard to the additional permissions.

When you convey a copy of a covered work, you may at your option remove any additional permissions from that copy, or from any part of it. (Additional permissions may be written to require their own removal in certain cases when you modify the work.) You may place additional permissions on material, added by you to a covered work, for which you have or can give appropriate copyright permission.

Notwithstanding any other provision of this License, for material you add to a covered work, you may (if authorized by the copyright holders of that material) supplement the terms of this License with terms:

- a) Disclaiming warranty or limiting liability differently from the terms of sections 15 and 16 of this License; or
- b) Requiring preservation of specified reasonable legal notices or author attributions in that material or in the Appropriate Legal Notices displayed by works containing it; or
- c) Prohibiting misrepresentation of the origin of that material, or requiring that modified versions of such material be marked in reasonable ways as different from the original version; or



- d) Limiting the use for publicity purposes of names of licensors or authors of the material; or
- e) Declining to grant rights under trademark law for use of some trade names, trademarks, or service marks; or
- f) Requiring indemnification of licensors and authors of that material by anyone who conveys the material (or modified versions of it) with contractual assumptions of liability to the recipient, for any liability that these contractual assumptions directly impose on those licensors and authors.

All other non-permissive additional terms are considered "further restrictions" within the meaning of section 10. If the Program as you received it, or any part of it, contains a notice stating that it is governed by this License along with a term that is a further restriction, you may remove that term. If a license document contains a further restriction but permits relicensing or conveying under this License, you may add to a covered work material governed by the terms of that license document, provided that the further restriction does not survive such relicensing or conveying.

If you add terms to a covered work in accord with this section, you must place, in the relevant source files, a statement of the additional terms that apply to those files, or a notice indicating where to find the applicable terms.

Additional terms, permissive or non-permissive, may be stated in the form of a separately written license, or stated as exceptions; the above requirements apply either way.

## 8. Termination.

You may not propagate or modify a covered work except as expressly provided under this License. Any attempt otherwise to propagate or modify it is void, and will automatically terminate your rights under this License (including any patent licenses granted under the third paragraph of section 11).

However, if you cease all violation of this License, then your license from a particular copyright holder is reinstated (a) provisionally, unless and until the copyright holder explicitly and finally terminates your license, and (b) permanently, if the copyright holder fails to notify you of the violation by some reasonable means prior to 60 days after the cessation.

Moreover, your license from a particular copyright holder is reinstated permanently if the copyright holder notifies you of the violation by some reasonable means, this is the first time you have received notice of violation of this License (for any work) from that copyright holder, and you cure the violation prior to 30 days after your receipt of the notice.

Termination of your rights under this section does not terminate the licenses of parties who have received copies or rights from you under this License. If your rights have been terminated and not permanently reinstated, you do not qualify to receive new licenses for the same material under section 10.

#### 9. Acceptance Not Required for Having Copies.

You are not required to accept this License in order to receive or run a copy of the Program. Ancillary propagation of a covered work occurring solely as a consequence of using peer-to-peer transmission to receive a copy likewise does not require acceptance. However, nothing other than this License grants you permission to propagate or modify any covered work. These actions infringe copyright if you do not accept this License. Therefore, by modifying or propagating a covered work, you indicate your acceptance of this License to do so.

#### 10. Automatic Licensing of Downstream Recipients.

Each time you convey a covered work, the recipient automatically receives a license from the original licensors, to run, modify and propagate that work, subject to this License. You are not responsible for enforcing compliance by third parties with this License.

An "entity transaction" is a transaction transferring control of an organization, or substantially all assets of one, or subdividing an organization, or merging organizations. If propagation of a covered work results from an entity transaction, each party to that transaction who receives a copy of the work also receives whatever licenses to the work the party's predecessor in interest had or could give under the previous paragraph, plus a right to possession of the Corresponding Source of the work from the predecessor in interest, if the predecessor has it or can get it with reasonable efforts.

You may not impose any further restrictions on the exercise of the rights granted or affirmed under this License. For example, you may not impose a license fee, royalty, or other charge for exercise of rights granted under this License, and you may not initiate litigation

(including a cross-claim or counterclaim in a lawsuit) alleging that any patent claim is infringed by making, using, selling, offering for sale, or importing the Program or any portion of it.

## 11. Patents.

A "contributor" is a copyright holder who authorizes use under this License of the Program or a work on which the Program is based. The work thus licensed is called the contributor's "contributor version".

A contributor's "essential patent claims" are all patent claims owned or controlled by the contributor, whether already acquired or hereafter acquired, that would be infringed by some manner, permitted by this License, of making, using, or selling its contributor version, but do not include claims that would be infringed only as a consequence of further modification of the contributor version. For purposes of this definition, "control" includes the right to grant patent sublicenses in a manner consistent with the requirements of this License.

Each contributor grants you a non-exclusive, worldwide, royalty-free patent license under the contributor's essential patent claims, to make, use, sell, offer for sale, import and otherwise run, modify and propagate the contents of its contributor version.

In the following three paragraphs, a "patent license" is any express agreement or commitment, however denominated, not to enforce a patent (such as an express permission to practice a patent or covenant not to sue for patent infringement). To "grant" such a patent license to a party means to make such an agreement or commitment not to enforce a patent against the party.

If you convey a covered work, knowingly relying on a patent license, and the Corresponding Source of the work is not available for anyone to copy, free of charge and under the terms of this License, through a publicly available network server or other readily accessible means, then you must either (1) cause the Corresponding Source to be so available, or (2) arrange to deprive yourself of the benefit of the patent license for this particular work, or (3) arrange, in a manner consistent with the requirements of this License, to extend the patent license to downstream recipients. "Knowingly relying" means you have actual knowledge that, but for the patent license, your conveying the covered work in a country, or your recipient's use of the covered work in a country, would infringe one or more identifiable patents in that country that you have reason to believe are valid.

If, pursuant to or in connection with a single transaction or arrangement, you convey, or propagate by procuring conveyance of, a covered work, and grant a patent license to some of the parties receiving the covered work authorizing them to use, propagate, modify or convey a specific copy of the covered work, then the patent license you grant is automatically extended to all recipients of the covered work and works based on it.

A patent license is "discriminatory" if it does not include within the scope of its coverage, prohibits the exercise of, or is conditioned on the non-exercise of one or more of the rights that are specifically granted under this License. You may not convey a covered work if you are a party to an arrangement with a third party that is in the business of distributing software, under which you make payment to the third party based on the extent of your activity of conveying the work, and under which the third party grants, to any of the parties who would receive the covered work from you, a discriminatory patent license (a) in connection with copies of the covered work conveyed by you (or copies made from those copies), or (b) primarily for and in connection with specific products or compilations that contain the covered work, unless you entered into that arrangement, or that patent license was granted, prior to 28 March 2007.

Nothing in this License shall be construed as excluding or limiting any implied license or other defenses to infringement that may otherwise be available to you under applicable patent law.

#### 12. No Surrender of Others' Freedom.

If conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot convey a covered work so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not convey it at all. For example, if you agree to terms that obligate you to collect a royalty for further conveying from those to whom you convey the Program, the only way you could satisfy both those terms and this License would be to refrain entirely from conveying the Program.

#### 13. Use with the GNU Affero General Public License.

Notwithstanding any other provision of this License, you have permission to link or combine any covered work with a work licensed under version 3 of the GNU Affero General Public License into a single combined work, and to convey the resulting work. The terms of this

License will continue to apply to the part which is the covered work, but the special requirements of the GNU Affero General Public License, section 13, concerning interaction through a network will apply to the combination as such.

#### 14. Revised Versions of this License.

The Free Software Foundation may publish revised and/or new versions of the GNU General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies that a certain numbered version of the GNU General Public License "or any later version" applies to it, you have the option of following the terms and conditions either of that numbered version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of the GNU General Public License, you may choose any version ever published by the Free Software Foundation.

If the Program specifies that a proxy can decide which future versions of the GNU General Public License can be used, that proxy's public statement of acceptance of a version permanently authorizes you to choose that version for the Program.

Later license versions may give you additional or different permissions. However, no additional obligations are imposed on any author or copyright holder as a result of your choosing to follow a later version.

#### 15. Disclaimer of Warranty.

THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

#### 16. Limitation of Liability.

IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MODIFIES AND/OR CONVEYS

THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

17.

Interpretation of Sections 15 and 16.

If the disclaimer of warranty and limitation of liability provided above cannot be given local legal effect according to their terms, reviewing courts shall apply local law that most closely approximates an absolute waiver of all civil liability in connection with the Program, unless a warranty or assumption of liability accompanies a copy of the Program in return for a fee.

## END OF TERMS AND CONDITIONS

### How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively state the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

```
<one line to give the program's name and a brief idea of what it does.>  
Copyright (C) <year> <name of author>
```

This program is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program. If not, see <https://www.gnu.org/licenses/>.

Also add information on how to contact you by electronic and paper mail.

If the program does terminal interaction, make it output a short notice like this when it starts in an interactive mode:

```
<program> Copyright (C) <year> <name of author>  
This program comes with ABSOLUTELY NO WARRANTY; for details type `show w'.  
This is free software, and you are welcome to redistribute it  
under certain conditions; type `show c' for details.
```

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, your program's commands might be different; for a GUI interface, you would use an "about box".

You should also get your employer (if you work as a programmer) or school, if any, to sign a "copyright disclaimer" for the program, if necessary. For more information on this, and how to apply and follow the GNU GPL, see [<https://www.gnu.org/licenses/>](https://www.gnu.org/licenses/).

The GNU General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Lesser General Public License instead of this License. But first, please read [<https://www.gnu.org/philosophy/why-not-lgpl.html>](https://www.gnu.org/philosophy/why-not-lgpl.html).

## 1.48 bash 5.0.18

### 1.48.1 Available under license :

GNU GENERAL PUBLIC LICENSE  
Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.,  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA  
Everyone is permitted to copy and distribute verbatim copies  
of this license document, but changing it is not allowed.

#### Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by

the GNU Lesser General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

## GNU GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which



contains

a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies

of the Program's

source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide

a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

- a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or

executable form with such  
an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent

infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number

of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW.

EXCEPT WHEN

OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN

IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

#### END OF TERMS AND CONDITIONS

#### How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest

to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the program's name and a brief idea of what it does.>  
Copyright (C) <year> <name of author>

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or  
(at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA.

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

Gnomovision version 69, Copyright (C) year name of author  
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.  
This is free software, and you are welcome to redistribute it under certain conditions; type `show c' for details.

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the program  
'Gnomovision' (which makes passes at compilers) written by James Hacker.

<signature of Ty Coon>, 1 April 1989  
Ty Coon, President of Vice

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Lesser General Public License instead of this License.

GNU Free Documentation License  
Version 1.3, 3 November 2008

Copyright (C) 2000, 2001, 2002, 2007, 2008 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.

## 0. PREAMBLE

The purpose of this License is to make a manual, textbook, or other functional and useful document "free" in the sense of freedom: to assure everyone the effective freedom to copy and redistribute it, with or without modifying it, either commercially or noncommercially. Secondly, this License preserves for the author and publisher a way to get credit for their work, while not being considered responsible for modifications made by others.

This License is a kind of "copyleft", which means that derivative works of the document must themselves be free in the same sense. It complements the GNU General Public License, which is a copyleft license designed for free software.

We

have designed this License in order to use it for manuals for free software, because free software needs free documentation: a free program should come with manuals providing the same freedoms that the software does. But this License is not limited to software manuals; it can be used for any textual work, regardless of subject matter or whether it is published as a printed book. We recommend this License principally for works whose purpose is instruction or reference.

## 1. APPLICABILITY AND DEFINITIONS

This License applies to any manual or other work, in any medium, that contains a notice placed by the copyright holder saying it can be distributed under the terms of this License. Such a notice grants a world-wide, royalty-free license, unlimited in duration, to use that work under the conditions stated herein. The "Document", below, refers to any such manual or work. Any member of the public is a

licensee, and is addressed as "you". You accept the license if you copy,  
modify or distribute the work in a way requiring permission under copyright law.

A "Modified Version" of the Document means any work containing the Document or a portion of it, either copied verbatim, or with modifications and/or translated into another language.

A "Secondary Section" is a named appendix or a front-matter section of the Document that deals exclusively with the relationship of the publishers or authors of the Document to the Document's overall subject (or to related matters) and contains nothing that could fall directly within that overall subject. (Thus, if the Document is in part a textbook of mathematics, a Secondary Section may not explain any mathematics.) The relationship could be a matter of historical connection with the subject or with related matters, or of legal, commercial, philosophical, ethical or political position regarding them.

The "Invariant Sections" are certain Secondary Sections whose titles are designated, as being those of Invariant Sections, in the notice that says that the Document is released under this License. If a section does not fit the above definition of Secondary then it is not allowed to be designated as Invariant. The Document may contain zero Invariant Sections. If the Document does not identify any Invariant Sections then there are none.

The "Cover Texts" are certain short passages of text that are listed, as Front-Cover Texts or Back-Cover Texts, in the notice that says that the Document is released under this License. A Front-Cover Text may be at most 5 words, and a Back-Cover Text may be at most 25 words.

A "Transparent" copy of the Document means a machine-readable copy, represented in a format whose specification is available to the general public, that is suitable for revising the document straightforwardly with generic text editors or (for images composed of pixels) generic paint programs or (for drawings) some widely available drawing editor, and that is suitable for input to text formatters or for automatic translation to a variety of formats suitable for input to text formatters. A copy made in an otherwise Transparent file format whose markup, or absence of markup, has been arranged to thwart or discourage subsequent modification by readers is not Transparent. An image format is not Transparent if used for any substantial amount of text. A copy that is not "Transparent" is called "Opaque".



Examples of suitable formats for Transparent copies include plain ASCII without markup, Texinfo input format, LaTeX input format, SGML or XML using a publicly available DTD, and standard-conforming simple HTML, PostScript or PDF designed for human modification. Examples of transparent image formats include PNG, XCF and JPG. Opaque formats include proprietary formats that can be read and edited only by proprietary word processors, SGML or XML for which the DTD and/or processing tools are not generally available, and the machine-generated HTML, PostScript or PDF produced by some word processors for output purposes only.

The "Title Page" means, for a printed book, the title page itself, plus such following pages as are needed to hold, legibly, the material this License requires to appear in the title page. For works in formats which do not have any title page as such, "Title Page" means the text near the most prominent appearance of the work's title, preceding the beginning of the body of the text.

The "publisher" means any person or entity that distributes copies of the Document to the public.

A section "Entitled XYZ" means a named subunit of the Document whose title either is precisely XYZ or contains XYZ in parentheses following text that translates XYZ in another language. (Here XYZ stands for a specific section name mentioned below, such as "Acknowledgements", "Dedications", "Endorsements", or "History".) To "Preserve the Title" of such a section when you modify the Document means that it remains a section "Entitled XYZ" according to this definition.

The

Document may include Warranty Disclaimers next to the notice which states that this License applies to the Document. These Warranty Disclaimers are considered to be included by reference in this License, but only as regards disclaiming warranties: any other implication that these Warranty Disclaimers may have is void and has no effect on the meaning of this License.

## 2. VERBATIM COPYING

You may copy and distribute the Document in any medium, either commercially or noncommercially, provided that this License, the copyright notices, and the license notice saying this License applies to the Document are reproduced in all copies, and that you add no other conditions whatsoever to those of this License. You may not use technical measures to obstruct or control the reading or further copying of the copies you make or distribute. However, you may accept compensation in exchange for copies. If you distribute a large enough

number of copies you must also follow the conditions in section 3.

You may also lend copies, under the same conditions stated above, and you may publicly display copies.

### 3. COPYING IN QUANTITY

If you publish printed copies (or copies in media that commonly have printed covers) of the Document, numbering more than 100, and the Document's license notice requires Cover Texts, you must enclose the copies in covers that carry, clearly and legibly, all these Cover Texts: Front-Cover Texts on the front cover, and Back-Cover Texts on the back cover. Both covers must also clearly and legibly identify you as the publisher of these copies. The front cover must present the full title with all words of the title equally prominent and visible. You may add other material on the covers in addition. Copying with changes limited to the covers, as long as they preserve the title of the Document and satisfy these conditions, can be treated as verbatim copying in other respects.

If the required texts for either cover are too voluminous to fit legibly, you should put the first ones listed (as many as fit reasonably) on the actual cover, and continue the rest onto adjacent pages.

If you publish or distribute Opaque copies of the Document numbering more than 100, you must either include a machine-readable Transparent copy along with each Opaque copy, or state in or with each Opaque copy a computer-network location from which the general network-using public has access to download using public-standard network protocols a complete Transparent copy of the Document, free of added material. If you use the latter option, you must take reasonably prudent steps, when you begin distribution of Opaque copies in quantity, to ensure that this Transparent copy will remain thus accessible at the stated location until at least one year after the last time you distribute an Opaque copy (directly or through your agents or retailers) of that edition to the public.

It is requested, but not required, that you contact the authors of the Document well before redistributing any large number of copies, to give them a chance to provide you with an updated version of the Document.

#### 4. MODIFICATIONS

You may copy and distribute a Modified Version of the Document under the conditions of sections 2 and 3 above, provided that you release the Modified Version under precisely this License, with the Modified Version filling the role of the Document, thus licensing distribution and modification of the Modified Version to whoever possesses a copy of it. In addition, you must do these things in the Modified Version:

- A. Use in the Title Page (and on the covers, if any) a title distinct from that of the Document, and from those of previous versions (which should, if there were any, be listed in the History section of the Document). You may use the same title as a previous version if the original publisher of that version gives permission.
- B. List on the Title Page, as authors, one or more persons or entities responsible for authorship of the modifications in the Modified Version, together with at least five of the principal authors of the Document (all of its principal authors, if it has fewer than five), unless they release you from this requirement.
- C. State on the Title page the name of the publisher of the Modified Version, as the publisher.
- D. Preserve all the copyright notices of the Document.
- E. Add an appropriate copyright notice for your modifications adjacent to the other copyright notices.
- F. Include, immediately after the copyright notices, a license notice giving the public permission to use the Modified Version under the terms of this License, in the form shown in the Addendum below.
- G. Preserve in that license notice the full lists of Invariant Sections and required Cover Texts given in the Document's license notice.
- H. Include an unaltered copy of this License.
- I. Preserve the section Entitled "History", Preserve its Title, and add to it an item stating at least the title, year, new authors, and publisher of the Modified Version as given on the Title Page. If there is no section Entitled "History" in the Document, create one stating the title, year, authors, and publisher of the Document as given on its Title Page, then add an item describing the Modified Version as stated in the previous sentence.
- J. Preserve the network location, if any, given in the Document for public access to a Transparent copy of the Document, and likewise the network locations given in the Document for previous versions it was based on. These may be placed in the "History" section. You may omit a network location for a work that was published at least four years before the Document itself, or if the original publisher of the version it refers to gives permission.
- K. For any section Entitled "Acknowledgements" or "Dedications", Preserve the Title of the section, and preserve in the section all

the substance and tone of each of the contributor  
acknowledgements  
and/or dedications given therein.

- L. Preserve all the Invariant Sections of the Document,  
unaltered in their text and in their titles. Section numbers  
or the equivalent are not considered part of the section titles.
- M. Delete any section Entitled "Endorsements". Such a section  
may not be included in the Modified Version.
- N. Do not retitle any existing section to be Entitled "Endorsements"  
or to conflict in title with any Invariant Section.
- O. Preserve any Warranty Disclaimers.

If the Modified Version includes new front-matter sections or  
appendices that qualify as Secondary Sections and contain no material  
copied from the Document, you may at your option designate some or all  
of these sections as invariant. To do this, add their titles to the  
list of Invariant Sections in the Modified Version's license notice.  
These titles must be distinct from any other section titles.

You may add a section Entitled "Endorsements", provided it contains  
nothing but  
endorsements of your Modified Version by various  
parties--for example, statements of peer review or that the text has  
been approved by an organization as the authoritative definition of a  
standard.

You may add a passage of up to five words as a Front-Cover Text, and a  
passage of up to 25 words as a Back-Cover Text, to the end of the list  
of Cover Texts in the Modified Version. Only one passage of  
Front-Cover Text and one of Back-Cover Text may be added by (or  
through arrangements made by) any one entity. If the Document already  
includes a cover text for the same cover, previously added by you or  
by arrangement made by the same entity you are acting on behalf of,  
you may not add another; but you may replace the old one, on explicit  
permission from the previous publisher that added the old one.

The author(s) and publisher(s) of the Document do not by this License  
give permission to use their names for publicity for or to assert or  
imply endorsement of any Modified Version.

## 5. COMBINING DOCUMENTS

You may combine the Document with other documents released under this  
License, under the terms defined in section 4 above for modified  
versions, provided that you include in the combination all of the  
Invariant Sections of all of the original documents, unmodified, and

list them all as Invariant Sections of your combined work in its license notice, and that you preserve all their Warranty Disclaimers.

The combined work need only contain one copy of this License, and multiple identical Invariant Sections may be replaced with a single copy. If there are multiple Invariant Sections with the same name but different contents, make the title of each such section unique by adding at the end of it, in parentheses, the name of the original author or publisher of that section if known, or else a unique number. Make the same adjustment to the section titles in the list of Invariant Sections in the license notice of the combined work.

In the combination, you must combine any sections Entitled "History" in the various original documents, forming one section Entitled "History"; likewise combine any sections Entitled "Acknowledgements", and any sections Entitled "Dedications". You must delete all sections Entitled "Endorsements".

## 6. COLLECTIONS OF DOCUMENTS

You may make a collection consisting of the Document and other documents released under this License, and replace the individual copies of this License in the various documents with a single copy that is included in the collection, provided that you follow the rules of this License for verbatim copying of each of the documents in all other respects.

You may extract a single document from such a collection, and distribute it individually under this License, provided you insert a copy of this License into the extracted document, and follow this License in all other respects regarding verbatim copying of that document.

## 7. AGGREGATION WITH INDEPENDENT WORKS

A compilation of the Document or its derivatives with other separate and independent documents or works, in or on a volume of a storage or distribution medium, is called an "aggregate" if the copyright resulting from the compilation is not used to limit the legal rights of the compilation's users beyond what the individual works permit. When the Document is included in an aggregate, this License does not apply to the other works in the aggregate which are not themselves derivative works of the Document.

If the Cover Text requirement of section 3 is applicable to these copies of the Document, then if the Document is less than one half of the entire aggregate, the Document's Cover Texts may be placed on covers that bracket the Document within the aggregate, or the electronic equivalent of covers if the Document is in electronic form. Otherwise they must appear on printed covers that bracket the whole aggregate.

## 8. TRANSLATION

Translation is considered a kind of modification, so you may distribute translations of the Document under the terms of section 4.

Replacing Invariant Sections with translations requires special permission from their copyright holders, but you may include translations of some or all Invariant Sections in addition to the original versions of these Invariant Sections. You may include a translation of this License, and all the license notices in the Document, and any Warranty Disclaimers, provided that you also include the original English version of this License and the original versions of those notices and disclaimers. In case of a disagreement between the translation and the original version of this License or a notice or disclaimer, the original version will prevail.

If a section in the Document is Entitled "Acknowledgements", "Dedications", or "History", the requirement (section 4) to Preserve its Title (section 1) will typically require changing the actual title.

## 9. TERMINATION

You may not copy, modify, sublicense, or distribute the Document except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, or distribute it is void, and will automatically terminate your rights under this License.

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, receipt of a copy of some or all of the same material does not give you any rights to use it.

## 10. FUTURE REVISIONS OF THIS LICENSE

The Free Software Foundation may publish new, revised versions of the GNU Free Documentation 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. See <http://www.gnu.org/copyleft/>.

Each version of the License is given a distinguishing version number. If the Document specifies that a particular numbered version of this License "or any later version" applies to it, you have the option of following the terms and conditions either of that specified version or of any later version that has been published (not as a draft) by the Free Software Foundation. If the Document does not specify a version number of this License, you may choose any version ever published (not as a draft) by the Free Software Foundation. If the Document specifies that a proxy can decide which future versions of this License can be used, that proxy's public statement of acceptance of a version permanently authorizes you to choose that version for the Document.

## 11. RELICENSING

"Massive Multiauthor Collaboration Site" (or "MMC Site") means any World Wide Web server that publishes copyrightable works and also provides prominent facilities for anybody to edit those works. A public wiki that anybody can edit is an example of such a server. A "Massive Multiauthor Collaboration" (or "MMC") contained in the site means any set of copyrightable works thus published on the MMC site.

"CC-BY-SA" means the Creative Commons Attribution-Share Alike 3.0 license published by Creative Commons Corporation, a not-for-profit corporation with a principal place of business in San Francisco, California, as well as future copyleft versions of that license

published by  
that same organization.

"Incorporate" means to publish or republish a Document, in whole or in part, as part of another Document.

An MMC is "eligible for relicensing" if it is licensed under this License, and if all works that were first published under this License somewhere other than this MMC, and subsequently incorporated in whole or in part into the MMC, (1) had no cover texts or invariant sections, and (2) were thus incorporated prior to November 1, 2008.

The operator of an MMC Site may republish an MMC contained in the site under CC-BY-SA on the same site at any time before August 1, 2009, provided the MMC is eligible for relicensing.

ADDENDUM: How to use this License for your documents

To use this License in a document you have written, include a copy of the License in the document and put the following copyright and license notices just after the title page:

Copyright (c) YEAR YOUR NAME.

Permission is granted to copy, distribute and/or modify this document under the terms of the GNU Free Documentation License, Version 1.3 or any later version published by the Free Software Foundation; with no Invariant Sections, no Front-Cover Texts, and no Back-Cover Texts. A copy of the license is included in the section entitled "GNU Free Documentation License".

If you have Invariant Sections, Front-Cover Texts and Back-Cover Texts, replace the "with...Texts." line with this:

with the Invariant Sections being LIST THEIR TITLES, with the Front-Cover Texts being LIST, and with the Back-Cover Texts being LIST.

If you have Invariant Sections without Cover Texts, or some other combination of the three, merge those two alternatives to suit the situation.

If your document contains nontrivial examples of program code, we recommend releasing these examples in parallel under your choice of free software license, such as the GNU General Public License, to permit their use in free software.

@c The GNU Free Documentation License.

@center Version 1.3, 3 November 2008



@c This file is intended to be included within another document,  
@c hence no sectioning command or @node.

@display

Copyright @copyright{ } 2000, 2001, 2002, 2007, 2008 Free Software Foundation, Inc.

@uref{http://fsf.org/}

Everyone is permitted to copy and distribute verbatim copies  
of this license document, but changing it is not allowed.

@end display

@enumerate 0

@item

PREAMBLE

The purpose of this License is to make a manual, textbook, or other  
functional and useful document @dfn{free} in the sense of freedom: to  
assure everyone the effective freedom to copy and redistribute it,  
with or without modifying it, either commercially or noncommercially.  
Secondarily, this License preserves for the author and publisher a way  
to get credit for their work, while not being considered responsible  
for modifications made by others.

This License is a kind of ``copyleft'', which means that derivative  
works of the document  
must themselves be free in the same sense. It  
complements the GNU General Public License, which is a copyleft  
license designed for free software.

We have designed this License in order to use it for manuals for free  
software, because free software needs free documentation: a free  
program should come with manuals providing the same freedoms that the  
software does. But this License is not limited to software manuals;  
it can be used for any textual work, regardless of subject matter or  
whether it is published as a printed book. We recommend this License  
principally for works whose purpose is instruction or reference.

@item

APPLICABILITY AND DEFINITIONS

This License applies to any manual or other work, in any medium, that  
contains a notice placed by the copyright holder saying it can be  
distributed under the terms of this License. Such a notice grants a  
world-wide, royalty-free license, unlimited in duration, to use that  
work under the conditions stated herein. The ``Document'', below,  
refers

to any such manual or work. Any member of the public is a  
licensee, and is addressed as ``you''. You accept the license if you

copy, modify or distribute the work in a way requiring permission under copyright law.

A "Modified Version" of the Document means any work containing the Document or a portion of it, either copied verbatim, or with modifications and/or translated into another language.

A "Secondary Section" is a named appendix or a front-matter section of the Document that deals exclusively with the relationship of the publishers or authors of the Document to the Document's overall subject (or to related matters) and contains nothing that could fall directly within that overall subject. (Thus, if the Document is in part a textbook of mathematics, a Secondary Section may not explain any mathematics.) The relationship could be a matter of historical connection with the subject or with related matters, or of legal, commercial, philosophical, ethical or political position regarding them.

The "Invariant Sections" are certain Secondary Sections whose titles are designated, as being those of Invariant Sections, in the notice that says that the Document is released under this License. If a section does not fit the above definition of Secondary then it is not allowed to be designated as Invariant. The Document may contain zero Invariant Sections. If the Document does not identify any Invariant Sections then there are none.

The "Cover Texts" are certain short passages of text that are listed, as Front-Cover Texts or Back-Cover Texts, in the notice that says that the Document is released under this License. A Front-Cover Text may be at most 5 words, and a Back-Cover Text may be at most 25 words.

A "Transparent" copy of the Document means a machine-readable copy, represented in a format whose specification is available to the general public, that is suitable for revising the document straightforwardly with generic text editors or (for images composed of pixels) generic paint programs or (for drawings) some widely available drawing editor, and that is suitable for input to text formatters or for automatic translation to a variety of formats suitable for input to text formatters. A copy made in an otherwise Transparent file format whose markup, or absence of markup, has been arranged to thwart or discourage subsequent modification by readers is not Transparent. An image format is not Transparent if used for any substantial amount of text. A copy that is not "Transparent" is called "Opaque".

Examples of suitable formats for Transparent copies include plain @sc{ascii} without markup, Texinfo input format, La@TeX{} input

format, @acronym{SGML} or @acronym{XML} using a publicly available @acronym{DTD}, and standard-conforming simple @acronym{HTML}, PostScript or @acronym{PDF} designed for human modification. Examples of transparent image formats include @acronym{PNG}, @acronym{XCF} and @acronym{JPG}. Opaque formats include proprietary formats that can be read and edited only by proprietary word processors, @acronym{SGML} or @acronym{XML} for which the @acronym{DTD} and/or processing tools are not generally available, and the machine-generated @acronym{HTML}, PostScript or @acronym{PDF} produced by some word processors for output purposes only.

The ``Title Page" means, for a printed book, the title page itself, plus such following pages as are needed to hold, legibly, the material this License requires to appear in the title page. For works in formats which do not have any title page as such, ``Title Page" means the text near the most prominent appearance of the work's title, preceding the beginning of the body of the text.

The ``publisher" means any person or entity that distributes copies of the Document to the public.

A section ``Entitled XYZ" means a named subunit of the Document whose title either is precisely XYZ or contains XYZ in parentheses following text that translates XYZ in another language. (Here XYZ stands for a specific section name mentioned below, such as ``Acknowledgements", ``Dedications", ``Endorsements", or ``History".) To ``Preserve the Title" of such a section when you modify the Document means that it remains a section ``Entitled XYZ" according to this definition.

The Document may include Warranty Disclaimers next to the notice which states that this License applies to the Document. These Warranty Disclaimers are considered to be included by reference in this License, but only as regards disclaiming warranties: any other implication that these Warranty Disclaimers may have is void and has no effect on the meaning of this License.

@item

## VERBATIM COPYING

You may copy and distribute the Document in any medium, either commercially or noncommercially, provided that this License, the copyright notices, and the license notice saying this License applies to the Document are reproduced in all copies, and that you add no other conditions whatsoever

to those of this License. You may not use technical measures to obstruct or control the reading or further

copying of the copies you make or distribute. However, you may accept compensation in exchange for copies. If you distribute a large enough number of copies you must also follow the conditions in section 3.

You may also lend copies, under the same conditions stated above, and you may publicly display copies.

@item

## COPYING IN QUANTITY

If you publish printed copies (or copies in media that commonly have printed covers) of the Document, numbering more than 100, and the Document's license notice requires Cover Texts, you must enclose the copies in covers that carry, clearly and legibly, all these Cover Texts: Front-Cover Texts on the front cover, and Back-Cover Texts on the back cover. Both covers must also clearly and legibly identify you as the publisher of these copies. The front cover must present the full title with all words of the title equally prominent and visible.

You may add other material on the covers in addition.

Copying with changes limited to the covers, as long as they preserve the title of the Document and satisfy these conditions, can be treated as verbatim copying in other respects.

If the required texts for either cover are too voluminous to fit legibly, you should put the first ones listed (as many as fit reasonably) on the actual cover, and continue the rest onto adjacent pages.

If you publish or distribute Opaque copies of the Document numbering more than 100, you must either include a machine-readable Transparent copy along with each Opaque copy, or state in or with each Opaque copy a computer-network location from which the general network-using public has access to download using public-standard network protocols a complete Transparent copy of the Document, free of added material. If you use the latter option, you must take reasonably prudent steps, when you begin distribution of Opaque copies in quantity, to ensure that this Transparent copy will remain thus accessible at the stated location until at least one year after the last time you distribute an Opaque copy (directly or through your agents or retailers) of that edition to the public.

It is requested, but not required, that you contact the authors of the Document well before redistributing any large number of copies, to give them a chance to provide you with an updated version of the Document.

@item

## MODIFICATIONS

You may copy and distribute a Modified Version of the Document under the conditions of sections 2 and 3 above, provided that you release the Modified Version under precisely this License, with the Modified Version filling the role of the Document, thus licensing distribution and modification of the Modified Version to whoever possesses a copy of it. In addition, you must do these things in the Modified Version:

@enumerate A

@item

Use in the Title Page (and on the covers, if any) a title distinct from that of the Document, and from those of previous versions (which should, if there were any, be listed in the History section of the Document). You may use the same title as a previous version if the original publisher of that version gives permission.

@item

List on the Title Page, as authors, one or more persons or entities responsible for authorship of the modifications in the Modified Version, together with at least five of the principal authors of the Document (all of its principal authors, if it has fewer than five), unless they release you from this requirement.

@item

State on the Title page the name of the publisher of the Modified Version, as the publisher.

@item

Preserve all the copyright notices of the Document.

@item

Add an appropriate copyright notice for your modifications adjacent to the other copyright notices.

@item

Include, immediately after the copyright notices, a license notice giving the public permission to use the Modified Version under the terms of this License, in the form shown in the Addendum below.

@item

Preserve in that license notice the full lists of Invariant Sections and required Cover Texts given in the Document's license notice.

@item

Include an unaltered copy of this License.

@item

Preserve the section Entitled ``History'', Preserve its Title, and add to it an item stating at least the title, year, new authors, and publisher of the Modified Version as given on the Title Page. If there is no section Entitled ``History'' in the Document, create one stating the title, year, authors, and publisher of the Document as given on its Title Page, then add an item describing the Modified Version as stated in the previous sentence.

@item

Preserve the network location, if any, given in the Document for public access to a Transparent copy of the Document, and likewise the network locations given in the Document for previous versions it was based on. These may be placed in the ``History'' section. You may omit a network location for a work that was published at least four years before the Document itself, or if the original publisher of the version it refers to gives permission.

@item

For any section Entitled ``Acknowledgements'' or ``Dedications'', Preserve the Title of the section, and preserve in the section all the substance and tone of each of the contributor acknowledgements and/or dedications given therein.

@item

Preserve all the Invariant Sections of the Document, unaltered in their text and in their titles. Section numbers or the equivalent are not considered part of the section titles.

@item

Delete any section Entitled ``Endorsements''. Such a section may not be included in the Modified Version.

@item

Do not retitle any existing section to be Entitled ``Endorsements'' or to conflict in title with any Invariant Section.

@item

Preserve any Warranty Disclaimers.

@end enumerate

If the Modified Version includes new front-matter sections or appendices that qualify as Secondary Sections and contain no material copied from the Document,

you may at your option designate some or all of these sections as invariant. To do this, add their titles to the

list of Invariant Sections in the Modified Version's license notice.

These titles must be distinct from any other section titles.

You may add a section Entitled ``Endorsements'', provided it contains nothing but endorsements of your Modified Version by various parties---for example, statements of peer review or that the text has been approved by an organization as the authoritative definition of a standard.

You may add a passage of up to five words as a Front-Cover Text, and a passage of up to 25 words as a Back-Cover Text, to the end of the list of Cover Texts in the Modified Version. Only one passage of Front-Cover Text and one of Back-Cover Text may be added by (or through arrangements made by) any one entity. If the Document already includes a cover text for the same cover, previously added by you or by arrangement made by the same entity you are acting on behalf of, you may not add another; but you may replace the old one, on explicit permission from the previous publisher that added the old one.

The author(s) and publisher(s) of the Document do not by this License give permission to use their names for publicity for or to assert or imply endorsement of any Modified Version.

@item

## COMBINING DOCUMENTS

You may combine the Document with other documents released under this License, under the terms defined in section 4 above for modified versions, provided that you include in the combination all of the Invariant Sections of all of the original documents, unmodified, and list them all as Invariant Sections of your combined work in its license notice, and that you preserve all their Warranty Disclaimers.

The combined work need only contain one copy of this License, and multiple identical Invariant Sections may be replaced with a single copy. If there are multiple Invariant Sections with the same name but different contents, make the title of each such section unique by adding at the end of it, in parentheses, the name of the original author or publisher of that section if known, or else a unique number. Make the same adjustment to the section titles in the list of Invariant Sections in the license notice of the combined work.

In the combination, you must combine any sections Entitled ``History'' in the various original documents, forming one section Entitled ``History''; likewise combine any sections Entitled ``Acknowledgements'', and any sections Entitled ``Dedications''. You must delete all

sections Entitled ``Endorsements."

@item

## COLLECTIONS OF DOCUMENTS

You may make a collection consisting of the Document and other documents released under this License, and replace the individual copies of this License in the various documents with a single copy that is included in the collection, provided that you follow the rules of this License for verbatim copying of each of the documents in all other respects.

You may extract

a single document from such a collection, and distribute it individually under this License, provided you insert a copy of this License into the extracted document, and follow this License in all other respects regarding verbatim copying of that document.

@item

## AGGREGATION WITH INDEPENDENT WORKS

A compilation of the Document or its derivatives with other separate and independent documents or works, in or on a volume of a storage or distribution medium, is called an ``aggregate" if the copyright resulting from the compilation is not used to limit the legal rights of the compilation's users beyond what the individual works permit. When the Document is included in an aggregate, this License does not apply to the other works in the aggregate which are not themselves derivative works of the Document.

If the Cover Text requirement of section 3 is applicable to these copies of the Document, then if the Document is less than one half of the entire aggregate, the Document's Cover Texts may be placed on covers that bracket the Document within the aggregate, or the electronic equivalent of covers if the Document is in electronic form. Otherwise they must appear on printed covers that bracket the whole aggregate.

@item

## TRANSLATION

Translation is considered a kind of modification, so you may distribute translations of the Document under the terms of section 4. Replacing Invariant Sections with translations requires special permission from their copyright holders, but you may include translations of some or all Invariant Sections in addition to the original versions of these Invariant Sections. You may include a translation of this License, and all the license notices in the



Document, and any Warranty Disclaimers, provided that you also include the original English version of this License and the original versions of those notices and disclaimers. In case of a disagreement between the translation and the original version of this License or a notice or disclaimer, the original version will prevail.

If a section in the Document is Entitled ``Acknowledgements'', ``Dedications'', or ``History'', the requirement (section 4) to Preserve its Title (section 1) will typically require changing the actual title.

@item

## TERMINATION

You may not copy, modify, sublicense, or distribute the Document except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, or distribute it is void, and will automatically terminate your rights under this License.

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, receipt of a copy of some or all of the same material does not give you any rights to use it.

@item

## FUTURE REVISIONS OF THIS LICENSE

The Free Software Foundation may publish new, revised versions of the GNU Free Documentation 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. See

[@uref{http://www.gnu.org/copyleft/}](http://www.gnu.org/copyleft/).

Each version of the License is given a distinguishing version number. If the Document specifies that a particular numbered version of this License "or any later version" applies to it, you have the option of following the terms and conditions either of that specified version or of any later version that has been published (not as a draft) by the Free Software Foundation. If the Document does not specify a version number of this License, you may choose any version ever published (not as a draft) by the Free Software Foundation. If the Document specifies that a proxy can decide which future versions of this License can be used, that proxy's public statement of acceptance of a version permanently authorizes you to choose that version for the Document.

@item

## RELICENSING

"Massive Multiauthor Collaboration Site" (or "MMC Site") means any World Wide Web server that publishes copyrightable works and also provides prominent facilities for anybody to edit those works. A public wiki that anybody can edit is an example of such a server. A "Massive Multiauthor Collaboration" (or "MMC") contained in the site means any set of copyrightable works thus published on the MMC site.

"CC-BY-SA" means the Creative Commons Attribution-Share Alike 3.0 license published by Creative Commons Corporation, a not-for-profit corporation with a principal place of business in San Francisco, California, as well as future copyleft versions of that license published by that same organization.

"Incorporate" means to publish or republish a Document, in whole or in part, as part of another Document.

An MMC is "eligible for relicensing" if it is licensed under this License, and if all works that were first published under this License somewhere other than this MMC, and subsequently incorporated in whole or in part into the MMC, (1) had no cover texts or invariant sections, and (2) were thus incorporated prior to November 1, 2008.

The operator of an MMC Site may republish an MMC contained in the site under CC-BY-SA on the same site at any time before August 1, 2009, provided the MMC is eligible for relicensing.

@end enumerate

@page

@heading ADDENDUM: How to use this License for your documents

To use this License in a document you have written, include a copy of the License in the document and put the following copyright and license notices just after the title page:

@smallexample

@group

Copyright (C) @var{year} @var{your name}.

Permission is granted to copy, distribute and/or modify this document under the terms of the GNU Free Documentation License, Version 1.3 or any later version published by the Free Software Foundation; with no Invariant Sections, no Front-Cover Texts, and no Back-Cover Texts. A copy of the license is included in the section entitled ``GNU Free Documentation License''.

@end group

@end smallexample

If you have Invariant Sections, Front-Cover Texts and Back-Cover Texts, replace the ``with@dots{ }Texts." line with this:

@smallexample

@group

with the Invariant Sections being @var{list their titles}, with the Front-Cover

Texts being @var{list}, and with the Back-Cover Texts

being @var{list}.

@end group

@end smallexample

If you have Invariant Sections without Cover Texts, or some other combination of the three, merge those two alternatives to suit the situation.

If your document contains nontrivial examples of program code, we recommend releasing these examples in parallel under your choice of free software license, such as the GNU General Public License, to permit their use in free software.

@c Local Variables:

@c ispell-local-pdict: "ispell-dict"

@c End:

GNU 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.

## 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:

```
<program> Copyright (C) <year> <name of author>  
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>.  
Unless otherwise stated, all files in this directory are Copyright (C) 1991,1992,1993,1994,1995,1996,1997,1998,1999,2000,2001,2002,2003, 2004,2005,2006,2007,2008,2009,2010,2011  
Free Software Foundation, Inc.

See the file COPYING in the bash distribution root directory for copying and usage restrictions.

The file ifs-posix.tests is Copyright (C) 2005 Glen Fowler.

## 1.49 tftp-hpa 5.2

## 1.49.1 Available under license :

No license file was found, but licenses were detected in source scan.

/\*

\* Copyright (c) 1983, 1993

\* The Regents of the University of California. All rights reserved.

\*

\* Redistribution and use in source and binary forms, with or without  
\* modification, are permitted provided that the following conditions  
\* are met:

\* 1. Redistributions of source code must retain the above copyright  
\* notice, this list of conditions and the following disclaimer.

\* 2. Redistributions in binary form must reproduce the above copyright  
\* notice, this list of conditions and the following disclaimer in the  
\* documentation and/or other materials provided with the distribution.

\* 3. All advertising materials mentioning features or use of this software  
\* must display the following acknowledgement:

\* This product includes software developed by the University of  
\* California, Berkeley and its contributors.

\* 4. Neither the name of the University nor the names of its contributors  
\*

may be used to endorse or promote products derived from this software

\* without specific prior written permission.

\*

\* THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS ``AS IS" AND  
\* ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE  
\* IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE  
\* ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE  
\* FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL  
\* DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS  
\* OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)  
\* HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT  
\* LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY  
\* OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF  
\* SUCH DAMAGE.

\*/

Found in path(s):

\* /opt/cola/permits/1108298343\_1611281305.28/0/tftp-hpa-5-2-tar-bz2/tftp-hpa-5.2/tftp/tftp.c

\*

/opt/cola/permits/1108298343\_1611281305.28/0/tftp-hpa-5-2-tar-bz2/tftp-hpa-5.2/common/tftpsubs.c

\* /opt/cola/permits/1108298343\_1611281305.28/0/tftp-hpa-5-2-tar-bz2/tftp-hpa-5.2/tftp/main.c

No license file was found, but licenses were detected in source scan.

Summary: The client for the Trivial File Transfer Protocol (TFTP).

Name: tftp

Version: 5.2

Release: 1

License: BSD  
Group: Applications/Internet  
Source0: <http://www.kernel.org/pub/software/network/tftp/tftp-hpa-%{version}.tar.gz>  
BuildRequires: tcp\_wrappers-devel  
BuildRoot: %{\_tmppath}/%{name}-root

%description

The Trivial File Transfer Protocol (TFTP) is normally used only for booting diskless workstations. The tftp package provides the user interface for TFTP, which allows users to transfer files to and from a remote machine. This program and TFTP provide very little security, and should not be enabled unless it is expressly needed.

%package server

Group: System Environment/Daemons  
Summary: The server for the Trivial File Transfer Protocol (TFTP).  
Requires: xinetd

%description server

The Trivial File Transfer Protocol (TFTP) is normally used only for booting diskless workstations. The tftp-server package provides the server for TFTP, which allows users to transfer files to and from a remote machine. TFTP provides very little security, and should not be enabled unless it is expressly needed. The TFTP server is run from /etc/xinetd.d/tftp, and is disabled by default on Red Hat Linux systems.

%prep

%setup -q -n tftp-hpa-%{version}

%build

%configure

make %{?\_smp\_mflags}

%install

rm -rf \${RPM\_BUILD\_ROOT}  
mkdir -p \${RPM\_BUILD\_ROOT}%{\_bindir}  
mkdir -p \${RPM\_BUILD\_ROOT}%{\_mandir}/man{1,8}  
mkdir -p \${RPM\_BUILD\_ROOT}%{\_sbindir}

make INSTALLROOT=\${RPM\_BUILD\_ROOT} \  
SBINDIR=%{\_sbindir} MANDIR=%{\_mandir} \  
install

install -m755 -d \${RPM\_BUILD\_ROOT}%{\_sysconfdir}/xinetd.d/ \${RPM\_BUILD\_ROOT}/tftpboot  
install -m644 tftp-xinetd \${RPM\_BUILD\_ROOT}%{\_sysconfdir}/xinetd.d/tftp

%post server

```
/sbin/service xinetd reload > /dev/null 2>&1 || :
```

```
%postun server
```

```
if [ $1 = 0 ]; then
```

```
  /sbin/service xinetd reload > /dev/null 2>&1 || :
```

```
fi
```

```
%clean
```

```
rm -rf ${RPM_BUILD_ROOT}
```

```
%files
```

```
%defattr(-,root,root)
```

```
%{_bindir}/tftp
```

```
%{_mandir}/man1/*
```

```
%files
```

```
server
```

```
%defattr(-,root,root)
```

```
%config(noreplace) %{_sysconfdir}/xinetd.d/tftp
```

```
%dir /tftpboot
```

```
%{_sbindir}/in.tftpd
```

```
%{_mandir}/man8/*
```

```
%changelog
```

```
* Tue Sep 14 2004 H. Peter Anvin <hpa@zytor.com>
```

```
- removed completely broken "Malta" patch.
```

```
- integrated into build machinery so rpm -ta works.
```

```
* Fri Feb 13 2004 Elliot Lee <sopwith@redhat.com>
```

```
- rebuilt
```

```
* Wed Jun 04 2003 Elliot Lee <sopwith@redhat.com>
```

```
- rebuilt
```

```
* Fri Apr 11 2003 Elliot Lee <sopwith@redhat.com>
```

```
- 0.33
```

```
- Add /tftpboot directory (#88204)
```

```
* Mon Feb 24 2003 Elliot Lee <sopwith@redhat.com>
```

```
- rebuilt
```

```
* Sun Feb 23 2003 Tim Powers <timp@redhat.com>
```

```
- add BuildPreReq on tcp_wrappers
```

```
* Wed Jan 22 2003 Tim Powers <timp@redhat.com>
```

```
- rebuilt
```

```
* Mon Nov 11 2002 Elliot Lee <sopwith@redhat.com> 0.32-1
```

- Update to 0.32
  
- \* Wed Oct 23 2002 Elliot Lee <sopwith@redhat.com> 0.30-1
  - Fix #55789
  - Update to 0.30
  
- \* Thu Jun 27 2002 Elliot Lee <sopwith@redhat.com>
  - Try applying HJ's patch from #65476
  
- \* Fri Jun 21 2002 Tim Powers <timp@redhat.com>
  - automated rebuild
  
- \* Mon Jun 17 2002 Elliot Lee <sopwith@redhat.com>
  - Update to 0.29
  
- \* Thu May 23 2002 Tim Powers <timp@redhat.com>
  - automated rebuild
  
- \* Wed Jan 09 2002 Tim Powers <timp@redhat.com>
  - automated rebuild
  
- \* Tue Dec 18 2001 Elliot Lee <sopwith@redhat.com> 0.17-15
  - Add patch4: netkit-tftp-0.17-defaultport.patch for bug #57562
  - Update to tftp-hpa-0.28 (bug #56131)
  - Remove include/arpa/tftp.h to fix #57259
  - Add resource limits in tftp-xinetd (#56722)
  
- \* Sun Jun 24 2001 Elliot Lee <sopwith@redhat.com>
  - Bump release + rebuild.
  
- \* Tue Jun 12 2001 Helge Deller <hdeller@redhat.de> (0.17-13)
  - updated tftp-hpa source to tftp-hpa-0.17
  - tweaked specfile with different defines for tftp-netkit and tftp-hpa version
  - use hpa's tftpd.8 man page instead of the netkits one
  
- \* Mon May 07 2001 Helge Deller <hdeller@redhat.de>
  - rebuilt in 7.1.x
  
- \* Wed Apr 18 2001 Helge Deller <hdeller@redhat.de>
  - fix tftp client's put problems (#29529)
  - update
  - to tftp-hpa-0.16
  
- \* Wed Apr 4 2001 Jakub Jelinek <jakub@redhat.com>
  - don't let configure to guess compiler, it can pick up eggs
  
- \* Thu Feb 08 2001 Helge Deller <hdeller@redhat.de>

- changed "wait" in xinetd file to "yes" (hpa-tftpd forks and exits) (#26467)
  - fixed hpa-tftpd to handle files greater than 32MB (#23725)
  - added "-l" flag to hpa-tftpd for file-logging (#26467)
  - added description for "-l" to the man-page
- \* Thu Feb 08 2001 Helge Deller <hdeller@redhat.de>
  - updated tftp client to 0.17 stable (#19640),
  - drop dependency on xinetd for tftp client (#25051),
- \* Wed Jan 17 2001 Jeff Johnson <jbj@redhat.com>
  - xinetd shouldn't wait on tftp (which forks) (#23923).
- \* Sat Jan 6 2001 Jeff Johnson <jbj@redhat.com>
  - fix to permit tftp put's (#18128).
  - startup as root with chroot to /tftpboot with early reversion to nobody is preferable to starting as nobody w/o ability to chroot.
  - %%post is needed by server, not client. Add %%postun for erasure as well.
- \* Wed Aug 23 2000
  - Nalin Dahyabhai <nalin@redhat.com>
  - default to being disabled
- \* Thu Aug 17 2000 Jeff Johnson <jbj@redhat.com>
  - correct group.
- \* Tue Jul 25 2000 Nalin Dahyabhai <nalin@redhat.com>
  - change user from root to nobody
- \* Sat Jul 22 2000 Jeff Johnson <jbj@redhat.com>
  - update to tftp-hpa-0.14 (#14003).
  - add server\_args (#14003).
  - remove -D\_BSD\_SOURCE (#14003).
- \* Fri Jul 21 2000 Nalin Dahyabhai <nalin@redhat.com>
  - cook up an xinetd config file for tftpd
- \* Wed Jul 12 2000 Prospector <bugzilla@redhat.com>
  - automatic rebuild
- \* Sun Jun 18 2000 Jeff Johnson <jbj@redhat.com>
  - FHS packaging.
  - update to 0.17.
- \* Fri May 5 2000 Matt Wilson <msw@redhat.com>
  - use \_BSD\_SOURCE for hpa's tftpd so we get BSD signal semantics.
- \* Fri Feb 11 2000 Bill Nottingham <notting@redhat.com>
  - fix description

\* Wed Feb 9 2000 Jeff Johnson <jbj@redhat.com>

- compress man pages (again).

\* Wed Feb 02 2000 Cristian Gafton <gafton@redhat.com>

- man pages are compressed

- fix description and summary

\* Tue

Jan 4 2000 Bill Nottingham <notting@redhat.com>

- split client and server

\* Tue Dec 21 1999 Jeff Johnson <jbj@redhat.com>

- update to 0.16.

\* Sat Aug 28 1999 Jeff Johnson <jbj@redhat.com>

- update to 0.15.

\* Wed Apr 7 1999 Jeff Johnson <jbj@redhat.com>

- tftpd should truncate file when overwriting (#412)

\* Sun Mar 21 1999 Cristian Gafton <gafton@redhat.com>

- auto rebuild in the new build environment (release 22)

\* Mon Mar 15 1999 Jeff Johnson <jbj@redhat.com>

- compile for 6.0.

\* Fri Aug 7 1998 Jeff Johnson <jbj@redhat.com>

- build root

\* Mon Apr 27 1998 Prospector System <bugs@redhat.com>

- translations modified for de, fr, tr

\* Mon Sep 22 1997 Erik Troan <ewt@redhat.com>

- added check for getpwnam() failure

\* Tue Jul 15 1997 Erik Troan <ewt@redhat.com>

- initial build

Found in path(s):

\* /opt/cola/permits/1108298343\_1611281305.28/0/tftp-hpa-5-2-tar-bz2/tftp-hpa-5.2/tftp.spec

No license file was found, but licenses were detected in source scan.

/\* \*- c \*- ----- \*

\*

\* Copyright 2001-2006 H. Peter Anvin - All Rights Reserved

\*

\* This program is free software available under the same license



```
* as the "OpenBSD" operating system, distributed at
* http://www.openbsd.org/.
*
* ----- */
```

Found in path(s):

```
* /opt/cola/permits/1108298343_1611281305.28/0/tftp-hpa-5-2-tar-bz2/tftp-hpa-5.2/config.h
No license file was found, but licenses were detected in source scan.
```

```
.\" *- nroff *- ----- *
.\"
.\" Copyright (c) 1990, 1993, 1994
.\" The Regents of the University of California. All rights reserved.
.\"
.\" Copyright 2001 H. Peter Anvin - All Rights Reserved
.\"
.\" Redistribution and use in source and binary forms, with or without
.\" modification, are permitted provided that the following conditions
.\" are met:
.\" 1. Redistributions of source code must retain the above copyright
.\" notice, this list of conditions and the following disclaimer.
.\" 2. Redistributions in binary form must reproduce the above copyright
.\" notice, this list of conditions and the following disclaimer in the
.\" documentation and/or other materials provided with the distribution.
.\" 3. Neither the name of the University nor the names of its contributors
.\" may be used to endorse or promote products derived from this software
.\"
.\" without specific prior written permission.
.\"
.\" THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS ``AS IS'' AND
.\" ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE
.\" IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE
.\" ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE
.\" FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL
.\" DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS
.\" OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)
.\" HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT
.\" LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY
.\" OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF
.\" SUCH DAMAGE.
.\"
.\" ----- */
```

Found in path(s):

```
* /opt/cola/permits/1108298343_1611281305.28/0/tftp-hpa-5-2-tar-bz2/tftp-hpa-5.2/tftp/tftp.1.in
No license file was found, but licenses were detected in source scan.
```

```
/* ----- *
```

```

*
* Copyright 2001-2007 H. Peter Anvin - All Rights Reserved
*
* This program is free software available under the same license
* as the "OpenBSD" operating system, distributed at
* http://www.openbsd.org/.
*
* ----- */

```

Found in path(s):

```

* /opt/cola/permits/1108298343_1611281305.28/0/tftp-hpa-5-2-tar-bz2/tftp-hpa-5.2/tftpd/remap.h
* /opt/cola/permits/1108298343_1611281305.28/0/tftp-hpa-5-2-tar-bz2/tftp-hpa-5.2/tftpd/misc.c
* /opt/cola/permits/1108298343_1611281305.28/0/tftp-hpa-5-2-tar-bz2/tftp-hpa-5.2/tftpd/remap.c
No license file was found, but licenses were detected in source scan.

```

```

.\" *- nroff *- ----- *
.\"
.\" Copyright (c) 1990, 1993, 1994
.\" The Regents of the University of California. All rights reserved.
.\"
.\" Copyright 2001-2009 H. Peter Anvin - All Rights Reserved
.\"
.\" Redistribution and use in source and binary forms, with or without
.\" modification, are permitted provided that the following conditions
.\" are met:
.\" 1. Redistributions of source code must retain the above copyright
.\" notice, this list of conditions and the following disclaimer.
.\" 2. Redistributions in binary form must reproduce the above copyright
.\" notice, this list of conditions and the following disclaimer in the
.\" documentation and/or other materials provided with the distribution.
.\" 3. Neither the name of the University nor the names of its contributors
.\" may be used to endorse or promote products derived from this software
.\"
.\" without specific prior written permission.
.\"
.\" THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS ``AS IS'' AND
.\" ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE
.\" IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE
.\" ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE
.\" FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL
.\" DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS
.\" OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)
.\" HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT
.\" LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY
.\" OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF
.\" SUCH DAMAGE.
.\"
.\" ----- */

```

Found in path(s):

\* /opt/cola/permits/1108298343\_1611281305.28/0/tftp-hpa-5-2-tar-bz2/tftp-hpa-5.2/tftpd/tftpd.8.in

No license file was found, but licenses were detected in source scan.

Summary: The client for the Trivial File Transfer Protocol (TFTP).

Name: tftp

Version: @@VERSION@@

Release: 1

License: BSD

Group: Applications/Internet

Source0: <http://www.kernel.org/pub/software/network/tftp/tftp-hpa-%{version}.tar.gz>

BuildRequires: tcp\_wrappers-devel

BuildRoot: %{\_tmppath}/%{name}-root

%description

The Trivial File Transfer Protocol (TFTP) is normally used only for booting diskless workstations. The tftp package provides the user interface for TFTP, which allows users to transfer files to and from a remote machine. This program and TFTP provide very little security, and should not be enabled unless it is expressly needed.

%package server

Group: System Environment/Daemons

Summary: The server for the Trivial File Transfer Protocol (TFTP).

Requires: xinetd

%description server

The Trivial File Transfer Protocol (TFTP) is normally used only for booting diskless workstations. The tftp-server package provides the server for TFTP, which allows users to transfer files to and from a remote machine. TFTP provides very little security, and should not be enabled unless it is expressly needed. The TFTP server is run from /etc/xinetd.d/tftp, and is disabled by default on Red Hat Linux systems.

%prep

%setup -q -n tftp-hpa-%{version}

%build

%configure

make %{?\_smp\_mflags}

%install

rm -rf \${RPM\_BUILD\_ROOT}

mkdir -p \${RPM\_BUILD\_ROOT}%{\_bindir}

mkdir -p \${RPM\_BUILD\_ROOT}%{\_mandir}/man{1,8}

```

mkdir -p ${RPM_BUILD_ROOT}%{_sbindir}

make INSTALLROOT=${RPM_BUILD_ROOT} \
  SBINDIR=${_sbindir} MANDIR=${_mandir} \
  install
install -m755 -d ${RPM_BUILD_ROOT}%{_sysconfdir}/xinetd.d/ ${RPM_BUILD_ROOT}/tftpboot
install -m644 tftp-xinetd ${RPM_BUILD_ROOT}%{_sysconfdir}/xinetd.d/tftp

%post server
/sbin/service xinetd reload > /dev/null 2>&1 || :

%postun server
if [ $1 = 0 ]; then
  /sbin/service xinetd reload > /dev/null 2>&1 || :
fi

%clean
rm -rf ${RPM_BUILD_ROOT}

%files
%defattr(-,root,root)
%{_bindir}/tftp
%{_mandir}/man1/*

%files
server
%defattr(-,root,root)
%config(noreplace) % {_sysconfdir}/xinetd.d/tftp
%dir /tftpboot
%{_sbindir}/in.tftpd
%{_mandir}/man8/*

%changelog
* Tue Sep 14 2004 H. Peter Anvin <hpa@zytor.com>
- removed completely broken "Malta" patch.
- integrated into build machinery so rpm -ta works.

* Fri Feb 13 2004 Elliot Lee <sopwith@redhat.com>
- rebuilt

* Wed Jun 04 2003 Elliot Lee <sopwith@redhat.com>
- rebuilt

* Fri Apr 11 2003 Elliot Lee <sopwith@redhat.com>
- 0.33
- Add /tftpboot directory (#88204)

* Mon Feb 24 2003 Elliot Lee <sopwith@redhat.com>

```

- rebuilt

\* Sun Feb 23 2003 Tim Powers <timp@redhat.com>

- add BuildPreReq on tcp\_wrappers

\* Wed Jan 22 2003 Tim Powers <timp@redhat.com>

- rebuilt

\* Mon Nov 11 2002 Elliot Lee <sopwith@redhat.com> 0.32-1

- Update to 0.32

\* Wed Oct 23 2002 Elliot Lee <sopwith@redhat.com> 0.30-1

- Fix #55789

- Update to 0.30

\* Thu Jun 27 2002 Elliot Lee <sopwith@redhat.com>

- Try applying HJ's patch from #65476

\*

Fri Jun 21 2002 Tim Powers <timp@redhat.com>

- automated rebuild

\* Mon Jun 17 2002 Elliot Lee <sopwith@redhat.com>

- Update to 0.29

\* Thu May 23 2002 Tim Powers <timp@redhat.com>

- automated rebuild

\* Wed Jan 09 2002 Tim Powers <timp@redhat.com>

- automated rebuild

\* Tue Dec 18 2001 Elliot Lee <sopwith@redhat.com> 0.17-15

- Add patch4: netkit-tftp-0.17-defaultport.patch for bug #57562

- Update to tftp-hpa-0.28 (bug #56131)

- Remove include/arpa/tftp.h to fix #57259

- Add resource limits in tftp-xinetd (#56722)

\* Sun Jun 24 2001 Elliot Lee <sopwith@redhat.com>

- Bump release + rebuild.

\* Tue Jun 12 2001 Helge Deller <hdeller@redhat.de> (0.17-13)

- updated tftp-hpa source to tftp-hpa-0.17

- tweaked specfile with different defines for tftp-netkit and tftp-hpa version

- use hpa's tftpd.8 man page instead of the netkits one

\* Mon May 07 2001 Helge Deller <hdeller@redhat.de>

- rebuilt in 7.1.x

- \* Wed Apr 18 2001 Helge Deller <hdeller@redhat.de>
  - fix tftp client's put problems (#29529)
  - 
  - update to tftp-hpa-0.16
  
- \* Wed Apr 4 2001 Jakub Jelinek <jakub@redhat.com>
  - don't let configure to guess compiler, it can pick up egcs
  
- \* Thu Feb 08 2001 Helge Deller <hdeller@redhat.de>
  - changed "wait" in xinetd file to "yes" (hpa-tftpd forks and exits) (#26467)
  - fixed hpa-tftpd to handle files greater than 32MB (#23725)
  - added "-l" flag to hpa-tftpd for file-logging (#26467)
  - added description for "-l" to the man-page
  
- \* Thu Feb 08 2001 Helge Deller <hdeller@redhat.de>
  - updated tftp client to 0.17 stable (#19640),
  - drop dependency on xinetd for tftp client (#25051),
  
- \* Wed Jan 17 2001 Jeff Johnson <jbj@redhat.com>
  - xinetd shouldn't wait on tftp (which forks) (#23923).
  
- \* Sat Jan 6 2001 Jeff Johnson <jbj@redhat.com>
  - fix to permit tftp put's (#18128).
  - startup as root with chroot to /tftpboot with early reversion to nobody is preferable to starting as nobody w/o ability to chroot.
  - %%post is needed by server, not client. Add %%postun for erasure as well.
  
- \* Wed Aug 23 2000 Nalin Dahyabhai <nalin@redhat.com>
  - default to being disabled
  
- \* Thu Aug 17 2000 Jeff Johnson <jbj@redhat.com>
  - correct group.
  
- \* Tue Jul 25 2000 Nalin Dahyabhai <nalin@redhat.com>
  - change user from root to nobody
  
- \* Sat Jul 22 2000 Jeff Johnson <jbj@redhat.com>
  - update to tftp-hpa-0.14 (#14003).
  - add server\_args (#14003).
  - remove -D\_BSD\_SOURCE (#14003).
  
- \* Fri Jul 21 2000 Nalin Dahyabhai <nalin@redhat.com>
  - cook up an xinetd config file for tftpd
  
- \* Wed Jul 12 2000 Prospector <bugzilla@redhat.com>
  - automatic rebuild

- \* Sun Jun 18 2000 Jeff Johnson <jbj@redhat.com>
  - FHS packaging.
  - update to 0.17.
  
- \* Fri May 5 2000 Matt Wilson <msw@redhat.com>
  - use `_BSD_SOURCE` for hpa's tftpd so we get BSD signal semantics.
  
- \* Fri Feb 11 2000 Bill Nottingham <notting@redhat.com>
  - fix description
  
- \* Wed Feb 9 2000 Jeff Johnson <jbj@redhat.com>
  - compress man pages (again).
  
- \* Wed Feb 02 2000 Cristian Gafton <gafton@redhat.com>
  - man pages are compressed
  - fix description and summary
  
- \*
  - Tue Jan 4 2000 Bill Nottingham <notting@redhat.com>
    - split client and server
  
- \* Tue Dec 21 1999 Jeff Johnson <jbj@redhat.com>
  - update to 0.16.
  
- \* Sat Aug 28 1999 Jeff Johnson <jbj@redhat.com>
  - update to 0.15.
  
- \* Wed Apr 7 1999 Jeff Johnson <jbj@redhat.com>
  - tftpd should truncate file when overwriting (#412)
  
- \* Sun Mar 21 1999 Cristian Gafton <gafton@redhat.com>
  - auto rebuild in the new build environment (release 22)
  
- \* Mon Mar 15 1999 Jeff Johnson <jbj@redhat.com>
  - compile for 6.0.
  
- \* Fri Aug 7 1998 Jeff Johnson <jbj@redhat.com>
  - build root
  
- \* Mon Apr 27 1998 Prospector System <bugs@redhat.com>
  - translations modified for de, fr, tr
  
- \* Mon Sep 22 1997 Erik Troan <ewt@redhat.com>
  - added check for `getpwnam()` failure
  
- \* Tue Jul 15 1997 Erik Troan <ewt@redhat.com>
  - initial build

Found in path(s):

\* /opt/cola/permits/1108298343\_1611281305.28/0/tftp-hpa-5-2-tar-bz2/tftp-hpa-5.2/tftp.spec.in

No license file was found, but licenses were detected in source scan.

## Copyright 2001-2007 H. Peter Anvin - All Rights Reserved

## This program is free software available under the same license

Found in path(s):

\* /opt/cola/permits/1108298343\_1611281305.28/0/tftp-hpa-5-2-tar-bz2/tftp-hpa-5.2/MCONFIG.in

No license file was found, but licenses were detected in source scan.

/\* ----- \*

\*

\* Copyright 2001-2006 H. Peter Anvin - All Rights Reserved

\*

\* This program is free software available under the same license

\* as the "OpenBSD" operating system, distributed at

\* <http://www.openbsd.org/>.

\*

\* ----- \*/

Found in path(s):

\* /opt/cola/permits/1108298343\_1611281305.28/0/tftp-hpa-5-2-tar-bz2/tftp-hpa-5.2/tftpd/recvfrom.c

\* /opt/cola/permits/1108298343\_1611281305.28/0/tftp-hpa-5-2-tar-bz2/tftp-hpa-5.2/tftpd/recvfrom.h

No license file was found, but licenses were detected in source scan.

/\* ----- \*

\*

\* Copyright 2001 H. Peter Anvin - All Rights Reserved

\*

\* This program is free software available under the same license

\* as the "OpenBSD" operating system, distributed at

\* <http://www.openbsd.org/>.

\*

\* ----- \*/

Found in path(s):

\* /opt/cola/permits/1108298343\_1611281305.28/0/tftp-hpa-5-2-tar-bz2/tftp-hpa-5.2/tftpd/tftpd.h

No license file was found, but licenses were detected in source scan.

/\*

\* Copyright (c) 1993

\* The Regents of the University of California. All rights reserved.

\*

\* Redistribution and use in source and binary forms, with or without

\* modification, are permitted provided that the following conditions

\* are met:

\* 1. Redistributions of source code must retain the above copyright



- \* notice, this list of conditions and the following disclaimer.
- \* 2. Redistributions in binary form must reproduce the above copyright
- \* notice, this list of conditions and the following disclaimer in the
- \* documentation and/or other materials provided with the distribution.
- \* 3. All advertising materials mentioning features or use of this software
- \* must display the following acknowledgement:
- \* This product includes software developed by the University of
- \* California, Berkeley and its contributors.
- \* 4. Neither the name of the University nor the names of its contributors
- \* may
- be used to endorse or promote products derived from this software
- \* without specific prior written permission.
- \*
- \* THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS ``AS IS" AND
- \* ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE
- \* IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE
- \* ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE
- \* FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL
- \* DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS
- \* OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)
- \* HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT
- \* LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY
- \* OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF
- \* SUCH DAMAGE.
- \*/

Found in path(s):

- \* /opt/cola/permits/1108298343\_1611281305.28/0/tftp-hpa-5-2-tar-bz2/tftp-hpa-5.2/tftp/extern.h
  - \*
  - /opt/cola/permits/1108298343\_1611281305.28/0/tftp-hpa-5-2-tar-bz2/tftp-hpa-5.2/common/tftpsubs.h
- No license file was found, but licenses were detected in source scan.

- /\*
- \* Copyright (c) 1983 Regents of the University of California.
- \* Copyright (c) 1999-2009 H. Peter Anvin
- \* Copyright (c) 2011 Intel Corporation; author: H. Peter Anvin
- \* All rights reserved.
- \*
- \* Redistribution and use in source and binary forms, with or without
- \* modification, are permitted provided that the following conditions
- \* are met:
- \* 1. Redistributions of source code must retain the above copyright
- \* notice, this list of conditions and the following disclaimer.
- \* 2. Redistributions in binary form must reproduce the above copyright
- \* notice, this list of conditions and the following disclaimer in the
- \* documentation and/or other materials provided with the distribution.
- \* 3. All advertising materials mentioning features or use of this software
- \* must display the following acknowledgement:

\* This product includes software developed by the University of  
 \* California, Berkeley and its  
 contributors.  
 \* 4. Neither the name of the University nor the names of its contributors  
 \* may be used to endorse or promote products derived from this software  
 \* without specific prior written permission.  
 \*  
 \* THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS ``AS IS" AND  
 \* ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE  
 \* IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE  
 \* ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE  
 \* FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL  
 \* DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS  
 \* OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)  
 \* HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT  
 \* LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY  
 \* OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF  
 \* SUCH DAMAGE.  
 \*/

Found

in path(s):

\* /opt/cola/permits/1108298343\_1611281305.28/0/tftp-hpa-5-2-tar-bz2/tftp-hpa-5.2/tftpd/tftpd.c

## 1.50 glib 2.64.5

### 1.50.1 Available under license :

This work may be reproduced and distributed in whole or in part, in any medium, physical or electronic, so as long as this copyright notice remains intact and unchanged on all copies. Commercial redistribution is permitted and encouraged, but you may not redistribute, in whole or in part, under terms more restrictive than those under which you received it. If you redistribute a modified or translated version of this work, you must also make the source code to the modified or translated version available in electronic form without charge. However, mere aggregation as part of a larger work shall not count as a modification for this purpose.

All code examples in this work are placed into the public domain, and may be used, modified and redistributed without restriction.

BECAUSE THIS WORK IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE WORK, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE WORK "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. SHOULD THE WORK PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY REPAIR OR CORRECTION.

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 WORK 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 WORK, EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

PCRE LICENCE

Please see the file LICENCE in the PCRE distribution for licensing details.

End

#### GNU LESSER GENERAL PUBLIC LICENSE

Version 2.1, February 1999

Copyright (C) 1991, 1999 Free Software Foundation, Inc.  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA  
Everyone is permitted to copy and distribute verbatim copies  
of this license document, but changing it is not allowed.

[This is the first released version of the Lesser GPL. It also counts  
as the successor of the GNU Library Public License, version 2, hence  
the version number 2.1.]

#### Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public Licenses are intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users.

This license, the Lesser General Public License, applies to some specially designated software packages--typically libraries--of the Free Software Foundation and other authors who decide to use it. You can use it too, but we suggest you first think carefully about whether this license or the ordinary General Public License is the better strategy to use in any particular case, based on the explanations below.

When we speak of free software, we are referring to freedom of use, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish); that you receive source code or can get it if you want it; that you can change the software and use pieces of

it in new free programs; and that you are informed that you can do these things.

To protect your rights, we need to make restrictions that forbid distributors to deny you these rights or to ask you to surrender these rights. These restrictions translate to certain responsibilities for you if you distribute copies of the library or if you modify it.

For example, if you distribute copies of the library, whether gratis or for a fee, you must give the recipients all the rights that we gave you. You must make sure that they, too, receive or can get the source code. If you link other code with the library, you must provide complete object files to the recipients, so that they can relink them with the library after making changes to the library and recompiling it. And you must show them these terms so they know their rights.

We protect your rights with a two-step method: (1) we copyright the library, and (2) we offer you this license, which gives you legal permission to copy, distribute and/or modify the library.

To protect each distributor, we want to make it very clear that there is no warranty for the free library. Also, if the library is modified by someone else and passed on, the recipients should know that what they have is not the original version, so that the original author's reputation will not be affected by problems that might be introduced by others.

Finally, software patents pose a constant threat to the existence of any free program. We wish to make sure that a company cannot effectively restrict the users of a free program by obtaining a restrictive license from a patent holder. Therefore, we insist that any patent license obtained for a version of the library must be consistent with the full freedom of use specified in this license.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License. This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License. We use this license for certain libraries in order to permit linking those libraries into non-free programs.

When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits

such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.

We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

## GNU LESSER GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License Agreement applies to any software library or other program which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Lesser General Public License (also called "this License").

Each licensee is addressed as "you".

A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

1. You may copy and distribute verbatim copies of the Library's complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and distribute a copy of this License along with the Library.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

- a) The modified work must itself be a software library.

- b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.
  
- c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.
  
- d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do

this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.



If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is

interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally

distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:

a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.

b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

8. You may not copy, modify, sublicense, link with, or distribute

the Library except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the Library is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

9. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Library or its derivative works. These actions are prohibited by law if

you do not accept this License. Therefore, by modifying or distributing the Library (or any work based on the Library), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Library or works based on it.

10. Each time you redistribute the Library (or any work based on the Library), the recipient automatically receives a license from the original licensor to copy, distribute, link with or modify the Library subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties with this License.

11. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse

you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Library at all. For example, if a patent license would not permit royalty-free redistribution of the Library by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Library.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system

which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

12. If the distribution and/or use of the Library is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Library under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

13. The Free Software Foundation may publish revised and/or new versions of the Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Library does not specify a license version number, you may choose any version ever published by the Free Software Foundation.

14. If you wish to incorporate parts of the Library into other free programs whose distribution conditions are incompatible with these, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

15. BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR

OTHER PARTIES PROVIDE THE LIBRARY "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE LIBRARY AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE LIBRARY (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

#### END OF TERMS AND CONDITIONS

#### How to Apply These Terms to Your New Libraries

If you develop a new library, and you want it to be of the greatest possible use to the public, we recommend making it free software that everyone can redistribute and change. You can do so by permitting redistribution under these terms (or, alternatively, under the terms of the ordinary General Public License).

To apply these terms, attach the following notices to the library. It is safest to attach them to the start of each source file to most effectively convey

the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the library's name and a brief 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!

## 1.51 iputils 20200821

### 1.51.1 Available under license :

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of the copyright holder nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

GNU GENERAL PUBLIC LICENSE

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.,  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA  
Everyone is permitted to copy and distribute verbatim copies  
of this license document, but changing it is not allowed.

### Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Lesser General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price.

Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

## GNU GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

- a) You must cause the modified files to carry prominent notices



stating that you changed the files and the date of any change.

- b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.
- c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

- a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing

or modifying  
the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License

may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR

THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

## END OF TERMS AND CONDITIONS

### How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

```
<one line to give the program's name and a brief idea of what it does.>  
Copyright (C) <year> <name of author>
```

```
This program is free software; you can redistribute it and/or modify  
it under the terms of the GNU  
General Public License as published by  
the Free Software Foundation; either version 2 of the License, or  
(at your option) any later version.
```

```
This program is distributed in the hope that it will be useful,  
but WITHOUT ANY WARRANTY; without even the implied warranty of  
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the  
GNU General Public License for more details.
```

```
You should have received a copy of the GNU General Public License along  
with this program; if not, write to the Free Software Foundation, Inc.,  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA.
```

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

```
Gnomovision version 69, Copyright (C) year name of author  
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.  
This is free software, and you are welcome to redistribute  
it  
under certain conditions; type `show c' for details.
```

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may

be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the program `Gnomovision' (which makes passes at compilers) written by James Hacker.

<signature of Ty Coon>, 1 April 1989

Ty Coon, President of Vice

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this

is what you want to do, use the GNU Lesser General Public License instead of this License.

arping: GPL v2 or later

clockdiff: BSD-3

ninfod: BSD-3

ping: BSD-3

rarp: GPL v2 or later

rdisc: AS-IS, SUN MICROSYSTEMS license

tftpd: BSD-3

tracepath: GPL v2 or later

traceroute: BSD-3

Files containing license texts are available in Documentation directory.

Copyright (C) 2002 USAGI/WIDE Project.

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of the project nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE PROJECT AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE

ARE DISCLAIMED. IN NO EVENT SHALL THE PROJECT OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

## 1.52 elfutils 0.180

### 1.52.1 Available under license :

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.

0. Additional Definitions.

As used herein, "this License" refers to version 3 of the GNU Lesser General Public License, and the "GNU GPL" refers to version 3 of the GNU General Public License.

"The Library" refers to a covered work governed by this License, other than an Application or a Combined Work as defined below.

An "Application" is any work that makes use of an interface provided by the Library, but which is not otherwise based on the Library. Defining a subclass of a class defined by the Library is deemed a mode of using an interface provided by the Library.

A "Combined Work" is a work produced by combining or linking an Application with the Library. The particular version of the Library with which the Combined Work was made is also called the "Linked Version".

The "Minimal Corresponding Source" for a Combined Work means the Corresponding Source for the Combined Work, excluding any source code

for portions of the Combined Work that, considered in isolation, are based on the Application, and not on the Linked Version.

The "Corresponding Application Code" for a Combined Work means the object code and/or source code for the Application, including any data and utility programs needed for reproducing the Combined Work from the Application, but excluding the System Libraries of the Combined Work.

#### 1. Exception to Section 3 of the GNU GPL.

You may convey a covered work under sections 3 and 4 of this License without being bound by section 3 of the GNU GPL.

#### 2. Conveying Modified Versions.

If you modify a copy of the Library, and, in your modifications, a facility refers to a function or data to be supplied by an Application that uses the facility (other than as an argument passed when the facility is invoked), then you may convey a copy of the modified version:

- a) under this License, provided that you make a good faith effort to ensure that, in the event an Application does not supply the function or data, the facility still operates, and performs whatever part of its purpose remains meaningful, or
- b) under the GNU GPL, with none of the additional permissions of this License applicable to that copy.

#### 3. Object Code Incorporating Material from Library Header Files.

The object code form of an Application may incorporate material from a header file that is part of the Library. You may convey such object code under terms of your choice, provided that, if the incorporated material is not limited to numerical parameters, data structure layouts and accessors, or small macros, inline functions and templates (ten or fewer lines in length), you do both of the following:

- a) Give prominent notice with each copy of the object code that the Library is used in it and that the Library and its use are covered by this License.
- b) Accompany the object code with a copy of the GNU GPL and this license document.

#### 4. Combined Works.



You may convey a Combined Work under terms of your choice that, taken together, effectively do not restrict modification of the portions of the Library contained in the Combined Work and reverse engineering for debugging such modifications, if you also do each of the following:

- a) Give prominent notice with each copy of the Combined Work that the Library is used in it and that the Library and its use are covered by this License.
- b) Accompany the Combined Work with a copy of the GNU GPL and this license document.
- c) For a Combined Work that displays copyright notices during execution, include the copyright notice for the Library among these notices, as well as a reference directing the user to the copies of the GNU GPL and this license document.
- d) Do one of the following:
  - 0) Convey the Minimal Corresponding Source under the terms of this License, and the Corresponding Application Code in a form suitable for, and under terms that permit, the user to recombine or relink the Application with a modified version of the Linked Version to produce a modified Combined Work, in the manner specified by section 6 of the GNU GPL for conveying Corresponding Source.
  - 1) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (a) uses at run time a copy of the Library already present on the user's computer system, and (b) will operate properly with a modified version of the Library that is interface-compatible with the Linked Version.
- e) Provide Installation Information, but only if you would otherwise be required to provide such information under section 6 of the GNU GPL, and only to the extent that such information is necessary to install and execute a modified version of the Combined Work produced by recombining or relinking the Application with a modified version of the Linked Version. (If you use option 4d0, the Installation Information must accompany the Minimal Corresponding Source and Corresponding Application Code. If you use option 4d1, you must provide the Installation Information in the manner specified by section 6 of the GNU GPL for conveying Corresponding Source.)

## 5. Combined Libraries.

You may place library facilities that are a work based on the Library side by side in a single library together with other library facilities that are not Applications and are not covered by this License, and convey such a combined library under terms of your choice, if you do both of the following:

- a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities, conveyed under the terms of this License.
- b) Give prominent notice with the combined library that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

## 6. Revised Versions of the GNU Lesser General Public License.

The Free Software Foundation may publish revised and/or new versions of the GNU Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library as you received it specifies that a certain numbered version of the GNU Lesser General Public License "or any later version" applies to it, you have the option of following the terms and conditions either of that published version or of any later version published by the Free Software Foundation. If the Library as you received it does not specify a version number of the GNU Lesser General Public License, you may choose any version of the GNU Lesser General Public License ever published by the Free Software Foundation.

If the Library as you received it specifies that a proxy can decide whether future versions of the GNU Lesser General Public License shall apply, that proxy's public statement of acceptance of any version is permanent authorization for you to choose that version for the Library.

GNU GENERAL PUBLIC LICENSE

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.,  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA  
Everyone is permitted to copy and distribute verbatim copies  
of this license document, but changing it is not allowed.

## Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Lesser General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price.

Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any

patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

GNU GENERAL PUBLIC LICENSE  
TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any

part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium

customarily used for software interchange; or,

c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to

these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions

of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

#### END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Programs



If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the program's name and a brief idea of what it does.>

Copyright (C) <year> <name of author>

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA.

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

```
Gnomovision version 69, Copyright (C) year name of author
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute
it
under certain conditions; type `show c' for details.
```

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the program  
'Gnomovision' (which makes passes at compilers) written by James Hacker.

<signature of Ty Coon>, 1 April 1989  
Ty Coon, President of Vice

This General Public License does not permit incorporating your program into  
proprietary programs. If your program is a subroutine library, you may  
consider it more useful to permit linking proprietary applications with the  
library. If this

is what you want to do, use the GNU Lesser General  
Public License instead of this License.

This license applies to the eu-readelf.1 man page which was forked  
from the binutils readelf version of the man page. The rest of the  
documentation is provided under the license found in the top level  
directory.

GNU Free Documentation License  
Version 1.3, 3 November 2008

Copyright (C) 2000, 2001, 2002, 2007, 2008 Free Software Foundation, Inc.  
<<https://fsf.org/>>

Everyone is permitted to copy and distribute verbatim copies  
of this license document, but changing it is not allowed.

## 0. PREAMBLE

The purpose of this License is to make a manual, textbook, or other  
functional and useful document "free" in the sense of freedom: to  
assure everyone the effective freedom to copy and redistribute it,  
with or without modifying it, either commercially or noncommercially.  
Secondarily, this License preserves for the author and publisher a way  
to get credit for their work, while not being considered responsible  
for modifications made by others.

This License  
is a kind of "copyleft", which means that derivative  
works of the document must themselves be free in the same sense. It  
complements the GNU General Public License, which is a copyleft  
license designed for free software.

We have designed this License in order to use it for manuals for free  
software, because free software needs free documentation: a free  
program should come with manuals providing the same freedoms that the  
software does. But this License is not limited to software manuals;  
it can be used for any textual work, regardless of subject matter or  
whether it is published as a printed book. We recommend this License

principally for works whose purpose is instruction or reference.

## 1. APPLICABILITY AND DEFINITIONS

This License applies to any manual or other work, in any medium, that contains a notice placed by the copyright holder saying it can be distributed under the terms of this License. Such a notice grants a world-wide, royalty-free license, unlimited in duration, to use that work under the conditions stated herein. The "Document", below, refers to any such manual or work. Any member of the public is a licensee, and is addressed as "you". You accept the license if you copy, modify or distribute the work in a way requiring permission under copyright law.

A "Modified Version" of the Document means any work containing the Document or a portion of it, either copied verbatim, or with modifications and/or translated into another language.

A "Secondary Section" is a named appendix or a front-matter section of the Document that deals exclusively with the relationship of the publishers or authors of the Document to the Document's overall subject (or to related matters) and contains nothing that could fall directly within that overall subject. (Thus, if the Document is in part a textbook of mathematics, a Secondary Section may not explain any mathematics.) The relationship could be a matter of historical connection with the subject or with related matters, or of legal, commercial, philosophical, ethical or political position regarding them.

The "Invariant Sections" are certain Secondary Sections whose titles are designated, as being those of Invariant Sections, in the notice that says that the Document is released under this License. If a section does not fit the above definition of Secondary then it is not allowed to be designated as Invariant. The Document may contain zero Invariant Sections. If the Document does not identify any Invariant Sections then there are none.

The "Cover Texts" are certain short passages of text that are listed, as Front-Cover Texts or Back-Cover Texts, in the notice that says that the Document is released under this License. A Front-Cover Text may be at most 5 words, and a Back-Cover Text may be at most 25 words.

A "Transparent" copy of the Document means a machine-readable copy, represented in a format whose specification is available to the general public, that is suitable for revising the document

straightforwardly

with generic text editors or (for images composed of pixels) generic paint programs or (for drawings) some widely available drawing editor, and that is suitable for input to text formatters or for automatic translation to a variety of formats suitable for input to text formatters. A copy made in an otherwise Transparent file format whose markup, or absence of markup, has been arranged to thwart or discourage subsequent modification by readers is not Transparent. An image format is not Transparent if used for any substantial amount of text. A copy that is not "Transparent" is called "Opaque".

Examples of suitable formats for Transparent copies include plain ASCII without markup, Texinfo input format, LaTeX input format, SGML or XML using a publicly available DTD, and standard-conforming simple HTML, PostScript or PDF designed for human modification. Examples of transparent image formats include PNG, XCF and JPG. Opaque formats include proprietary formats that can be read and edited only by proprietary word processors, SGML or XML for which the DTD and/or processing tools are not generally available, and the machine-generated HTML, PostScript or PDF produced by some word processors for output purposes only.

The "Title Page" means, for a printed book, the title page itself, plus such following pages as are needed to hold, legibly, the material this License requires to appear in the title page. For works in formats which do not have any title page as such, "Title Page" means the text near the most prominent appearance of the work's title, preceding the beginning of the body of the text.

The "publisher" means any person or entity that distributes copies of the Document to the public.

A section "Entitled XYZ" means a named subunit of the Document whose title either is precisely XYZ or contains XYZ in parentheses following text that translates XYZ in another language. (Here XYZ stands for a specific section name mentioned below, such as "Acknowledgements", "Dedications", "Endorsements", or "History".) To "Preserve the Title" of such a section when you modify the Document means that it remains a section "Entitled XYZ" according to this definition.

The Document may include Warranty Disclaimers next to the notice which states that this License applies to the Document. These Warranty Disclaimers are considered to be included by reference in this License, but only as regards disclaiming warranties; any other implication that these Warranty Disclaimers may have is void and has no effect on the meaning of this License.

## 2. VERBATIM COPYING

You may copy and distribute the Document in any medium, either commercially or noncommercially, provided that this License, the copyright notices, and the license notice saying this License applies to the Document are reproduced in all copies, and that you add no other conditions whatsoever to those of this License. You may not use technical measures to obstruct or control the reading or further copying of the copies you make or distribute. However, you may accept compensation in exchange for copies. If you distribute a large enough number of copies you must also follow the conditions in section 3.

You may also lend copies, under the same conditions stated above, and you may publicly display copies.

## 3. COPYING IN QUANTITY

If you publish printed copies (or copies in media that commonly have printed covers) of the Document, numbering more than 100, and the Document's license notice requires Cover Texts, you must enclose the copies in covers that carry, clearly and legibly, all these Cover Texts: Front-Cover Texts on the front cover, and Back-Cover Texts on the back cover. Both covers must also clearly and legibly identify you as the publisher of these copies. The front cover must present the full title with all words of the title equally prominent and visible. You may add other material on the covers in addition. Copying with changes limited to the covers, as long as they preserve the title of the Document and satisfy these conditions, can be treated as verbatim copying in other respects.

If the required texts for either cover are too voluminous to fit legibly, you should put the first ones listed (as many as fit reasonably) on the actual cover, and continue the rest onto adjacent pages.

If you publish or distribute Opaque copies of the Document numbering more than 100, you must either include a machine-readable Transparent copy along with each Opaque copy, or state in or with each Opaque copy a computer-network location from which the general network-using public has access to download using public-standard network protocols a complete Transparent copy of the Document, free of added material. If you use the latter option, you must take reasonably prudent steps, when you begin distribution of Opaque copies in quantity, to ensure that this Transparent copy will remain thus accessible at the stated

location until at least one year after the last time you distribute an Opaque copy (directly or through your agents or retailers) of that edition to the public.

It is requested, but not required, that you contact the authors of the Document well before redistributing any large number of copies, to give them a chance to provide you with an updated version of the Document.

#### 4. MODIFICATIONS

You may copy and distribute a Modified Version of the Document under the conditions of sections 2 and 3 above, provided that you release the Modified Version under precisely this License, with the Modified Version filling the role of the Document, thus licensing distribution and modification of the Modified Version to whoever possesses a copy of it. In addition, you must do these things in the Modified Version:

- A. Use in the Title Page (and on the covers, if any) a title distinct from that of the Document, and from those of previous versions (which should, if there were any, be listed in the History section of the Document). You may use the same title as a previous version if the original publisher of that version gives permission.
- B. List on the Title Page, as authors, one or more persons or entities responsible for authorship of the modifications in the Modified Version, together with at least five of the principal authors of the Document (all of its principal authors, if it has fewer than five), unless they release you from this requirement.
- C. State on the Title page the name of the publisher of the Modified Version, as the publisher.
- D. Preserve all the copyright notices of the Document.
- E. Add an appropriate copyright notice for your modifications adjacent to the other copyright notices.
- F. Include, immediately after the copyright notices, a license notice giving the public permission to use the Modified Version under the terms of this License, in the form shown in the Addendum below.
- G. Preserve in that license notice the full lists of Invariant Sections and required Cover Texts given in the Document's license notice.
- H. Include an unaltered copy of this License.
- I. Preserve the section Entitled "History", Preserve its Title, and add to it an item stating at least the title, year, new authors, and publisher of the Modified Version as given on the Title Page. If there is no section Entitled "History" in the Document, create one stating the title, year, authors, and publisher of the Document as

given on its Title Page, then add an item describing the Modified Version as stated in the previous sentence.

J. Preserve the network location, if any, given in the Document for public access to a Transparent copy of the Document, and likewise the network locations given in the Document for previous versions it was based on. These may be placed in the "History" section.

You may omit a network location for a work that was published at least four years before the Document itself, or if the original publisher of the version it refers to gives permission.

K. For any section Entitled "Acknowledgements" or "Dedications", Preserve the Title of the section, and preserve in the section all the substance and tone of each of the contributor acknowledgements and/or dedications given therein.

L. Preserve all the Invariant Sections of the Document, unaltered in their text and in their titles. Section numbers or the equivalent are not considered part of the section titles.

M. Delete any section Entitled "Endorsements". Such a section may not be included in the Modified Version.

N. Do not retitle any existing section to be Entitled "Endorsements" or to conflict in title with any Invariant Section.

O. Preserve any Warranty Disclaimers.

If the Modified Version includes new front-matter sections or appendices that qualify as Secondary Sections and contain no material copied from the Document, you may at your option designate some or all of these sections as invariant. To do this, add their titles to the list of Invariant Sections in the Modified Version's license notice. These titles must be distinct from any other section titles.

You may add a section Entitled "Endorsements", provided it contains nothing but endorsements of your Modified Version by various parties--for example, statements of peer review or that the text has been approved by an organization as the authoritative definition of a standard.

You may add a passage of up to five words as a Front-Cover Text, and a passage of up to 25 words as a Back-Cover Text, to the end of the list of Cover Texts in the Modified Version. Only one passage of Front-Cover Text and one of Back-Cover Text may be added by (or through arrangements made by) any one entity. If the Document already includes a cover text for the same cover, previously added by you or by arrangement made by the same entity you are acting on behalf of, you may not add another; but you may replace the old one, on explicit permission from the previous publisher that added the old one.

The author(s) and publisher(s) of the Document do not by this License give permission to use their names for publicity for or to assert or imply endorsement of any Modified Version.

## 5. COMBINING DOCUMENTS

You may combine the Document with other documents released under this License, under the terms defined in section 4 above for modified versions, provided that you include in the combination all of the Invariant Sections of all of the original documents, unmodified, and list them all as Invariant Sections of your combined work in its license notice, and that you preserve all their Warranty Disclaimers.

The combined work need only contain one copy of this License, and multiple identical Invariant Sections may be replaced with a single copy. If there are multiple Invariant Sections with the same name but different contents, make the title of each such section unique by adding at the end of it, in parentheses, the name of the original author or publisher of that section if known, or else a unique number.

Make the same adjustment to the section titles in the list of Invariant Sections in the license notice of the combined work.

In the combination, you must combine any sections Entitled "History" in the various original documents, forming one section Entitled "History"; likewise combine any sections Entitled "Acknowledgements", and any sections Entitled "Dedications". You must delete all sections Entitled "Endorsements".

## 6. COLLECTIONS OF DOCUMENTS

You may make a collection consisting of the Document and other documents released under this License, and replace the individual copies of this License in the various documents with a single copy that is included in the collection, provided that you follow the rules of this License for verbatim copying of each of the documents in all other respects.

You may extract a single document from such a collection, and distribute it individually under this License, provided you insert a copy of this License into the extracted document, and follow this License in all other respects regarding verbatim copying of that document.



## 7. AGGREGATION WITH INDEPENDENT WORKS

A compilation of the Document or its derivatives with other separate and independent documents or works, in or on a volume of a storage or distribution medium, is called an "aggregate" if the copyright resulting from the compilation is not used to limit the legal rights of the compilation's users beyond what the individual works permit. When the Document is included in an aggregate, this License does not apply to the other works in the aggregate which are not themselves derivative works of the Document.

If the Cover Text requirement of section 3 is applicable to these copies of the Document, then if the Document is less than one half of the entire aggregate, the Document's Cover Texts may be placed on covers that bracket the Document within the aggregate, or the electronic equivalent of covers if the Document is in electronic form.

Otherwise they must appear on printed covers that bracket the whole aggregate.

## 8. TRANSLATION

Translation is considered a kind of modification, so you may distribute translations of the Document under the terms of section 4. Replacing Invariant Sections with translations requires special permission from their copyright holders, but you may include translations of some or all Invariant Sections in addition to the original versions of these Invariant Sections. You may include a translation of this License, and all the license notices in the Document, and any Warranty Disclaimers, provided that you also include the original English version of this License and the original versions of those notices and disclaimers. In case of a disagreement between the translation and the original version of this License or a notice or disclaimer, the original version will prevail.

If a section in the Document is Entitled "Acknowledgements", "Dedications", or "History", the requirement (section 4) to Preserve its Title (section 1) will typically require changing the actual title.

## 9. TERMINATION

You may not copy, modify, sublicense, or distribute the Document except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, or distribute it is void, and

will automatically terminate your rights under this License.

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, receipt of a copy of some or all of the same material does not give you any rights to use it.

## 10. FUTURE REVISIONS OF THIS LICENSE

The Free Software Foundation may publish new, revised versions of the GNU Free Documentation 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. See <https://www.gnu.org/licenses/>.

Each version of the License is given a distinguishing version number. If the Document specifies that a particular numbered version of this License "or any later version" applies to it, you have the option of following the terms and conditions either of that specified version or of any later version that has been published (not as a draft) by the Free Software Foundation. If the Document does not specify a version number of this License, you may choose any version ever published (not as a draft) by the Free Software Foundation. If the Document specifies that a proxy can decide which future versions of this License can be used, that proxy's public statement of acceptance of a version permanently authorizes you to choose that version for the Document.

## 11. RELICENSING

"Massive Multiauthor Collaboration Site" (or "MMC Site") means any World Wide Web server that publishes copyrightable works and also provides prominent facilities for anybody to edit those works. A public wiki that anybody can edit is an example of such a server. A "Massive Multiauthor Collaboration" (or "MMC") contained in the site means any set of copyrightable works thus published on the MMC site.

"CC-BY-SA" means the Creative Commons Attribution-Share Alike 3.0

license published by Creative Commons Corporation, a not-for-profit corporation with a principal place of business in San Francisco, California, as well as future copyleft versions of that license published by that same organization.

"Incorporate" means to publish or republish a Document, in whole or in part, as part of another Document.

An MMC is "eligible for relicensing" if it is licensed under this License, and if all works that were first published under this License somewhere other than this MMC, and subsequently incorporated in whole or in part into the MMC, (1) had no cover texts or invariant sections, and (2) were thus incorporated prior to November 1, 2008.

The operator of an MMC Site may republish an MMC contained in the site under CC-BY-SA on the same site at any time before August 1, 2009, provided the MMC is eligible for relicensing.

ADDENDUM: How to use this License for your documents

To use this License in a document you have written, include a copy of the

License in the document and put the following copyright and license notices just after the title page:

Copyright (c) YEAR YOUR NAME.

Permission is granted to copy, distribute and/or modify this document under the terms of the GNU Free Documentation License, Version 1.3 or any later version published by the Free Software Foundation; with no Invariant Sections, no Front-Cover Texts, and no Back-Cover Texts.

A copy of the license is included in the section entitled "GNU Free Documentation License".

If you have Invariant Sections, Front-Cover Texts and Back-Cover Texts, replace the "with...Texts." line with this:

with the Invariant Sections being LIST THEIR TITLES, with the Front-Cover Texts being LIST, and with the Back-Cover Texts being LIST.

If you have Invariant Sections without Cover Texts, or some other combination of the three, merge those two alternatives to suit the situation.

If your document contains nontrivial examples of program code, we recommend releasing these examples in parallel under your choice of free software license, such as the GNU General Public License, to permit their use in free software.

## GNU 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.

### 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:

```
<program> Copyright (C) <year> <name of author>  
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>.

# 1.53 curl 7.72.0

## 1.53.1 Available under license :

### COPYRIGHT AND PERMISSION NOTICE

Copyright (c) 1996 - 2020, Daniel Stenberg, <daniel@haxx.se>, and many contributors, see the THANKS file.

All rights reserved.

Permission to use, copy, modify, and distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF THIRD PARTY RIGHTS. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Except as contained in this notice, the name of a copyright holder shall not be used in advertising or otherwise to promote the sale, use or other dealings in this Software without prior written authorization of the copyright holder.

# 1.54 expat 2.2.9

## 1.54.1 Available under license :

Copyright (c) 1998-2000 Thai Open Source Software Center Ltd and Clark Cooper  
Copyright (c) 2001-2019 Expat maintainers

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND,

EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

## 1.55 util-linux 2.36.0

### 1.55.1 Available under license :

NR	START	END	SECTORS	SIZE	NAME	UUID
1	32	7679	7648	3.7M		8f8378c0-01
2	7680	16383	8704	4.3M		8f8378c0-02
5	7936	12799	4864	2.4M		
6	12544	16127	3584	1.8M		

GNU LESSER GENERAL PUBLIC LICENSE  
Version 2.1, February 1999

Copyright (C) 1991, 1999 Free Software Foundation, Inc.  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA  
Everyone is permitted to copy and distribute verbatim copies  
of this license document, but changing it is not allowed.

[This is the first released version of the Lesser GPL. It also counts  
as the successor of the GNU Library Public License, version 2, hence  
the version number 2.1.]

#### Preamble

The licenses for most software are designed to take away your  
freedom to share and change it. By contrast, the GNU General Public  
Licenses are intended to guarantee your freedom to share and change  
free software--to make sure the software is free for all its users.

This license, the Lesser General Public License, applies to some  
specially designated software packages--typically libraries--of the  
Free Software Foundation and other authors who  
decide to use it. You  
can use it too, but we suggest you first think carefully about whether  
this license or the ordinary General Public License is the better  
strategy to use in any particular case, based on the explanations below.

When we speak of free software, we are referring to freedom of use,  
not price. Our General Public Licenses are designed to make sure that  
you have the freedom to distribute copies of free software (and charge  
for this service if you wish); that you receive source code or can get

it if you want it; that you can change the software and use pieces of it in new free programs; and that you are informed that you can do these things.

To protect your rights, we need to make restrictions that forbid distributors to deny you these rights or to ask you to surrender these rights. These restrictions translate to certain responsibilities for you if you distribute copies of the library or if you modify it.

For example, if you distribute copies of the library, whether gratis or for a fee, you must give the recipients all the rights that we gave you. You must make sure that they, too, receive or can get the source code. If you link other code with the library, you must provide complete object files to the recipients, so that they can relink them with the library after making changes to the library and recompiling it. And you must show them these terms so they know their rights.

We protect your rights with a two-step method: (1) we copyright the library, and (2) we offer you this license, which gives you legal permission to copy, distribute and/or modify the library.

To protect each distributor, we want to make it very clear that there is no warranty for the free library. Also, if the library is modified by someone else and passed on, the recipients should know that what they have is not the original version, so that the original author's reputation will not be affected by problems that might be introduced by others.

Finally, software patents pose a constant threat to the existence of any free program. We wish to make sure that a company cannot effectively restrict the users of a free program by obtaining a restrictive license from a patent holder. Therefore, we insist that any patent license obtained for a version of the library must be consistent with the full freedom of use specified in this license.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License. This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License. We use this license for certain libraries in order to permit linking those libraries into non-free programs.

When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits

such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.

We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

## GNU LESSER GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License Agreement applies to any software library or other program which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Lesser General Public License (also called "this License").

Each licensee is addressed as "you".

A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

1. You may copy and distribute verbatim copies of the Library's complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and distribute a copy of this License along with the Library.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

- a) The modified work must itself be a software library.

- b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.
  
- c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.
  
- d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do



this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is

interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally

distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:

a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.

b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

8. You may not copy, modify, sublicense, link with, or distribute

the Library except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the Library is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

9. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Library or its derivative works. These actions are prohibited by law if

you do not accept this License. Therefore, by modifying or distributing the Library (or any work based on the Library), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Library or works based on it.

10. Each time you redistribute the Library (or any work based on the Library), the recipient automatically receives a license from the original licensor to copy, distribute, link with or modify the Library subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties with this License.

11. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse

you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Library at all. For example, if a patent license would not permit royalty-free redistribution of the Library by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Library.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system

which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

12. If the distribution and/or use of the Library is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Library under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

13. The Free Software Foundation may publish revised and/or new versions of the Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Library does not specify a license version number, you may choose any version ever published by the Free Software Foundation.

14. If you wish to incorporate parts of the Library into other free programs whose distribution conditions are incompatible with these, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

15. BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR

OTHER PARTIES PROVIDE THE LIBRARY "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE LIBRARY AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE LIBRARY (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

#### END OF TERMS AND CONDITIONS

#### How to Apply These Terms to Your New Libraries

If you develop a new library, and you want it to be of the greatest possible use to the public, we recommend making it free software that everyone can redistribute and change. You can do so by permitting redistribution under these terms (or, alternatively, under the terms of the ordinary General Public License).

To apply these terms, attach the following notices to the library. It is safest to attach them to the start of each source file to most effectively convey

the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the library's name and a brief idea of what it does.>

Copyright (C) <year> <name of author>

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

You should have received a copy of the GNU Lesser General Public License along with this library; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA

Also add information on how to contact you by electronic and paper mail.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the library, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the library `Frob' (a library for tweaking knobs) written by James Random Hacker.

<signature of Ty Coon>, 1 April 1990

Ty Coon, President of Vice

That's all there is to it!

GNU GENERAL PUBLIC LICENSE

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.,  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

#### Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Lesser General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price.

Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights.

These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

## GNU GENERAL PUBLIC LICENSE

### TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program).



Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the

entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as

distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE,  
THERE IS NO WARRANTY  
FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN  
OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES  
PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED  
OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF  
MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS  
TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE  
PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING,  
REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING  
WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR  
REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES,  
INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING  
OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED  
TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY  
YOU OR  
THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER  
PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE  
POSSIBILITY OF SUCH DAMAGES.

#### END OF TERMS AND CONDITIONS

#### How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest  
possible use to the public, the best way to achieve this is to make it  
free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest  
to attach them to the start of each source file to most effectively  
convey the exclusion of warranty; and each file should have at least  
the "copyright" line and a pointer to where the full notice is found.

<one line to give the program's name and a brief idea of what it does.>

Copyright (C) <year> <name of author>

This program is free software; you can redistribute it and/or modify  
it under the terms of the GNU

General Public License as published by

the Free Software Foundation; either version 2 of the License, or  
(at your option) any later version.

This program is distributed in the hope that it will be useful,  
but WITHOUT ANY WARRANTY; without even the implied warranty of  
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the  
GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA.

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

```
Gnomovision version 69, Copyright (C) year name of author
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute
it
under certain conditions; type `show c' for details.
```

The hypothetical commands ``show w'` and ``show c'` should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than ``show w'` and ``show c'`; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

```
Yoyodyne, Inc., hereby disclaims all copyright interest in the program
`Gnomovision' (which makes passes at compilers) written by James Hacker.
```

```
<signature of Ty Coon>, 1 April 1989
Ty Coon, President of Vice
```

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Lesser General Public License instead of this License.

GNU GENERAL PUBLIC LICENSE  
Version 3, 29 June 2007

Copyright (C) 2007 Free Software Foundation, Inc. <<https://fsf.org/>>  
Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

#### Preamble

The GNU General Public License is a free, copyleft license for software and other kinds of works.

The licenses for most software and other practical works are designed to take away your freedom to share and change the works. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change all versions of a program--to make sure it remains free software for all its users. We, the Free Software Foundation, use the GNU General Public License for most of our software; it applies also to any other work released this way by its authors. You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for them if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs, and that you know you can do these things.

To protect your rights, we need to prevent others from denying you these rights or asking you to surrender the rights. Therefore, you have certain responsibilities if you distribute copies of the software, or if you modify it: responsibilities to respect the freedom of others.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must pass on to the recipients the same freedoms that you received. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

Developers that use the GNU GPL protect your rights with two steps:

(1) assert copyright on the software, and (2) offer you this License giving you legal permission to copy, distribute and/or modify it.

For the developers' and authors' protection, the GPL clearly explains that there is no warranty for this free software. For both users' and authors' sake, the GPL requires that modified versions be marked as changed, so that their problems will not be attributed erroneously to authors of previous versions.

Some devices are designed to deny users access to install or run modified versions of the software inside them, although the manufacturer can do so. This is fundamentally incompatible with the aim of protecting users' freedom to change the software. The systematic pattern of such abuse occurs in the area of products for individuals to use, which is precisely where it is most unacceptable. Therefore, we have designed this version of the GPL to prohibit the practice for those products. If such problems arise substantially in other domains, we

stand

ready to extend this provision to those domains in future versions of the GPL, as needed to protect the freedom of users.

Finally, every program is threatened constantly by software patents. States should not allow patents to restrict development and use of software on general-purpose computers, but in those that do, we wish to avoid the special danger that patents applied to a free program could make it effectively proprietary. To prevent this, the GPL assures that patents cannot be used to render the program non-free.

The precise terms and conditions for copying, distribution and modification follow.

## TERMS AND CONDITIONS

### 0. Definitions.

"This License" refers to version 3 of the GNU General Public License.

"Copyright" also means copyright-like laws that apply to other kinds of works, such as semiconductor masks.

"The Program" refers to any copyrightable work licensed under this License. Each licensee is addressed as "you". "Licensees" and "recipients" may be individuals or organizations.

To "modify" a work means to copy from or adapt all or part of the work in a fashion requiring copyright permission, other than the making of an exact copy. The resulting work is called a "modified version" of the earlier work or a work "based on" the earlier work.

A "covered work" means either the unmodified Program or a work based on the Program.

To "propagate" a work means to do anything with it that, without permission, would make you directly or secondarily liable for infringement under applicable copyright law, except executing it on a computer or modifying a private copy. Propagation includes copying, distribution (with or without modification), making available to the public, and in some countries other activities as well.

To "convey" a work means any kind of propagation that enables other parties to make or receive copies. Mere interaction with a user through a computer network, with no transfer of a copy, is not conveying.



An interactive user interface displays "Appropriate Legal Notices" to the extent that it includes a convenient and prominently visible feature that (1) displays an appropriate copyright notice, and (2) tells the user that there is no warranty for the work (except to the extent that warranties are provided), that licensees may convey the work under this License, and how to view a copy of this License. If the interface presents a list of user commands or options, such as a menu, a prominent item in the list meets this criterion.

#### 1. Source Code.

The "source code" for a work means the preferred form of the work for making modifications to it. "Object code" means any non-source form of a work.

A "Standard Interface" means an interface that either is an official standard defined by a recognized standards body, or, in the case of interfaces specified for a particular programming language, one that is widely used among developers working in that language.

The "System Libraries" of an executable work include anything, other than the work as a whole, that (a) is included in the normal form of packaging a Major Component, but which is not part of that Major Component, and (b) serves only to enable use of the work with that Major Component, or to implement a Standard Interface for which an implementation is available to the public in source code form. A "Major Component", in this context, means a major essential component (kernel, window system, and so on) of the specific operating system (if any) on which the executable work runs, or a compiler used to produce the work, or an object code interpreter used to run it.

The "Corresponding Source" for a work in object code form means all the source code needed to generate, install, and (for an executable work) run the object code and to modify the work, including scripts to control those activities. However, it does not include the work's System Libraries, or general-purpose tools or generally available free programs which are used unmodified in performing those activities but which are not part of the work. For example, Corresponding Source includes interface definition files associated with source files for the work, and the source code for shared libraries and dynamically linked subprograms that the work is specifically designed to require, such as by intimate data communication or control flow between those subprograms and other parts of the work.

The Corresponding Source need not include anything that users can regenerate automatically from other parts of the Corresponding

Source.

The Corresponding Source for a work in source code form is that same work.

## 2. Basic Permissions.

All rights granted under this License are granted for the term of copyright on the Program, and are irrevocable provided the stated conditions are met. This License explicitly affirms your unlimited permission to run the unmodified Program. The output from running a covered work is

covered by this License only if the output, given its content, constitutes a covered work. This License acknowledges your rights of fair use or other equivalent, as provided by copyright law.

You may make, run and propagate covered works that you do not convey, without conditions so long as your license otherwise remains in force. You may convey covered works to others for the sole purpose of having them make modifications exclusively for you, or provide you with facilities for running those works, provided that you comply with the terms of this License in conveying all material for which you do not control copyright. Those thus making or running the covered works for you must do so exclusively on your behalf, under your direction and control, on terms that prohibit them from making any copies of your copyrighted material outside their relationship with you.

Conveying under any other circumstances is permitted solely under the conditions stated below. Sublicensing is not allowed; section 10 makes it unnecessary.

## 3. Protecting Users' Legal Rights From Anti-Circumvention Law.

No covered work shall be deemed part of an effective technological measure under any applicable law fulfilling obligations under article 11 of the WIPO copyright treaty adopted on 20 December 1996, or similar laws prohibiting or restricting circumvention of such measures.

When you convey a covered work, you waive any legal power to forbid circumvention of technological measures to the extent such circumvention is effected by exercising rights under this License with respect to the covered work, and you disclaim any intention to limit operation or modification of the work as a means of enforcing, against the work's users, your or third parties' legal rights to forbid circumvention of technological measures.

#### 4. Conveying Verbatim Copies.

You may convey verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice; keep intact all notices stating that this License and any non-permissive terms added in accord with section 7 apply to the code; keep intact all notices of the absence of any warranty; and give all recipients a copy of this License along with the Program.

You may charge any price or no price for each copy that you convey, and you may offer support or warranty protection for a fee.

#### 5. Conveying Modified Source Versions.

You may convey a work based on the Program, or the modifications to produce it from the Program, in the form of source code under the terms of section 4, provided that you also meet all of these conditions:

- a) The work must carry prominent notices stating that you modified it, and giving a relevant date.
- b) The work must carry prominent notices stating that it is released under this License and any conditions added under section 7. This requirement modifies the requirement in section 4 to "keep intact all notices".
- c) You must license the entire work, as a whole, under this License to anyone who comes into possession of a copy. This License will therefore apply, along with any applicable section 7 additional terms, to the whole of the work, and all its parts, regardless of how they are packaged. This License gives no permission to license the work in any other way, but it does not invalidate such permission if you have separately received it.
- d) If the work has interactive user interfaces, each must display Appropriate Legal Notices; however, if the Program has interactive interfaces that do not display Appropriate Legal Notices, your work need not make them do so.

A compilation of a covered work with other separate and independent works, which are not by their nature extensions of the covered work, and which are not combined with it such as to form a larger program, in or on a volume of a storage or distribution medium, is called an "aggregate" if the compilation and its resulting copyright are not

used to limit the access or legal rights of the compilation's users beyond what the individual works permit. Inclusion of a covered work in an aggregate does not cause this License to apply to the other parts of the aggregate.

#### 6. Conveying Non-Source Forms.

You may convey a covered work in object code form under the terms of sections 4 and 5, provided that you also convey the machine-readable Corresponding Source under the terms of this License, in one of these ways:

a) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by the Corresponding Source fixed on a durable physical medium customarily used for software interchange.

b) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by a written offer, valid for at least three years

and valid for as

long as you offer spare parts or customer support for that product model, to give anyone who possesses the object code either (1) a copy of the Corresponding Source for all the software in the product that is covered by this License, on a durable physical medium customarily used for software interchange, for a price no more than your reasonable cost of physically performing this conveying of source, or (2) access to copy the Corresponding Source from a network server at no charge.

c) Convey individual copies of the object code with a copy of the written offer to provide the Corresponding Source. This alternative is allowed only occasionally and noncommercially, and only if you received the object code with such an offer, in accord with subsection 6b.

d) Convey the object code by offering access from a designated place (gratis or for a charge), and offer equivalent access to the Corresponding Source in the same way through the same place at no further charge. You need not require recipients to copy the Corresponding Source along with the object code. If the place to copy the object code is a network server, the Corresponding Source may be on a different server (operated by you or a third party) that supports equivalent copying facilities, provided you maintain clear directions next to the object code saying where to find the Corresponding Source. Regardless of what server hosts the Corresponding Source, you remain obligated to ensure that it is

available for as long as needed to satisfy these requirements.

e) Convey the object code using peer-to-peer transmission, provided you inform other peers where the object code and Corresponding Source of the work are being offered to the general public at no charge under subsection 6d.

A separable portion of the object code, whose source code is excluded from the Corresponding Source as a System Library, need not be included in conveying the object code work.

A "User Product" is either (1) a "consumer product", which means any tangible personal property which is normally used for personal, family, or household purposes, or (2) anything designed or sold for incorporation into a dwelling. In determining whether a product is a consumer product, doubtful cases shall be resolved in favor of coverage. For a particular product received by a particular user, "normally used" refers to a typical or common use of that class of product, regardless of the status of the particular user or of the way in which the particular user actually uses, or expects or is expected to use, the product. A product is a consumer product regardless of whether the product has substantial commercial, industrial or non-consumer uses, unless such uses represent the only significant mode of use of the product.

"Installation Information" for a User Product means any methods, procedures, authorization keys, or other information required to install and execute modified versions of a covered work in that User Product from a modified version of its Corresponding Source. The information must suffice to ensure that the continued functioning of the modified object code is in no case prevented or interfered with solely because modification has been made.

If you convey an object code work under this section in, or with, or specifically for use in, a User Product, and the conveying occurs as part of a transaction in which the right of possession and use of the User Product is transferred to the recipient in perpetuity or for a fixed term (regardless of how the transaction is characterized), the Corresponding Source conveyed under this section must be accompanied by the Installation Information. But this requirement does not apply if neither you nor any third party retains the ability to install modified object code on the User Product (for example, the work has been installed in ROM).

The requirement to provide Installation Information does not include a requirement to continue to provide support service, warranty, or updates

for a work that has been modified or installed by the recipient, or for the User Product in which it has been modified or installed. Access to a network may be denied when the modification itself materially and adversely affects the operation of the network or violates the rules and protocols for communication across the network.

Corresponding Source conveyed, and Installation Information provided, in accord with this section must be in a format that is publicly documented (and with an implementation available to the public in source code form), and must require no special password or key for unpacking, reading or copying.

## 7. Additional Terms.

"Additional permissions" are terms that supplement the terms of this License by making exceptions from one or more of its conditions. Additional permissions that are applicable to the entire Program shall be treated as though they were included in this License, to the extent that they are valid under applicable law. If additional permissions apply only to part of the Program, that part may be used separately under those permissions, but the entire Program remains governed by this License without regard to the additional permissions.

When you convey a copy of a covered work, you may at your option remove any additional permissions from that copy, or from any part of it. (Additional permissions may be written to require their own removal in certain cases when you modify the work.) You may place additional permissions on material, added by you to a covered work, for which you have or can give appropriate copyright permission.

Notwithstanding any other provision of this License, for material you add to a covered work, you may (if authorized by the copyright holders of that material) supplement the terms of this License with terms:

- a) Disclaiming warranty or limiting liability differently from the terms of sections 15 and 16 of this License; or
- b) Requiring preservation of specified reasonable legal notices or author attributions in that material or in the Appropriate Legal Notices displayed by works containing it; or
- c) Prohibiting misrepresentation of the origin of that material, or requiring that modified versions of such material be marked in reasonable ways as different from the original version; or
- d) Limiting the use for publicity purposes of names of licensors or

authors of the material; or

e) Declining to grant rights under trademark law for use of some trade names, trademarks, or service marks; or

f) Requiring indemnification of licensors and authors of that material by anyone who conveys the material (or modified versions of it) with contractual assumptions of liability to the recipient, for any liability that these contractual assumptions directly impose on

those licensors and authors.

All other non-permissive additional terms are considered "further restrictions" within the meaning of section 10. If the Program as you received it, or any part of it, contains a notice stating that it is governed by this License along with a term that is a further restriction, you may remove that term. If a license document contains a further restriction but permits relicensing or conveying under this License, you may add to a covered work material governed by the terms of that license document, provided that the further restriction does not survive such relicensing or conveying.

If you add terms to a covered work in accord with this section, you must place, in the relevant source files, a statement of the additional terms that apply to those files, or a notice indicating where to find the applicable terms.

Additional terms, permissive or non-permissive, may be stated in the form of a separately written license, or stated as exceptions; the above requirements apply either way.

## 8. Termination.

You may not propagate or modify a covered work except as expressly provided under this License. Any attempt otherwise to propagate or modify it is void, and will automatically terminate your rights under this License (including any patent licenses granted under the third paragraph of section 11).

However, if you cease all violation of this License, then your license from a particular copyright holder is reinstated (a) provisionally, unless and until the copyright holder explicitly and finally terminates your license, and (b) permanently, if the copyright holder fails to notify you of the violation by some reasonable means prior to 60 days after the cessation.

Moreover, your license from a particular copyright holder is

reinstated permanently if the copyright holder notifies you of the violation by some reasonable means, this is the first time you have received notice of violation of this License (for any work) from that copyright holder, and you cure the violation prior to 30 days after your receipt of the notice.

Termination of your rights under this section does not terminate the licenses of parties who have received copies or rights from you under this License. If your rights have been terminated and not permanently reinstated, you do not qualify to receive new licenses for the same material under section 10.

#### 9. Acceptance Not Required for Having Copies.

You are not required to accept this License in order to receive or run a copy of the Program. Ancillary propagation of a covered work occurring solely as a consequence of using peer-to-peer transmission to receive a copy likewise does not require acceptance. However, nothing other than this License grants you permission to propagate or modify any covered work. These actions infringe copyright if you do not accept this License. Therefore, by modifying or propagating a covered work, you indicate your acceptance of this License to do so.

#### 10. Automatic Licensing of Downstream Recipients.

Each time you convey a covered work, the recipient automatically receives a license from the original licensors, to run, modify and propagate that work, subject to this License. You are not responsible for enforcing compliance by third parties with this License.

An "entity transaction" is a transaction transferring control of an organization, or substantially all assets of one, or subdividing an organization, or merging organizations. If propagation of a covered work results from an entity transaction, each party to that transaction who receives a copy of the work also receives whatever licenses to the work the party's predecessor in interest had or could give under the previous paragraph, plus a right to possession of the Corresponding Source of the work from the predecessor in interest, if the predecessor has it or can get it with reasonable efforts.

You may not impose any further restrictions on the exercise of the rights granted or affirmed under this License. For example, you may not impose a license fee, royalty, or other charge for exercise of rights granted under this License, and you may not initiate litigation (including a cross-claim or counterclaim in a lawsuit) alleging that any patent claim is infringed by making, using, selling, offering for



sale, or importing the Program or any portion of it.

## 11. Patents.

A "contributor" is a copyright holder who authorizes use under this License of the Program or a work on which the Program is based. The work thus licensed is called the contributor's "contributor version".

A contributor's "essential patent claims" are all patent claims owned or controlled by the contributor, whether already acquired or hereafter acquired, that would be infringed by some manner, permitted by this License, of making, using, or selling its contributor version, but do not include claims that would be infringed only as a consequence of further modification of the contributor version. For purposes of this definition, "control" includes the right to grant patent sublicenses in a manner consistent with the requirements of this License.

Each contributor grants you a non-exclusive, worldwide, royalty-free patent license under the contributor's essential patent claims, to make, use, sell, offer for sale, import and otherwise run, modify and propagate the contents of its contributor version.

In the following three paragraphs, a "patent license" is any express agreement or commitment, however denominated, not to enforce a patent (such as an express permission to practice a patent or covenant not to sue for patent infringement). To "grant" such a patent license to a party means to make such an agreement or commitment not to enforce a patent against the party.

If you convey a covered work, knowingly relying on a patent license, and the Corresponding Source of the work is not available for anyone to copy, free of charge and under the terms of this License, through a publicly available network server or other readily accessible means, then you must either (1) cause the Corresponding Source to be so available, or (2) arrange to deprive yourself of the benefit of the patent license for this particular work, or (3) arrange, in a manner consistent with the requirements of this License, to extend the patent license to downstream recipients. "Knowingly relying" means you have actual knowledge that, but for the patent license, your conveying the covered work in a country, or your recipient's use of the covered work in a country, would infringe one or more identifiable patents in that country that you have reason to believe are valid.

If, pursuant to or in connection with a single transaction or arrangement, you convey, or propagate by procuring conveyance of, a

covered work, and grant a patent license to some of the parties receiving the covered work authorizing them to use, propagate, modify or convey a specific copy of the covered work, then the patent license you grant is automatically extended to all recipients of the covered work and works based on it.

A patent license is "discriminatory" if it does not include within the scope of its coverage, prohibits the exercise of, or is conditioned on the non-exercise of one or more of the rights that are specifically granted under this License. You may not convey a covered work if you are a party to an arrangement with a third party that is in the business of distributing software, under which you make payment to the third party based on the extent of your activity of conveying the work, and under which the third party grants, to any of the parties who would receive the covered work from you, a discriminatory patent license (a) in connection with copies of the covered work conveyed by you (or copies made from those copies), or (b) primarily for and in connection with specific products or compilations that contain the covered work, unless you entered into that arrangement, or that patent license was granted, prior to 28 March 2007.

Nothing in this License shall be construed as excluding or limiting any implied license or other defenses to infringement that may otherwise be available to you under applicable patent law.

#### 12. No Surrender of Others' Freedom.

If conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot convey a covered work so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not convey it at all. For example, if you agree to terms that obligate you to collect a royalty for further conveying from those to whom you convey the Program, the only way you could satisfy both those terms and this License would be to refrain entirely from conveying the Program.

#### 13. Use with the GNU Affero General Public License.

Notwithstanding any other provision of this License, you have permission to link or combine any covered work with a work licensed under version 3 of the GNU Affero General Public License into a single combined work, and to convey the resulting work. The terms of this License will continue to apply to the part which is the covered work, but the special requirements of the GNU Affero General Public License,

section 13, concerning interaction through a network will apply to the combination as such.

#### 14. Revised Versions of this License.

The Free Software Foundation may publish revised and/or new versions of the GNU General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies that a certain numbered version of the GNU General Public License "or any later version" applies to it, you have the option of following the terms and conditions either of that numbered version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of the GNU General Public License, you may choose any version ever published by the Free Software Foundation.

If the Program specifies that a proxy can decide which future versions of the GNU General Public License can be used, that proxy's public statement of acceptance of a version permanently authorizes you to choose that version for the Program.

Later license versions may give you additional or different permissions. However, no additional obligations are imposed on any author or copyright holder as a result of your choosing to follow a later version.

#### 15. Disclaimer of Warranty.

THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

#### 16. Limitation of Liability.

IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MODIFIES AND/OR CONVEYS THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE

USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

17.

Interpretation of Sections 15 and 16.

If the disclaimer of warranty and limitation of liability provided above cannot be given local legal effect according to their terms, reviewing courts shall apply local law that most closely approximates an absolute waiver of all civil liability in connection with the Program, unless a warranty or assumption of liability accompanies a copy of the Program in return for a fee.

## END OF TERMS AND CONDITIONS

### How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively state the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the program's name and a brief idea of what it does.>

Copyright (C) <year> <name of author>

This program is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program. If not, see <<https://www.gnu.org/licenses/>>.

Also add information on how to contact you by electronic and paper mail.

If the program does terminal interaction, make it output a short notice like this when it starts in an interactive mode:

```
<program> Copyright (C) <year> <name of author>  
This program comes with ABSOLUTELY NO WARRANTY; for details type `show w'.  
This is free software, and you are welcome to redistribute it  
under certain conditions; type `show c' for details.
```

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, your program's commands might be different; for a GUI interface, you would use an "about box".

You should also get your employer (if you work as a programmer) or school, if any, to sign a "copyright disclaimer" for the program, if necessary. For more information on this, and how to apply and follow the GNU GPL, see <https://www.gnu.org/licenses/>.

The GNU General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Lesser General Public License instead of this License. But first, please read <https://www.gnu.org/licenses/why-not-lgpl.html>.

WEV @@ WEV[B "1

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, and the entire permission notice in its entirety, including the disclaimer of warranties.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. The name of the author may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ALL OF WHICH ARE HEREBY DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL

DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT

(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF NOT ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

x ?"U@,5 @mISmIN<GimCN7g1uE  
43mI,5WEV @@ WEV @mImImIAmImImI0mImImI\*mImI  
A0mImImI...  
lost+found...

;9GimCN7g

!"#\$%&'()\*+,-  
./0123456789;:<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^\_`abcdefghijklmnopqrstuvwxyz{|}~

!"#\$%&'()\*+,-  
./0123456789;:<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^\_`abcdefghijklmnopqrstuvwxyz{|}~

!"#\$%&'()\*+,-  
./0123456789;:<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^\_`abcdefghijklmnopqrstuvwxyz{|}~

!"#\$%&'()\*+,-  
./0123456789;:<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^\_`abcdefghijklmnopqrstuvwxyz{|}~WEV @@  
WEV[B "1

This library is free software; you can redistribute it and/or modify it under the terms of the Modified BSD License.

The complete text of the license is available in the  
../Documentation/licenses/COPYING.BSD-3-Clause file.

Permission to use, copy, modify, and/or distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies.

THE SOFTWARE IS PROVIDED "AS IS" AND THE AUTHOR DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

The complete text of the license is available in the  
../Documentation/licenses/COPYING.LGPL-2.1-or-later

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public

License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

The complete text of the license is available in the  
../Documentation/licenses/COPYING.LGPL-2.1-or-later file.

/\*

\* Copyright (c) 1989 The Regents of the University of California.

\* All rights reserved.

\*

\* Redistribution and use in source and binary forms, with or without  
\* modification, are permitted provided that the following conditions  
\* are met:

\* 1. Redistributions of source code must retain the above copyright  
\* notice, this list of conditions and the following disclaimer.

\* 2. Redistributions in binary form must reproduce the above copyright  
\* notice, this list of conditions and the following disclaimer in the  
\* documentation and/or other materials provided with the distribution.

\* 3. All advertising materials mentioning features or use of this software  
\* must display the following acknowledgement:

\* This product includes software developed by the University of  
\* California, Berkeley and its contributors.

\* 4. Neither the name of the University nor the names of its contributors  
\* may be used to endorse or promote products derived from this software

\*

without specific prior written permission.

\*

\* THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS ``AS IS" AND  
\* ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE  
\* IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE  
\* ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE  
\* FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL  
\* DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS  
\* OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)  
\* HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT  
\* LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY  
\* OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF  
\* SUCH DAMAGE.

\*/

## 1.56 libtirpc 1.2.6

### 1.56.1 Available under license :

/\*

\* Copyright (c) Copyright (c) Bull S.A. 2005 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 THE AUTHOR ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
- \*/

## 1.57 dosfs-tools 4.2

### 1.57.1 Available under license :

GNU 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.

#### 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:

```
<program> Copyright (C) <year> <name of author>  
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>.

## 1.58 gawk 5.1.0

### 1.58.1 Available under license :

GNU LIBRARY GENERAL PUBLIC LICENSE  
Version 2, June 1991

Copyright (C) 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.

[This is the first released version of the library GPL. It is numbered 2 because it goes with version 2 of the ordinary GPL.]

#### Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public Licenses are intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users.

This license, the Library General Public License, applies to some specially designated Free Software Foundation software, and to any other libraries whose authors decide to use it. You can use it for your libraries, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it

if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the library, or if you modify it.

For example, if you distribute copies of the library, whether gratis or for a fee, you must give the recipients all the rights that we gave you. You must make sure that they, too, receive or can get the source code. If you link a program with the library, you must provide complete object files to the recipients so that they can relink them with the library, after making changes to the library and recompiling it. And you must show them these terms so they know their rights.

Our method of protecting your rights has two steps: (1) copyright the library, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the library.

Also, for each distributor's protection, we want to make certain that everyone understands that there is no warranty for this free library. If the library is modified by someone else and passed on, we want its recipients to know that what they have is not the original version, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that companies distributing free software will individually obtain patent licenses, thus in effect transforming the program into proprietary software. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License, which was designed for utility programs. This license, the GNU Library General Public License, applies to certain designated libraries. This license is quite different from the ordinary one; be sure to read it in full, and don't assume that anything in it is the same as in the ordinary license.

The reason we have a separate public license for some libraries is that they blur the distinction we usually make between modifying or adding to a program and simply using it. Linking a program with a library, without changing the library, is in some sense simply using the library, and is analogous to running a utility program or application program. However, in



a textual and legal sense, the linked executable is a combined work, a derivative of the original library, and the ordinary General Public License treats it as such.

Because

of this blurred distinction, using the ordinary General Public License for libraries did not effectively promote software sharing, because most developers did not use the libraries. We concluded that weaker conditions might promote sharing better.

However, unrestricted linking of non-free programs would deprive the users of those programs of all benefit from the free status of the libraries themselves. This Library General Public License is intended to permit developers of non-free programs to use free libraries, while preserving your freedom as a user of such programs to change the free libraries that are incorporated in them. (We have not seen how to achieve this as regards changes in header files, but we have achieved it as regards changes in the actual functions of the Library.) The hope is that this will lead to faster development of free libraries.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, while the latter only works together with the library.

Note that it is possible for a library to be covered by the ordinary General Public License rather than by this special one.

## GNU LIBRARY GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License Agreement applies to any software library which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Library General Public License (also called "this License"). Each licensee is addressed as "you".

A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed

under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a

portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

1. You may copy and distribute verbatim copies of the Library's complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and distribute a copy of this License along with the Library.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) The modified work must itself be a software library.

b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.

c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.

d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility

is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6,

whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also compile or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

b) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

c) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

d) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major

components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:

a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.

b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

8. You may not copy, modify, sublicense, link with, or distribute the Library except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the Library is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

9. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Library or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Library (or any work based on the Library), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Library or works based on it.

10. Each time you redistribute the Library (or any work based on the Library), the recipient automatically receives a license from the original licensor to copy, distribute, link with or modify the Library

subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

11. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute

the Library at all. For example, if a patent license would not permit royalty-free redistribution of the Library by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Library.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system;

it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

12. If the distribution and/or use of the Library is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Library under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

13. The Free Software Foundation may publish revised and/or new versions of the Library General Public License from time to time.

Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each

version is given a distinguishing version number. If the Library specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Library does not specify a license version number, you may choose any version ever published by the Free Software Foundation.

14. If you wish to incorporate parts of the Library into other free programs whose distribution conditions are incompatible with these, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

15. BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE LIBRARY "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE LIBRARY AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE LIBRARY (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS



## Appendix: 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 a brief idea of what it does.>  
Copyright (C) <year>  
<name of author>
```

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Library General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Library General Public License for more details.

You should have received a copy of the GNU Library General Public License along with this library; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301, USA

Also add information on how to contact you by electronic and paper mail.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the library, if necessary.

Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the library `Frob' (a library for tweaking knobs) written by James Random Hacker.

```
<signature of Ty Coon>, 1 April 1990  
Ty Coon, President of Vice
```

That's all there is to it!

GNU GENERAL PUBLIC LICENSE  
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.

## 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:

```
<program> Copyright (C) <year> <name of author>
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>.

## 1.59 pcre 8.44

### 1.59.1 Available under license :

PCRE2 LICENCE

Please see the file LICENCE in the PCRE2 distribution for licensing details.

End

PCRE2 LICENCE

-----

PCRE2 is a library of functions to support regular expressions whose syntax



and semantics are as close as possible to those of the Perl 5 language.

Releases 10.00 and above of PCRE2 are distributed under the terms of the "BSD" licence, as specified below, with one exemption for certain binary redistributions. The documentation for PCRE2, supplied in the "doc" directory, is distributed under the same terms as the software itself. The data in the testdata directory is not copyrighted and is in the public domain.

The basic library functions are written in C and are freestanding. Also included in the distribution is a just-in-time compiler that can be used to optimize pattern matching. This is an optional feature that can be omitted when the library is built.

## THE BASIC LIBRARY FUNCTIONS

-----

Written by: Philip Hazel  
Email local part: Philip.Hazel  
Email domain: gmail.com

University of Cambridge Computing Service,  
Cambridge,  
England.

Copyright (c) 1997-2020 University of Cambridge  
All rights reserved.

## PCRE2 JUST-IN-TIME COMPILATION SUPPORT

-----

Written by: Zoltan Herczeg  
Email local part: hzmester  
Email domain: freemail.hu

Copyright(c) 2010-2020 Zoltan Herczeg  
All rights reserved.

## STACK-LESS JUST-IN-TIME COMPILER

-----

Written by: Zoltan Herczeg  
Email local part: hzmester  
Email domain: freemail.hu

Copyright(c) 2009-2020 Zoltan Herczeg

All rights reserved.

## THE "BSD" LICENCE

-----

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- \* Redistributions of source code must retain the above copyright notices, this list of conditions and the following disclaimer.
- \* Redistributions in binary form must reproduce the above copyright notices, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- \* Neither the name of the University of Cambridge nor the names of any contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

## EXEMPTION FOR BINARY LIBRARY-LIKE PACKAGES

-----

The second condition in the BSD licence (covering binary redistributions) does not apply all the way down a chain of software. If binary package A includes PCRE2, it must respect the condition, but if package B is software that includes package A, the condition is not imposed on package B unless it uses PCRE2 independently.

End

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the 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 THE AUTHOR ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

## 1.60 rsync 3.2.3

### 1.60.1 Available under license :

Copyright (c) 1998 Red Hat Software

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 X CONSORTIUM BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Except as contained in this notice, the name of the X Consortium shall not be used in advertising or otherwise to promote the sale, use or other dealings in this Software without prior written authorization from the X Consortium.

## GNU 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.

### 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:

```
<program> Copyright (C) <year> <name of author>  
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>.

## REGARDING OPENSOURCE AND XXHASH

In addition, as a special exception, the copyright holders give  
permission to dynamically link rsync with the OpenSSL and xxhash  
libraries when those libraries are being distributed in compliance  
with their license terms, and to distribute a dynamically linked  
combination of rsync and these libraries. This is also considered  
to be covered under the GPL's System Libraries exception.

# 1.61 libevdev 1.11.0

## 1.61.1 Available under license :

SPDX-License-Identifier: MIT

Copyright 2013 Red Hat, Inc.

Copyright 2013 David Herrmann <dh.herrmann@gmail.com>

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice (including the next paragraph) shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY,

WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

The following license is from a Linux kernel header file and there is no GPL code this package links to.

Copyright (c) 1999-2002 Vojtech Pavlik

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 as published by the Free Software Foundation.

These licenses apply to the doxygen documentation HTML style only. They do not apply or affect libinput itself.

Apache: <https://github.com/Velron/doxygen-bootstrapped/>

MIT: <https://bootswatch.com/paper/bootstrap.css>

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.

The MIT License (MIT)

Copyright (c) 2011-2015 Twitter, Inc

Permission is hereby granted, free of charge, to any person obtaining a copy  
of this software and associated documentation files (the "Software"), to  
deal in the Software without restriction, including without limitation the  
rights to use, copy, modify, merge, publish, distribute, sublicense, and/or  
sell copies of the Software, and to permit persons to whom the Software is  
furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in  
all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR  
IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY,  
FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE  
AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER  
LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE,  
ARISING  
FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS  
IN THE SOFTWARE.

## 1.62 iproute 5.9.0-1.el8

### 1.62.1 Available under license :

No license file was found, but licenses were detected in source scan.

```
/*  
*-----  
* msg_iproute.c - Message file for iproute facility  
*
```



\* July 17, 1990, Kevin Paul Herbert  
\*  
\* Copyright (c) 1990-2013, 2015-2017, 2019 by Cisco Systems, Inc.  
\* All rights reserved.  
\*-----  
\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/include/msg\_iproute.rc  
No license file was found, but licenses were detected in source scan.

```
/*-----  
* router_af_actions_registry.c  
*  
* Router address family actions registry.  
*  
* May 2002, Victor Kamensky  
*  
* Copyright (c) 2002-2004, 2007-2008 by cisco Systems, Inc.  
* All rights reserved.  
*-----  
*/
```

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/router\_af\_actions\_registry.c  
No license file was found, but licenses were detected in source scan.

```
/* $Id: iprouting_actions.c,v 3.2.60.2 1996/08/23 22:02:29 jserpa Exp $  
* $Source: /release/112/cvs/Xsys/iprouting/iprouting_actions.c,v $  
*-----  
* IP routing specific parsing functions.  
*  
* August 1994, Bruce Cole  
*  
* Copyright (c) 1994-2010, 2012, 2015, 2017-2018 by cisco Systems, Inc.  
* All rights reserved.  
*-----  
* $Log: iprouting_actions.c,v $  
* Revision 3.2.60.2 1996/08/23 22:02:29 jserpa  
* CSCdi67021: router ospf <as> gets nv-ramed in reverse order of  
* configuration  
* Branch: California_branch  
*  
* Revision 3.2.60.1 1996/04/15 21:18:11 bcole  
* CSCdi54649: IP Host Modularity, IP Automatic Stub Routing feature  
* commit  
* Branch: California_branch  
*  
*-----
```

```

* Revision 3.2 1995/11/17 17:34:38 hampton
* Remove old entries from the RCS header logs.
*
* Revision 3.1 1995/11/09
12:08:28 shaker
* Bump version numbers from 2.x to 3.x.
*
* Revision 2.1 1995/06/07 21:07:33 hampton
* Bump version numbers from 1.x to 2.x.
*
*-----
* $Endlog$
*/

```

Found in path(s):

```

* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/src/iprouting_actions.c
No license file was found, but licenses were detected in source scan.

```

```

/* $Id$
* $Source$
*-----
* iprouting_registry.c
*
* September 2001, Fan Kong
*
* Copyright (c) 2001, 2003, 2005, 2007-2008 by cisco Systems, Inc.
* All rights reserved.
*-----
* $Log$
*-----
* $Endlog$
*/

```

Found in path(s):

```

* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/src/iprouting_registry.c
No license file was found, but licenses were detected in source scan.

```

```

/* $Id: iprouting_setup.c,v 3.4.4.1 1996/06/28 01:21:03 snyder Exp $
* $Source: /release/112/cvs/Xsys/iprouting/iprouting_setup.c,v $
*-----
* IP Routing setup commands
*
* May 1993, Robert Widmer
*
* Copyright (c) 1993-2002, 2007-2008, 2010 by cisco Systems, Inc.
* All rights reserved.
*-----

```

```

* $Log: iprouting_setup.c,v $
* Revision 3.4.4.1 1996/06/28 01:21:03 snyder
* CSCdi61601: fix some char * that should have been char [] in iprouting
* Branch: California_branch
*
*       You get space back for the pointer
*       You get space back for each reference
*       You get bytes out of data space
*
* Revision 3.4 1996/03/09 22:56:04 widmer
* CSCdi47890: HTTP server doesnt work
* Add HTTP server
*
* Revision 3.3 1995/11/28 03:58:38 widmer
*
CSCdi44175: Add setup_printf to replace sprintf in setup code
*
* Revision 3.2 1995/11/17 17:34:53 hampton
* Remove old entries from the RCS header logs.
*
* Revision 3.1 1995/11/09 12:08:42 shaker
* Bump version numbers from 2.x to 3.x.
*
* Revision 2.1 1995/06/07 21:07:55 hampton
* Bump version numbers from 1.x to 2.x.
*
*-----
* $Endlog$
*/

```

Found in path(s):

```

* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/src/iprouting_setup.c
No license file was found, but licenses were detected in source scan.

```

```

/* $Id$
* $Source$
*-----
* cfg_route_default.h
*
* September 2016, Yingzhen Qu
*
* Copyright (c) 2016 by cisco Systems, Inc.
* All rights reserved.
*-----
* $Log$
*-----
* $Endlog$
*/

```

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/cfg\_route\_default.h

No license file was found, but licenses were detected in source scan.

```
/* $Id: cfg_router_timers.h,v 3.2.60.1 1996/04/15 21:17:46 bcole Exp $
* $Source: /release/112/cvs/Xsys/iprouting/cfg_router_timers.h,v $
* -----
* C F G _ R O U T E R _ T I M E R S . H
*
* Copyright (c) 1992-1999, 2002, 2004-2011, 2018 by cisco Systems, Inc.
* All Rights Reserved
* -----
* $Log: cfg_router_timers.h,v $
* Revision 3.2.60.1 1996/04/15 21:17:46 bcole
* CSCdi54649: IP Host Modularity, IP Automatic Stub Routing feature
* commit
* Branch: California_branch
*
* Revision 3.2 1995/11/17 17:32:28 hampton
* Remove old entries from the RCS header logs.
*
* Revision 3.1 1995/11/09 12:06:09 shaker
* Bump version numbers from 2.x to 3.x.
*
* Revision 2.1 1995/07/01 12:16:04 tli
* CSCdi36508: Rationalize parser file placement, part I
* Rationalize iprouting
*
* Revision 2.1 1995/06/07 22:13:13 hampton
* Bump version numbers from 1.x to 2.x.
*
* -----
* $Endlog$
*/
```

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/internal\_inc/cfg\_router\_timers.h

No license file was found, but licenses were detected in source scan.

```
/* $Id$
* $Source$
* -----
* cfg_routemap_match_ip.h -- IP specific route-map clauses
*
* March 1995 Tony Li
*
* Copyright (c) 1995-1998, 2000-2002, 2004-2005, 2007-2010, 2014 by cisco Systems, Inc.
```

\* All rights reserved.

\*-----

\* \$Log\$

\*-----

\* \$Endlog\$

\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/cfg\_routemap\_match\_ip.h

No license file was found, but licenses were detected in source scan.

/\* \$Id\$

\* \$Source\$

\*-----

\* cfg\_router\_input-queue.h

\*

\* September 1997, Dawn Li

\*

\* Copyright (c) 1997-2002, 2007-2008 by cisco Systems, Inc.

\* All rights reserved.

\*-----

\* \$Log\$

\*-----

\* \$Endlog\$

\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/internal\_inc/cfg\_router\_input-queue.h

No license file was found, but licenses were detected in source scan.

/\*

\*-----

\* cfg\_router\_topology\_mode.h - router topology configuration sub mode

\* commands.

\*

\* Sept 2004, Mercia Zheng

\*

\* Copyright (c) 2004, 2007-2008 by cisco Systems, Inc.

\* All rights reserved.

\*-----

\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/cfg\_router\_topology\_mode.h

No license file was found, but licenses were detected in source scan.

/\*-----

```
* routemap_api.h -- Dynamic routemap API definitions.
*
* May 2003, Tanya Shastri
*
* Copyright (c) 2003, 2005-2009, 2011, 2013, 2015, 2018-2019 by cisco Systems, Inc.
* All rights reserved.
*-----
*/
```

Found in path(s):

```
*/opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/include/routemap_api.h
No license file was found, but licenses were detected in source scan.
```

```
/*
*-----
* msg_routemap.c -- Message system definitions for Route-map
*
* Copyright (c) 2003, 2007-2008 by cisco Systems, Inc.
* All rights reserved.
*-----
*/
```

Found in path(s):

```
*/opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/src/msg_routemap.c
No license file was found, but licenses were detected in source scan.
```

```
/* $Id$
* $Source$
*-----
* iprouting_init_ionized.c - ION specific IP Routing Protocol support.
*
* September 2001, Chandra Appanna
*
* Copyright (c) 2001-2012 by cisco Systems, Inc.
* All rights reserved.
*-----
* $Log$
*-----
* $Endlog$
*/
```

Found in path(s):

```
*/opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/src/iprouting_init_ionized.c
No license file was found, but licenses were detected in source scan.
```

```
/* $Id$
* $Source$
*-----
```

```
* IP routing clear commands
*
* May 1993, Robert Widmer
*
* Copyright (c) 1993-1999, 2001-2002, 2004-2010 by cisco Systems, Inc.
* All rights reserved.
*
*-----
* $Log$
*-----
* $Endlog$
*/
```

Found in path(s):

`/opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/src/exec_clear_ip_routing.h`

No license file was found, but licenses were detected in source scan.

```
/* $Id$
* $Source$
*-----
* iprouting_debug.c -- Debugging routines for IP routing
*
* May 1993, John Bashinski
*
* Copyright (c) 1993-2010, 2019 by Cisco Systems, Inc.
* All rights reserved.
*-----
* $Log$
*-----
* $Endlog$
*/
```

Found in path(s):

`/opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/src/iprouting_debug.c`

No license file was found, but licenses were detected in source scan.

```
/*
*
*-----
* Generic route tag list support.
*
* June 2011, Karthik Subramaniam
*
* Copyright (c) 1997-2008, 2010-2012 by cisco Systems, Inc.
* All rights reserved.
*-----
* $Endlog$
*/
```

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/include/routetag\_list.h

No license file was found, but licenses were detected in source scan.

/\*

\*-----

\* C F G \_ R O U T E R \_ B F D . H

\*

\* Copyright (c) 2004-2008, 2010-2011, 2015 by cisco Systems, Inc.

\* All Rights Reserved

\*-----

\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/cfg\_router\_bfd.h

No license file was found, but licenses were detected in source scan.

/\*

\*-----

\* route\_map\_ion.h - Route map support data structures specific to ION.

\*

\* January 2002, Siva Yaragalla

\*

\* Copyright (c) 2002-2009, 2011 by cisco Systems, Inc.

\* All rights reserved.

\*-----

\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/internal\_inc/route\_map\_ion.h

No license file was found, but licenses were detected in source scan.

/\*

\*-----

\* network\_constants.h -- General Networking Constants

\*

\* June 2002, interest-idb

\*

\* Copyright (c) 2002-2004, 2007-2008 by cisco Systems, Inc.

\* All rights reserved.

\*

\*-----

\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/include/network\_constants.h



No license file was found, but licenses were detected in source scan.

```
/*-----  
* route3_blob.c  
*  
* IOS and blob specific route3.c parser functions.  
*  
* March 2002, Victor Kamensky  
*  
* Copyright (c) 2002-2003, 2005, 2007-2008 by cisco Systems, Inc.  
* All rights reserved.  
*-----  
*/
```

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/route3\_blob.c

No license file was found, but licenses were detected in source scan.

```
/* $Id: cfg_router.h,v 3.2.60.2 1996/08/12 16:03:38 widmer Exp $  
* $Source: /release/112/cvs/Xsys/iprouting/cfg_router.h,v $  
*-----  
* C F G _ R O U T E R . H  
*  
* Enter router subcommand mode  
*  
* Copyright (c) 1992-2002, 2005, 2007-2009, 2015, 2017-2018 by cisco Systems, Inc.  
* All rights reserved.  
*-----  
* $Log: cfg_router.h,v $  
* Revision 3.2.60.2 1996/08/12 16:03:38 widmer  
* CSCdi65725: Create Eolns macro that defaults csb->which to 0  
* Branch: California_branch  
* Add Eolns and Nvgenns macro that default csb->which to 0  
* Remove hidden keyword help strings  
*  
* Revision 3.2.60.1 1996/04/15 21:17:43 bcole  
* CSCdi54649: IP Host Modularity, IP Automatic Stub Routing feature  
* commit  
* Branch: California_branch  
*  
* Revision 3.2 1995/11/17 17:31:56 hampton  
* Remove old  
entries from the RCS header logs.  
*  
* Revision 3.1 1995/11/09 12:05:20 shaker  
* Bump version numbers from 2.x to 3.x.  
*  
* Revision 2.1 1995/07/01 12:15:46 tli
```

\* CSCdi36508: Rationalize parser file placement, part I

\* Rationalize iprouting

\*

\* Revision 2.1 1995/06/07 22:12:17 hampton

\* Bump version numbers from 1.x to 2.x.

\*

\*-----

\* \$Endlog\$

\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/cfg\_router.h

No license file was found, but licenses were detected in source scan.

/\*

\*-----

\* routemap\_debug\_flags.h -- Routemap debugging support

\*

\* July 1998, Wilber Su

\*

\* Copyright (c) 1998, 2004, 2007-2008, 2014 by cisco Systems, Inc.

\* All rights reserved.

\*-----

\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/include/routemap\_debug\_flags.h

No license file was found, but licenses were detected in source scan.

/\*

\*-----

\* IOS prefix list support.

\*

\* March 2005, Sarath Chandran

\*

\* Copyright (c) 2005, 2007-2008 by cisco Systems, Inc.

\* All rights reserved.

\*-----

\*

\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/ip\_prefixlist\_ios.c

No license file was found, but licenses were detected in source scan.

/\*

\*-----

\* cfg\_router\_auto\_summary.h

```
*
* October 1993
*
* Copyright (c) 1993-1996, 1999-2009 by cisco Systems, Inc.
* All rights reserved.
*
* Supports the router subcommand "auto-summary". Configures auto aggregation
* of routing information to the network number level.
*-----
*/
```

Found in path(s):

```
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-
tar/iprouting_cmn/internal_inc/cfg_router_auto_summary.h
No license file was found, but licenses were detected in source scan.
```

```
/* $Id$
* $Source$
*-----
* router_topology_chain.c - Parser chains of router topology sub mode
*   for multi-topology routing support
* Sept 2004, Mercia Zheng
*
* Copyright (c) 2004-2010, 2019 by cisco Systems, Inc.
* All rights reserved.
*-----
* $Log$
*-----
* $Endlog$
*/
```

Found in path(s):

```
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/src/router_topology_chain.c
No license file was found, but licenses were detected in source scan.
```

```
/*-----
* routing_context.c
*
* This file has global definitions for routing context support
* common to blob and iprouting proceses.
*
* March 2009, Derek Yeung
*
* Copyright (c) 2009 by cisco Systems, Inc.
* All rights reserved.
*-----
*/
```

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/routing\_context.c

No license file was found, but licenses were detected in source scan.

/\* \$Id: cfg\_routemap\_set\_policy.h,v 3.3.52.1 1996/05/21 09:53:12 thille Exp \$

\* \$Source: /release/112/cvs/Xsys/iprouting/cfg\_routemap\_set\_policy.h,v \$

\*-----

\* cfg\_routemap\_set\_policy.h -- Policy specific route map clauses

\*

\* Mar 1995 Tony Li

\*

\* Copyright (c) 1995-1996, 2000, 2002, 2004, 2007-2009 by cisco Systems, Inc.

\* All rights reserved.

\*-----

\* \$Log: cfg\_routemap\_set\_policy.h,v \$

\* Revision 3.3.52.1 1996/05/21 09:53:12 thille

\* CSCdi51599: multiple /interface/ literals bloat code.

\* Branch: California\_branch

\* Save another 392 bytes by doing away with duplicate literals.

\*

\* Revision 3.3 1995/11/28 19:50:39 widmer

\* CSCdi44251: Replace Ifelse(csb->in\_help)/Eval with Func

\*

\* Revision 3.2 1995/11/17 17:31:55 hampton

\* Remove old entries from the RCS header logs.

\*

\* Revision 3.1 1995/11/09 12:05:18 shaker

\* Bump version numbers from 2.x to 3.x.

\*

\* Revision 2.3 1995/06/21 18:16:03 widmer

\* CSCdi36227: Fix parse chain alternates

\*

\* Revision 2.2 1995/06/15 15:18:47 widmer

\* CSCdi35889: parser transition structures should be static

\*

\* Revision 2.1 1995/06/07 21:05:42 hampton

\* Bump version numbers from 1.x to 2.x.

\*

\*-----

\* \$Endlog\$

\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-

tar/iprouting\_cmn/include/cfg\_routemap\_set\_policy.h

No license file was found, but licenses were detected in source scan.

/\*

```
*-----
* route_map_registry.h -- Registration Points for Route Maps support in ION
*
* July 2001, Siva Yaragalla
*
* Copyright (c) 2001, 2003, 2005, 2007-2008 by cisco Systems, Inc.
* All rights reserved.
*-----
*/
```

Found in path(s):

```
*/opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/include/route_map_registry.h
No license file was found, but licenses were detected in source scan.
```

```
/*
*-----
* route_map_nbcmn.c -- Route map support non-Blob common routines
*
* October 2001, Siva Yaragalla
*
* Copyright (c) 2001-2013, 2018, 2020 by cisco Systems, Inc.
* All rights reserved.
*-----
*/
```

Found in path(s):

```
*/opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/src/route_map_nbcmn.c
No license file was found, but licenses were detected in source scan.
```

```
/*-----
* routing_context.h - Routing Context library API
*
* March 2009, Derek Yeung
*
* Copyright (c) 2009 by cisco Systems, Inc.
* All rights reserved.
*-----
*/
```

Found in path(s):

```
*/opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/include/routing_context.h
No license file was found, but licenses were detected in source scan.
```

```
/*
*-----
* routemap_track_ios.c -- Route map support for tracking
*
* Functions shared by rp & vip.
*
*/
```

\* March 2003 Shyan Wignarajah

\*

\* Copyright (c) 2003-2010, 2013-2014, 2016 by cisco Systems, Inc.

\* All rights reserved.

\*-----

\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/routemap\_track\_ios.c

No license file was found, but licenses were detected in source scan.

/\*

\*-----

\* IP routing table flap statistics collection facility.

\*

\* Nov 1996, Ravi Chandra

\*

\* Copyright (c) 1995-1998, 2001-2005, 2007-2010 by cisco Systems, Inc.

\* All rights reserved.

\*-----

\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/iprouting\_stats.c

No license file was found, but licenses were detected in source scan.

/\*

\*-----

\* route\_capability.h

\*

\* August 2003, Peter Psenak

\*

\* Copyright (c) 2003-2004, 2007-2009, 2011, 2015 by Cisco Systems, Inc.

\* All rights reserved.

\*-----

\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/include/route\_capability.h

No license file was found, but licenses were detected in source scan.

/\*-----

\* route\_map\_registry.c

\*

\* July 2001, Siva Yaragalla

\*

\* Copyright (c) 2001, 2003, 2007-2008 by cisco Systems, Inc.

\* All rights reserved.

```
*-----  
*/
```

Found in path(s):

```
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/src/route_map_registry.c  
No license file was found, but licenses were detected in source scan.
```

```
/* $Id$  
* $Source$  
*-----  
* cfg_routemap_set_ip.h -- IP specific route-map clauses  
*  
* Mar 1995 Tony Li  
*  
* Copyright (c) 1995-1998, 2000-2004, 2006-2013, 2016, 2019 by cisco Systems, Inc.  
* All rights reserved.  
*-----  
* $Log$  
*-----  
* $Endlog$  
*/
```

Found in path(s):

```
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/src/cfg_routemap_set_ip.h  
No license file was found, but licenses were detected in source scan.
```

```
/*  
*-----  
* routemap_internal.h  
*  
* Route map support data structures.  
* To be included only by routemap code.  
*  
* Copyright (c) 1986-2003, 2005-2009, 2011, 2013-2015, 2018 by cisco Systems, Inc.  
* All rights reserved.  
*-----  
*/
```

Found in path(s):

```
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/include/routemap_internal.h  
No license file was found, but licenses were detected in source scan.
```

```
/* $Id: cfg_ip_prefixlist.h,v 3.1.2.2 1998/02/23 19:43:42 enkechen Exp $  
* $Source: /release/111/cvs/Xsys/ip/cfg_ip_prefixlist.h,v $  
*-----  
* cfg_ip_prefix.h -- IP Prefix List Parser Commands  
*  
* June 1997, Enke Chen
```

```

*
* Copyright (c) 1997-2001, 2004, 2007-2008, 2019 by cisco Systems, Inc.
* All rights reserved.
*-----
* $Log: cfg_ip_prefixlist.h,v $
* Revision 3.1.2.2 1998/02/23 19:43:42 enkechen
* CSCdj75270: Prefix-list: optimization for downloading large lists
* Branch: FIB_branch
*
* Revision 3.1.2.1 1997/12/17 21:36:57 enkechen
* CSCdj61356: Prefix-list - facility for efficient route filtering
* Branch: FIB_branch
*
* Revision 3.1 1997/12/17 01:46:33 enkechen
* Start with the new file.
*
*-----
* $Endlog$
*/

```

Found in path(s):

```

* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/src/cfg_ip_prefixlist.h
No license file was found, but licenses were detected in source scan.

```

```

/* $Id$
* $Source$
*-----
* cfg_router_flash-threshold.h
*
* January 1998, 2001 Dawn Li
*
* Copyright (c) 1998-1999, 2001, 2007-2008 by cisco Systems, Inc.
* All rights reserved.
*-----
* $Log$
*-----
* $Endlog$
*/

```

Found in path(s):

```

* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/internal_inc/cfg_router_flash-
threshold.h
No license file was found, but licenses were detected in source scan.

```

```

/*
*-----
* routemap_ios.c -- Route map support routines that can be shared
* by RP and VIP/LC

```



\*  
\* July 1998 Wilber Su  
\*  
\* Copyright (c) 1998-2020 by cisco Systems, Inc.  
\* All rights reserved.  
\*-----  
\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/routemap\_ios.c  
No license file was found, but licenses were detected in source scan.

/\*  
\*-----  
\* policylist\_ios.c - IOS stubs for notification routines  
\*           in policylist code  
\*  
\* Jun 2005, Tony P. Ambalathingal  
\*  
\* Copyright (c) 2003, 2005, 2007-2008 by cisco Systems, Inc.  
\* All rights reserved.  
\*-----  
\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/policylist\_ios.c  
No license file was found, but licenses were detected in source scan.

/\*  
\*-----  
\* route\_map\_http\_ion.c  
\*  
\* March, 2003 Phil Winterfield  
\*  
\*  
\* Copyright (c) 2003-2004, 2006-2008 by cisco Systems, Inc.  
\* All rights reserved.  
\*-----  
\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/route\_map\_http\_ion.c  
No license file was found, but licenses were detected in source scan.

/\*-----  
\* route\_map\_globs.c  
\*  
\* This file has the route map globals common to blob (for lc images)

```
* and routing process(for routing images).
*
* Copyright (c) 2002-2005, 2007-2008 by cisco Systems, Inc.
* All rights reserved.
*-----
*/
```

```
Found in path(s):
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/src/route_map_globs.c
No license file was found, but licenses were detected in source scan.
```

```
# All rights reserved.
```

```
Found in path(s):
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-
tar/iprouting_cmn/include/reg/route_map_registry.reg
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-
tar/iprouting_cmn/include/reg/router_topology_registry.reg
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/makefile
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-
tar/iprouting_cmn/include/reg/ion_iprouting_cmd_registry.reg
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-
tar/iprouting_cmn/include/reg/router_af_actions_registry.reg
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/include/.signature/makefile
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-
tar/iprouting_cmn/include/reg/routing_context_registry.reg
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/include/reg/iprouting_registry.reg
*
/opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/include/reg/lfafr_registry.reg
No license file was found, but licenses were detected in source scan.
```

```
/*
*-----
* ip_prefixlist_ion.h - IP Prefix Lists support for ION
*
* June 2002, Siva Yaragalla
*
* Copyright (c) 2002, 2005, 2007-2017 by cisco Systems, Inc.
* All rights reserved.
*-----
*/
```

```
Found in path(s):
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/include/ip_prefixlist_ion.h
No license file was found, but licenses were detected in source scan.
```

```
/* $Id: cfg_router_distribute.h,v 3.3.50.2.6.1 1996/09/12 19:08:19 perry1 Exp $
* $Source: /release/112/cvs/Xsys/iprouting/cfg_router_distribute.h,v $
```

```

*-----
* CFG_ROUTER_DISTRIBUTE.H
*
* Copyright (c) 1992-2001, 2003-2012, 2015-2016, 2018 by cisco Systems, Inc.
* All Rights Reserved
*-----
* $Log: cfg_router_distribute.h,v $
* Revision 3.3.50.2.6.1 1996/09/12 19:08:19 perryl
* Branch: Att-branch
* Allow virtual-access interface for distribute-list
*
* Revision 3.3.50.2 1996/08/12 16:03:44 widmer
* CSCdi65725: Create Eolns macro that defaults csb->which to 0
* Branch: California_branch
* Add Eolns and Nvgenns macro that default csb->which to 0
* Remove hidden keyword help strings
*
* Revision 3.3.50.1 1996/05/04 01:21:18 wilber
* Branch: California_branch
*
* Constrained Multicast Flooding
* - Define MOSPF hello option bit.
*
* Name Access List
*
* Revision 3.3 1995/12/04 06:47:13 tli
* CSCdi43559: IP: distribute-list 101 out should work
*
* Revision 3.2 1995/11/17 17:32:10 hampton
* Remove old entries from the RCS header logs.
*
* Revision 3.1 1995/11/09 12:05:34 shaker
* Bump version numbers from 2.x to 3.x.
*
* Revision 2.1 1995/07/01 12:15:52 tli
* CSCdi36508: Rationalize parser file placement, part I
* Rationalize iprouting
*
* Revision 2.1 1995/06/07 22:12:36 hampton
* Bump version numbers from 1.x to 2.x.
*
*-----
* $Endlog$
*/

```

Found in path(s):

```

* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-
tar/iprouting_cmn/internal_inc/cfg_router_distribute.h

```

No license file was found, but licenses were detected in source scan.

```
/*
*-----
* policylist_blob.c - Routines to handle policy-list commands.
*     Common for IOS and ION Blob.
*
* November 2003, Siva Yaragalla
*
* Copyright (c) 2003-2008, 2010 by cisco Systems, Inc.
* All rights reserved.
*-----
*/
```

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/policylist\_blob.c

No license file was found, but licenses were detected in source scan.

```
/*-----
* ip_stats.c - IP for topology aware stats
*
* April 2006, Jonsky Hsu
*
* Copyright (c) 2006-2010 by cisco Systems, Inc.
* All rights reserved.
*-----
*/
```

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/ip\_stats.c

No license file was found, but licenses were detected in source scan.

```
/*-----
* IP routemap test commands
*
* May 2003, Tanya Shastri
*
* Copyright (c) 2003, 2005-2008, 2011-2013, 2015, 2018-2019 by cisco Systems, Inc.
* All rights reserved.
*-----
*/
```

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/exec\_test\_ip\_routemap.h

No license file was found, but licenses were detected in source scan.

```
/*-----  
* route_map_def.h - Route Map Tyep Definition  
*  
* Feb, 2006 Allen Hu  
*  
* Copyright (c) 2006-2008, 2017 by cisco Systems, Inc.  
* All rights reserved.  
*-----  
*/
```

Found in path(s):

```
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/include/route_map_def.h  
No license file was found, but licenses were detected in source scan.
```

```
/*-----  
* ip_prefixlist_ionized.c - IP Prefix Lists support for ionized processes  
*  
* August 2001, Siva Yaragalla  
*  
* Copyright (c) 2001-2004, 2007-2008 by cisco Systems, Inc.  
* All rights reserved.  
*-----  
*/
```

Found in path(s):

```
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/src/ip_prefixlist_ionized.c  
No license file was found, but licenses were detected in source scan.
```

```
/*$Id: cfg_router_maximum-paths.h,v 3.2 1995/11/17 17:32:11 hampton Exp $  
*$Source: /swtal/cherf.111/ios/sys/iprouting/cfg_router_maximum-paths.h,v $  
*-----  
* cfg_router_maximum-paths.h  
*  
* <July> 1994 rchandra  
*  
* Copyright (c) 1994-2016, 2019 by cisco Systems, Inc.  
* All rights reserved.  
*-----  
*$Log: cfg_router_maximum-paths.h,v $  
* Revision 3.2 1995/11/17 17:32:11 hampton  
* Remove old entries from the RCS header logs.  
*  
* Revision 3.1 1995/11/09 12:05:39 shaker  
* Bump version numbers from 2.x to 3.x.  
*  
* Revision 2.1 1995/07/01 12:15:53 tli  
* CSCdi36508: Rationalize parser file placement, part I
```

```
* Rationalize iprouting
*
* Revision 2.1 1995/06/07 22:12:44 hampton
* Bump version numbers from 1.x to 2.x.
*
*-----
* $Endlog$
*/
```

Found in path(s):

```
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-
tar/iprouting_cmn/internal_inc/cfg_router_maximum-paths.h
No license file was found, but licenses were detected in source scan.
```

```
/*-----
* router_af_actions.h
*
* Router Address Family action declarations.
*
* May 2002, Victor Kamensky
*
* Copyright (c) 2002, 2004-2005, 2007-2008 by cisco Systems, Inc.
* All rights reserved.
*-----
*/
```

Found in path(s):

```
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/include/router_af_actions.h
No license file was found, but licenses were detected in source scan.
```

```
/*
*-----
* ion_iprouting_cmd_registry.c
*
* September 2001, Rashmi Shrivastava
*
* Copyright (c) 2001, 2003, 2005-2008 by cisco Systems, Inc.
* All rights reserved.
*-----
*/
```

Found in path(s):

```
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/src/ion_iprouting_cmd_registry.c
No license file was found, but licenses were detected in source scan.
```

```
/*
*-----
* protofltr.h
```

\*  
\* Routing protocol filter manager Public API definitions  
\*  
\* Jan 2006, Mercia Zheng  
\*  
\* Copyright (c) 2005-2011, 2020 by cisco Systems, Inc.  
\* All rights reserved.  
\*-----  
\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/internal\_inc/protofltr.h  
No license file was found, but licenses were detected in source scan.

/\* \$Id\$  
\* \$Source\$  
\*-----  
\* cfg\_router\_validate.h  
\*  
\* Nob to allow user to decide whether or not system should sanity check  
\* source IP address of incoming routing updates.  
\*  
\* March 1994, Bruce Cole  
\*  
\* Copyright (c) 1994-2002, 2007-2008 by cisco Systems, Inc.  
\* All rights reserved.  
\*  
\*-----  
\* \$Log\$  
\*-----  
\* \$Endlog\$  
\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/internal\_inc/cfg\_router\_validate.h  
No license file was found, but licenses were detected in source scan.

/\* \$Id: exec\_show\_route-map.h,v 3.2.60.1 1996/08/12 16:04:13 widmer Exp \$  
\* \$Source: /release/112/cvs/Xsys/iprouting/exec\_show\_route-map.h,v \$  
\*-----  
\* exec\_show\_route-map.h  
\*  
\* Copyright (c) 1993-1996, 1998, 2003-2008, 2011 by cisco Systems, Inc.  
\* All rights reserved.  
\*  
\* Command parsing chain for "show route-map".  
\*-----  
\* \$Log: exec\_show\_route-map.h,v \$

\* Revision 3.2.60.1 1996/08/12 16:04:13 widmer  
\* CSCdi65725: Create Eolns macro that defaults csb->which to 0  
\* Branch: California\_branch  
\* Add Eolns and Nvgenns macro that default csb->which to 0  
\* Remove hidden keyword help strings

\*  
\* Revision 3.2 1995/11/17 17:33:31 hampton  
\* Remove old entries from the RCS header logs.

\*  
\* Revision 3.1 1995/11/09 12:07:29 shaker  
\* Bump version numbers from 2.x to 3.x.

\*  
\*  
Revision 2.1 1995/07/01 12:16:22 tli

\* CSCdi36508: Rationalize parser file placement, part I  
\* Rationalize iprouting

\*  
\* Revision 2.1 1995/06/07 22:25:36 hampton  
\* Bump version numbers from 1.x to 2.x.

\*  
\*-----  
\* \$Endlog\$  
\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/include/exec\_show\_route-map.h  
No license file was found, but licenses were detected in source scan.

/\*  
\*-----  
\* routemap\_debug.h -- Routemap debugging support  
\*  
\* July 1998, Wilber Su  
\*  
\* Copyright (c) 1998, 2004, 2007-2008 by cisco Systems, Inc.  
\* All rights reserved.  
\*-----  
\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/include/routemap\_debug.h  
No license file was found, but licenses were detected in source scan.

/\*  
\*-----  
\* exec\_debug\_routemapapi.h -- Debugging for Route-map API  
\*  
\* May 2003, Tanya Shastri



\*  
\* Copyright (c) 2003-2004, 2007-2008, 2014 by cisco Systems, Inc.  
\* All rights reserved.  
\*-----  
\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-  
tar/iprouting\_cmn/include/exec\_debug\_routemapapi.h  
No license file was found, but licenses were detected in source scan.

/\* \$Id\$  
\* \$Source\$  
\*-----  
\* iprouting\_commands.h -- Support for extern command function decleration  
\*  
\* September 2001, Rashmi Shrivastava  
\*  
\* Copyright (c) 2001-2010, 2013, 2016 by cisco Systems, Inc.  
\* All rights reserved.  
\*-----  
\* \$Log\$  
\*-----  
\* \$Endlog\$  
\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-  
tar/iprouting\_cmn/internal\_inc/iprouting\_commands.h  
No license file was found, but licenses were detected in source scan.

/\*  
\* P A R S E R \_ D E F S \_ R O U T E R . H  
\*  
\* \$Id: parser\_defs\_router.h,v 3.1.40.2 1996/07/30 06:56:06 rchandra Exp \$  
\* \$Source: /release/112/cvs/Xsys/iprouting/parser\_defs\_router.h,v \$  
\*  
\* Copyright (c) 1985-2020 by cisco Systems, Inc.  
\* All rights reserved.  
\*  
\*-----  
\* \$Log: parser\_defs\_router.h,v \$  
\* Revision 3.1.40.2 1996/07/30 06:56:06 rchandra  
\* CSCdi64489: BGP: private-AS number cannot be removed from AS-path  
\* Branch: California\_branch  
\* - add 'neighbor x.x.x.x remove-private-AS' command.  
\* - add 'inbound' keyword to 'neighbor x.x.x.x soft-reconfiguration'  
\* command (CSCdi64487)

```

*
* Revision 3.1.40.1 1996/04/16 19:02:10 rchandra
* CSCdi54830: IP features commit
* Branch: California_branch
*
* Revision 3.1 1996/02/01 04:58:48 hampton
* Migrate files out of the parser directory. [CSCdi47717]
* Step 1: Create
copies of the files to be moved in their new location.
*
* Revision 3.2 1995/11/17 18:52:17 hampton
* Remove old entries from the RCS header logs.
*
* Revision 3.1 1995/11/09 12:56:05 shaker
* Bump version numbers from 2.x to 3.x.
*
* Revision 2.4 1995/08/28 21:14:47 rchandra
* CSCdi39436: BGP : Allow conditional unsuppression of suppressed routes
* - add 'neighbor x.x.x.x unsuppress-map <map>' command
*
* Revision 2.3 1995/07/06 23:11:21 rchandra
* CSCdi36759: BGP : Add conditional per neighbor default generation
* - add 'neighbor <x.x.x.x> default-originate route-map <tag>' command.
*
* Revision 2.2 1995/06/30 20:24:40 rchandra
* CSCdi36620: BGP requires IBGP neighbors to be fully meshed
*
* Revision 2.1 1995/06/07 22:31:08 hampton
* Bump version numbers from 1.x to 2.x.
*
*-----
* $Endlog$
*/

```

Found in path(s):

```
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/include/parser_defs_router.h
```

No license file was found, but licenses were detected in source scan.

```

#-----
# iproutingcmn_router_cmd.run-doxygen -- Run-doxygen Configuration File for
#           IP Routing Common Router Commands
#
# December 2007, Chi Iong Ansjory
#
# Copyright (c) 2007-2008, 2012 by cisco Systems, Inc.
# All rights reserved.
#-----

```

```

#-----
# RUN-DOXYGEN CONFIG FILE
#
# The variables defined in this file are used by the run-doxxygen script to
# execute doxygen and generate API documentation.
# This file will be sourced by a bourne shell script (/bin/sh)
# and so must follow the bourne shell script syntax
#
# This default configuration file is setup to work for the XOS project.
# If you want to reuse it, you must customize the properties below in order to
# make it work for your project.

#
# For more help contact doxygen-trolls@cisco.com
#-----

# The PROJECT_NAME variable is a single word (or a sequence of words surrounded
# by quotes) that should identify the project.

PROJECT_NAME=IPROUTINGCMN_ROUTER_CMD

# The PROJECT_NUMBER tag can be used to enter a project or revision number.
# This could be handy for archiving the generated documentation or
# if some version control system is used.

PROJECT_NUMBER=0.1.0.2

# The latest version of doxygen can be picked on the shared storage
# of the XOS/Component Framework team
# This executable can only run on linux 2.6 !!!!
#DOXYGEN=/auto/ios_comp/tools/doxygen-1.5.4/bin/doxygen
# Change this sanity check when doxygen will be supported for other hosts
#host=`uname -s`
#host_version=`uname -r`
#if [ $host != "Linux" ]; then
#  echo "Error: this wrapper can only be executed from Linux"
#  exit
#fi
#if [ $host_version \< "2.6" ]; then
#  echo "Error:
#  this wrapper requires Linux 2.6 or higher"
#  exit
#fi
#
#
# The location of the latex suite, this is needed only if the PDF
# generation option is used (-f)
# This binary is also only available on linux 2.6

```

```

#
#LATEX_PATH=/auto/ios_comp/tools/tetex/bin/i686-pc-linux-gnu
#LATEX_PATH=/usr/bin
#
#-----

# Use this variable to specify one or more wildcard pattern (like *.cpp
# and *.h) to filter out the source-files in the directories.

FILE_PATTERNS="ip_stats.h iprouting_debug.h router_af_actions_registry.reg.h"

# Exclude all internal defines (defines used to guard against multiple
# inclusions of the same header file)
EXCLUDE_SYMBOLS="__*_H__ reg_add* reg_delete* service_* reg_used* \
_reg_add* reg_inv_* reg_svr* _registry_* registry* REG_ELOG *_GEN_ID \
*_DEFINED *_argt *_res \
bgp* ospf* debug* route_debug* igrp* ipcache* ipproc* ip_mobile* netred* \
iprouting_acl DEBUG_ROUTING_PROT MISC_DEBUG_VARS \
DEBUG_ROUTING*
ALTP_BGF* __DEBUG_FLAGS* \
iprouting_debug_init iprouting_set_debug_array iprouting6_debug_list_command \
iprouting_debug_list_command iprouting_nsap_debug_list_command \
iprouting_debug_acl_notify \
reg_invoke_address_family_action_get_entries \
reg_invoke_address_family_action_nvgen_exit"

# When all symbols in a project start with a common prefix, by default all
# symbols will be put under the same header in the alphabetical index.
# The IGNORE_PREFIX tag can be used to specify one or more prefixes that
# should be ignored while generating the index headers. This will allow
# to spread the symbol index more evenly.

IGNORE_PREFIX="xos_XOS_"

# If the EXTRACT_ALL tag is set to YES doxygen will assume all entities in
# documentation are documented, even if no documentation was available.
# Private class members and static file members will be hidden unless
# the EXTRACT_PRIVATE and EXTRACT_STATIC tags are set to YES

EXTRACT_ALL=YES

# If the EXTRACT_STATIC tag is set to
# YES all static members of a file
# will be included in the documentation.

EXTRACT_STATIC=YES

# If the HIDE_UNDOC_MEMBERS tag is set to YES, Doxygen will hide all

```

# undocumented members of documented classes, files or namespaces.  
# If set to NO (the default) these members will be included in the  
# various overviews, but no documentation section is generated.  
# This option has no effect if EXTRACT\_ALL is enabled.

HIDE\_UNDOC\_MEMBERS=NO

#-----

# VARIABLES RELATED TO DOXYGEN OUTPUT

# This is the root of the destination folder (local variable)  
# Note that the archive area and the workspace area do not have to share the  
# same destination root.

DST\_BASE=/auto/ios\_comp/iprouting\_cmnn

# This is the URL through which the DST\_BASE folder can be accessed  
# from the intranet. This URL depends on the location of the storage.  
# Contact IT to find out the correct URL.

# (Local variable)

URL\_DST\_BASE=http://sjc-filer29a-web/projects/ios\_comp/iprouting\_cmnn

#

---- WORKSPACE AREA

# Relative path (to DST\_BASE) - used by OUTPUT\_WORKSPACE (local variable)

WORKSPACE\_FOLDER=api-docs

# This is the full pathame of the root under which all normal output folders will be located

OUTPUT\_WORKSPACE=\$DST\_BASE/\$WORKSPACE\_FOLDER

# This is the URL of the above OUTPUT\_WORKSPACE directory

# Only used for displaying where to access the documentation after the doxygen run

URL\_WORKSPACE=\$URL\_DST\_BASE/\$WORKSPACE\_FOLDER

# ---- ARCHIVE AREA

# Relative path (to DST\_BASE) - used by OUTPUT\_ARCHIVE (local variable)

ARCHIVE\_FOLDER=archive/xoslib

# This is the full pathame of the root under which all archive output folders will be located

OUTPUT\_ARCHIVE=\$DST\_BASE/\$ARCHIVE\_FOLDER

# This is the URL of the above OUTPUT\_WORKSPACE directory

# Only used for displaying where to access the documentation after the doxygen run

URL\_ARCHIVE=\$URL\_DST\_BASE/\$ARCHIVE\_FOLDER

#-----

#

VARIABLES RELATED TO DOXYGEN INPUT

```

# This is the root of the API source code (local variable)
SRC_BASE=/vob/cisco.comp/routing/iprouting_cmn

# This is the location of all the API public header files (or directories)
# In XOS all public header files are located in one directory
API_PUBLIC="$SRC_BASE/include $SRC_BASE/include/reg"
#API_PUBLIC="$SRC_BASE/include"

# This is the location of all the API source code, used with option -all only
# if you want to generate doxygen documentation for the source code
# (only useful for internal code review)
# Do not put the content of API_PUBLIC as it is added automatically
API_ALL="$SRC_BASE/shared $SRC_BASE/ios $SRC_BASE/iox $SRC_BASE/linux"

# The EXAMPLE_PATH tag can be used to specify one or more files or
# directories that contain example code fragments that are included (see
# the @example command).

```

```
EXAMPLE_PATH=$SRC_BASE/test/src
```

```

# The IMAGE_PATH tag can be used to specify one or more
# directories that contain image that are included
# in the documentation (see
# the @image command).
# This is only used/relevant if you have images in your API documentation.

```

```
IMAGE_PATH=$DST_BASE/api-docs-images
```

Found in path(s):

```

* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-
tar/iprouting_cmn/docs/iproutingcmn_router_cmd.run-doxygen
No license file was found, but licenses were detected in source scan.

```

```

/* $Id: cfg_router_network.h,v 3.2.60.1 1996/08/12 16:03:46 widmer Exp $
* $Source: /release/112/cvs/Xsys/iprouting/cfg_router_network.h,v $
*-----
* C F G _ R O U T E R _ N E T W O R K . H
*
* Copyright (c) 1992-2002, 2004-2009, 2013, 2018 by cisco Systems, Inc.
* All Rights Reserved
*-----
* $Log: cfg_router_network.h,v $
* Revision 3.2.60.1 1996/08/12 16:03:46 widmer
* CSCdi65725: Create Eolns macro that defaults csb->which to 0
* Branch: California_branch
* Add Eolns and Nvgenns macro that default csb->which to 0
* Remove hidden keyword help strings
*

```

```

* Revision 3.2 1995/11/17 17:32:18 hampton
* Remove old entries from the RCS header logs.
*
* Revision 3.1 1995/11/09 12:05:49 shaker
* Bump version numbers from 2.x to 3.x.
*
* Revision 2.2 1995/09/25 08:30:52
tli
* CSCdi40960: ISP jumbo patch 2
*
* Revision 2.1 1995/07/01 12:15:58 tli
* CSCdi36508: Rationalize parser file placement, part I
* Rationalize iprouting
*
* Revision 2.1 1995/06/07 22:12:56 hampton
* Bump version numbers from 1.x to 2.x.
*
*-----
* $Endlog$
*/

```

Found in path(s):

```

* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-
tar/iprouting_cmn/internal_inc/cfg_router_network.h

```

No license file was found, but licenses were detected in source scan.

```

/* $Id: exec_show_ip_prefixlist.h,v 3.1.2.1 1997/12/17 21:36:59 enkechen Exp $
* $Source: /release/111/cvs/Xsys/ip/exec_show_ip_prefixlist.h,v $
*-----
* exec_show_ip_prefixlist.h -- Show IP prefix lists
*
* July 1997 Enke Chen
*
* Copyright (c) 1994-1998, 2000-2001, 2007-2008, 2010 by cisco Systems, Inc.
* All rights reserved.
*-----
* $Log: exec_show_ip_prefixlist.h,v $
* Revision 3.1.2.1 1997/12/17 21:36:59 enkechen
* CSCdj61356: Prefix-list - facility for efficient route filtering
* Branch: FIB_branch
*
* Revision 3.1 1997/12/17 01:46:35 enkechen
* Start with the new file.
*
*-----
* $Endlog$
*/

```

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/exec\_show\_ip\_prefixlist.h

No license file was found, but licenses were detected in source scan.

/\*

\*-----

\* routemap\_track.h -- Route map support for tracking

\*

\* March 2003 Shyan Wignarajah

\*

\* Copyright (c) 2003, 2006-2008, 2010, 2012-2014 by cisco Systems, Inc.

\* All rights reserved.

\*-----

\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/include/routemap\_track.h

No license file was found, but licenses were detected in source scan.

/\*

\*-----

\* Generic prefix list support - prefix lists private header file

\*

\* March 2002, Siva Yaragalla

\*

\* Copyright (c) 2002, 2004, 2007-2008 by cisco Systems, Inc.

\* All rights reserved.

\*-----

\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/ip\_prefixlist\_private.h

No license file was found, but licenses were detected in source scan.

/\*

\* \$Id: route\_map.h,v 3.3.12.6 1996/05/04 01:22:42 wilber Exp \$

\* \$Source: /release/112/cvs/Xsys/iprouting/route\_map.h,v \$

\*-----

\* route\_map.h

\*

\* Route map support data structures.

\*

\* Copyright (c) 1986-2020 by cisco Systems, Inc.

\* All rights reserved.

\*-----

\* \$Log: route\_map.h,v \$

\* Revision 3.3.12.6 1996/05/04 01:22:42 wilber

\* Branch: California\_branch



\*  
 \* Constrained Multicast Flooding  
 \* - Define MOSPF hello option bit.  
 \*  
 \* Name Access List  
 \*  
 \* Revision 3.3.12.5 1996/04/16 19:02:23 rchandra  
 \* CSCdi54830: IP features commit  
 \* Branch: California\_branch  
 \*  
 \* Revision 3.3.12.4 1996/04/05 03:46:42 rchandra  
 \* CSCdi53755: BGP: flap dampening settings not flexible enough  
 \* Branch: California\_branch  
 \* - add route-map support to set flap dampening parameters  
 \*  
 \* Revision 3.3.12.3 1996/04/02 07:29:32 dkatz  
 \* CSCdi52277: Redistribution metric problems with IGRP/EIGRP  
 \* Branch: California\_branch  
 \* Always store canonical metrics scaled for IGRP, and make EIGRP do  
 \* its own scaling internally. Get the scaling right in all three  
 \* places.  
 \*  
 \* Revision 3.3.12.2 1996/03/28 23:59:20 rchandra  
 \* CSCdi52098: BGP: exact keyword not accepted by route-map in community  
 \* match  
 \* Branch: California\_branch  
 \* - fix my silly bug in handling exact community matching  
 \* - limit the range of valid community to 0xFFFF0000  
 \* - fix a cosmetic bug in show ip community-list  
 \*  
 \* Revision 3.3.12.1 1996/03/28 22:28:27 rchandra  
 \* CSCdi52880: BGP: generate error message for unsupported route-map  
 \* options  
 \* Branch: California\_branch  
 \* - generate error message when unsupported route-map option is used  
 \* - treat confederation EBGp neighbors similar to internal neighbors in  
 \* best path selection  
 \* - fix the bug in bgp\_compare\_med, so that  
 \* during MED comparison,  
 \* confederation information is skipped properly  
 \* - confederation EBGp paths should be inserted into the IP table with  
 \* internal distance  
 \* - do not consider common-AS neighbors as confederation neighbors  
 \* - during 'clear ip bgp dampening' avoid skipping paths  
 \* - undo the patch to the radix version walker  
 \*  
 \* Revision 3.3 1996/02/17 01:23:27 myeung  
 \* CSCdi49210: match tag clause does not work with static routes

```

*
* Revision 3.2 1995/11/17 17:37:17 hampton
* Remove old entries from the RCS header logs.
*
* Revision 3.1 1995/11/09 12:10:38 shaker
* Bump version numbers from 2.x to 3.x.
*
* Revision 2.4 1995/09/25 08:31:20 tli
* CSCdi40960: ISP jumbo patch 2
*
* Revision 2.3 1995/07/12 07:19:12 tli
* CSCdi36426: Policy routing will not disable on an interface
* - Policy routed packets were creating fastswitching cache entries.
* That's not till _next_ release.
* - Add counters to record packet and byte count on a per
route map entry
* basis.
* - Marketing identified a catastrophic deficiency. Implemented "set ip
* tos" and "set ip precedence" to cover this deficiency.
*
* Revision 2.2 1995/07/06 23:12:41 rchandra
* CSCdi36759: BGP : Add conditional per neighbor default generation
* - add 'neighbor <x.x.x.x> default-originate route-map <tag>' command.
*
* Revision 2.1 1995/06/07 21:10:57 hampton
* Bump version numbers from 1.x to 2.x.
*
*-----
* $Endlog$
*/

```

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/include/route\_map.h

No license file was found, but licenses were detected in source scan.

```

/* $Id$
* $Source$
*-----
* C F G _ R O U T E R _ D E F A U L T S . H
*
* Copyright (c) 1992-2011, 2013, 2015-2016, 2019 by cisco Systems, Inc.
* All Rights Reserved
*-----
* $Log$
*-----
* $Endlog$
*/

```

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/internal\_inc/cfg\_router\_default.h

No license file was found, but licenses were detected in source scan.

```
/*-----  
* iprouting_common.h - Basic types for IP routing (IPv4/IPv6)  
*  
* Contains:  
* - address family enum,  
* - tableid type and related macros  
* - topoid type and related macros  
* - private topoid definitions and APIs  
* - generic non-routing ID definitions/APIs  
*  
* Warning: this file should not have any dependency on other header file  
* except those where basic C types are defined.  
*  
* June 2003, Luc Revardel  
*  
* Copyright (c) 2003-2013, 2016, 2018, 2020 by cisco Systems, Inc.  
* All rights reserved.  
*-----  
*/
```

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/include/iprouting\_common.h

No license file was found, but licenses were detected in source scan.

```
/*-----  
* cfg_int_ip2_vnet_routing.h  
*  
* Interface VNET submode configuration IP commands.  
*  
* Copyright (c) 2009-2010 by cisco Systems, Inc.  
* All rights reserved.  
*-----  
*/
```

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/cfg\_int\_ip2\_vnet\_routing.h

No license file was found, but licenses were detected in source scan.

```
/* $Id$  
* $Source$  
*-----  
* iprouting_init_blob.c -- Partner file (in blob) for iprouting_init.c
```

```

*
* 27-August-2001, Fan Kong
*
* Copyright (c) 2001-2011, 2015, 2019 by cisco Systems, Inc.
* All rights reserved.
*-----
* $Log$
*-----
* $Endlog$
*/

```

Found in path(s):

```

* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/src/iprouting_init_blob.c
No license file was found, but licenses were detected in source scan.

```

```

/* $Id: exec_show_protocols.h,v 3.3.20.1 1996/08/12 16:04:12 widmer Exp $
* $Source: /release/112/cvs/Xsys/iprouting/exec_show_protocols.h,v $
*-----
* EXEC_SHOW_PROTOCOLS.H
*
* Copyright (c) 1992-1996, 2007-2009 by cisco Systems, Inc.
* All Rights Reserved
*-----
* $Log: exec_show_protocols.h,v $
* Revision 3.3.20.1 1996/08/12 16:04:12 widmer
* CSCdi65725: Create Eolns macro that defaults csb->which to 0
* Branch: California_branch
* Add Eolns and Nvgenns macro that default csb->which to 0
* Remove hidden keyword help strings
*
* Revision 3.3 1996/01/29 07:08:56 hampton
* Remove command number arguments passed to parse routines that only
* perform a single function. [CSCdi47717]
*
* Revision 3.2 1995/11/17 17:33:30 hampton
* Remove old entries from
the RCS header logs.
*
* Revision 3.1 1995/11/09 12:07:27 shaker
* Bump version numbers from 2.x to 3.x.
*
* Revision 2.1 1995/07/01 12:16:21 tli
* CSCdi36508: Rationalize parser file placement, part I
* Rationalize iprouting
*
* Revision 2.1 1995/06/07 22:25:21 hampton
* Bump version numbers from 1.x to 2.x.
*

```

```
*-----  
* $Endlog$  
*/
```

Found in path(s):

```
*/opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/src/exec_show_protocols.h
```

No license file was found, but licenses were detected in source scan.

```
/* $Id$  
* $Source$  
*-----  
* IP routing show commands  
*  
* May 1993, Robert Widmer  
*  
* Copyright (c) 1993-2003, 2005, 2007-2011, 2013, 2015-2020 by cisco Systems, Inc.  
* All rights reserved.  
*  
*-----  
* $Log$  
*-----  
* $Endlog$  
*/
```

Found in path(s):

```
*/opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/src/exec_show_ip_routing.h
```

No license file was found, but licenses were detected in source scan.

```
!-----  
! iproutingcmn_router_cmd.sesut - IPv4 Routing Common Router  
!     Commands Unit Test Routines  
!  
! December 2007, Chi Iong Ansjory  
!  
! Copyright (c) 2007 by cisco Systems, Inc.  
! All rights reserved.  
!-----  
! Sample unit test description file.  
! This file is used for generation of unit test module by SESUT.  
! See http://www.win-ses.cisco.com/unittest/sesut\_ios.html for  
! information about SESUT.  
!  
! Include a description of your test here.  
!  
! This is made up of many sections. Each section header starts with % in  
! first column. It is followed by the section identifier.  
! Lines that have '!' in the first column are considered comments.  
! Blank lines are ignored.
```

!  
! You can report success/failure of your test by calling the following  
! functions.  
! Call sesut\_<file prefix>\_testpass to indicate  
! test success.  
! void sesut\_<file prefix>\_testpass(void);  
! Call sesut\_<file prefix>\_testfail to indicate test failure.  
! void sesut\_<file prefix>\_testfail(const char \*fmt, ... );  
! The length of the formatted string should be less than or equal  
! to 255. Else it will be truncated.  
! Prototypes for these functions are included in the header file that  
! is generated by SESUT.

% Cflow

! Enter the files/subsystems in the unit under test.  
! These files will be instrumented for Cflow and MIF(if MIF is  
! available in your view). GDB flag -g is used during compilation.  
! cflow\_list=\$(sub\_mif) xyz.o \$(my\_subsys) abc.o  
! This list is ignored if ses\_iouut is used. ses\_iouut instruments all files  
! in UUT(defined by -old and -new options).

% MIF

! Enter MIF configuration  
! If MIF configuration is not specified and cflow\_list is specified  
! then a default MIF configuration is used.

!./os/free.c  
!./os/buffers.c  
!./os/chunk.c  
!-----  
!malloc  
!malloc\_aligned  
!malloc\_fast  
!malloc\_pcimem  
!malloc\_named  
!chunk\_malloc  
!getbuffer  
!pool\_getbuffer

%

API

! Include DTD configuration.  
! Not all features of DTD are available with SESUT yet.  
! List headers/text that contain prototypes for the functions to be tested  
! for robustness followed by a line consisting of '-'s followed by  
! the list of functions to be tested for robustness.  
! It is assumed that a .h file that includes all the text listed above  
! the line consisting of '-'s is self-compiling in the same context as

```

! the one used to compile the .sesut file and has the definitions of
! all the objects whose pointers are referenced.
!master.h
!../testtools/testtools.h
!../testtools/testtools_private.h
!<stdio.h>
!void mynewapi(int,int);
!-----
!mif_enable
!mif_disable
!mif_clear
!mif_lock
!mynewapi

% env
! Use this section to list object modules that are not
! part of the standard build but are used by the tests defined in this
! file. The text following "link:" is inserted
! into the final link step.
!link: xyz.o abc.o
!
! Use this section to add any special 'CFLAGS' needed to compile sesut
! generated test file
!cflags: -I../http/http_core/include
!cflags: -I../http/http_core/server
!cflags: -I../ios_http_core/config -I../http/http_core/lib
!cflags: -DEW_CONFIG_OPTION_CLIENT_CACHE
!
! You can specify functions to be executed before and after the test.
! pretest is executed before executing the unit test and the posttest is
! executed after executing the unit test. These are executed once regardless
! of the repeat count. The prototypes of these functions are expected to be:
! void <pretest>(void);
! void <posttest>(void);
! Define these functions in the 'model prolog' section. Note that these
! are optional. You can have one or both or none.
!pretest:config_my_feature
!posttest:validate_results
! If want want your pretest/posttest functions to receive same
! parameters as the test then specify the functions as:
!pretest_withparams:config_my_feature
!posttest_withparams:validate_results
!
The prototypes for these functions would be:
! void <pretest_withparams>(<types of parameters>)
! void <posttest_withparams>(<types of parameters>)
! Parameters are specified using "parameter:" keyword in % model" section.
! If both {pre|post}test and {pre|post}test_withparams are specified:

```

```

! pretest is executed before pretest_withparams.
! posttest is executed after posttest_withparams.

! You can specify a initializer/finalizer function to be executed
! at the time of test initialization/removal.
! Initializer is executed once during the lifetime of the current instance of
! the test. If the test is part of the image then the initializer is executed
! during subsystem initialization. If the test is a DLST(dynamically loaded)
! then the initializer is executed just after the dynamic load.
! The finalizer is executed when the test is removed (happens when the test is
! being replaced).
! Note that the subsystems in
the DLST are not initialized. You must list the
! subsystem init functions in the initializer function. Subsystem header is
! ignored for DLST's. You will not see the subsystems for DLST's listed in
! "show subsys" output.
! Use initializer to perform tasks like registry addition, memory allocation etc.
! Similarly use the finalizer to free these resources. This is an important
! consideration. Treat them like constructor/destructor for the DLST.
!
! The prototypes of these functions are expected to be:
! void <initializer>(void);
! void <finalizer> (void);
! Define these functions in the 'model prolog' section. Note that these
! are optional. You can have one or both or none.
!initializer:my_init
!finalizer:my_finit

% model prolog iou
! This code will be copied unchanged to the start of the generated .c file
! Include definitions, declarations, include statements that
! are used in the model
! You can include stubs for the functions that are not ready yet but are
! invoked.
!
! If you choose to have pretest and posttest functions include them here.
!
! "model prolog " accepts additional keywords.
! dt - This is meaningful in automation environments. If the test you are
! creating alters global state then use "dt" keyword. This informs
! automation framework that device should be reloaded prior to
! running next test.
! iou - Use this keyword if the test can be executed under IOU.
! preinit - Use this if the test executes prior to system initialization.
! % model prolog dt

#include IOS_INC(testtools/sesutlib_ios.h)

```



```

#include <routing/iprouting_cmn/include/ip_stats.h>
#include <routing/iprouting_cmn/include/iprouting_debug.h>
#include <routing/iprouting_cmn/include/router_af_actions_registry.h>

boolean sesrc;

% model digraph
! Describe the model. You have structured your test as a
! directed graph. Start keywords in column 1. Start the code at an
! offset(2TABS). This line("model digraph") can have an optional keyword.
! That is "vdag".
! This would generate testcases representing various
! acyclic paths leading from the start node. These tests cover all nodes.
! This does not guarantee that all the edges are covered.
! If your test model is a tree(or hierarchical) or a DAG(Directed Acyclic
! Graph) then you should use this keyword.
!% model digraph vdag
! There are three keywords. They are
! start node <nodeIdentifier> - Specify the start node in the model
! node <nodeIdentifier>: - Beginning of a node description.
!     Include descriptions for all edges starting at this node.
!     If there is code to be executed upon entry to this node
!     enter that immediatly following this line but before
!     entering any edge description.
! -><nodeIdentifier>: - Beginning of an edge description. This describes an
!     edge from the node to &lt;n>
! Choose <nodeIdentifier> to be descriptive. Examples: AVLTreeInsert,
!     DBSearch, DetachLine
!
! These identifiers are used during runtime to present execution times
! and other data.
! You can specify parameters for your unit test as follows:
!parameters:(uint interface, char* hostname="abc", uint subInterface=1)
!This should come before the line specifying the start node.
!The parameters can be used in the code for nodes/edges. The values
!for parameters are received via CLI or as a result of direct invocation of
!the generated function. Parameters can be of type 'uint'
!or 'char*'. If values for parameters are provided on CLI defaults are used.
! You should provide default values. If default values are not specified
! then the tool would assign default values. If the type is "uint" the
! default value is 0. Else(type char*) the default value is "".
! During automation the default values are used. Use descriptive names
! for parameters.
start node StartNode
! You can place initialization code that needs to be executed
! prior to entering the start node here.
node StartNode:

```

```

!
===== 6 APIs from ip_stats.h/ip_registry.reg =====

! 1. DEFINE show_ip_interface_with_topo

(void) sesut_execcommand(FALSE, "show ip interface e0/0 topology base stats");
printf("\n----- SESUT Test Reg: show_ip_interface_with_topo -----");

! 2. DEFINE clear_ip_interface_with_topo

(void) sesut_execcommand(FALSE, "clear ip interface e0/0 topology base stats");
printf("\n----- SESUT Test Reg: clear_ip_interface_with_topo -----");

! 3. DEFINE show_ip_traffic_with_topo

(void) sesut_execcommand(FALSE, "show ip traffic topology base");
printf("\n----- SESUT Test Reg: show_ip_traffic_with_topo -----");

! 4. DEFINE clear_ip_traffic_with_topo

(void) sesut_execcommand(FALSE, "clear ip traffic topology base");
printf("\n----- SESUT Test: clear_ip_traffic_with_topo -----");

! 5. DEFINE show_ip_interface_stats

(void) sesut_execcommand(FALSE, "show ip interface e0/0 stats");
printf("\n----- SESUT Test Reg: show_ip_interface_stats -----");

! 6. DEFINE clear_ip_interface_stats

(void) sesut_execcommand(FALSE,
"clear ip interface e0/0 stats");
printf("\n----- SESUT Test Reg: clear_ip_interface_stats -----");

! ===== 2 APIs from iprouting_debug.h =====

! 1. void
!  iprouting_debug_arr_ios_set_csb(struct parseinfo_ *csb);

!iprouting_debug_arr_ios_set_csb(NULL);
printf("\n----- SESUT Test: iprouting_debug_arr_ios_set_csb() -----");

! 2. void
!  iprouting_ios_call_debug_cmd(struct parseinfo_ *csb);

!iprouting_ios_call_debug_cmd(NULL);
printf("\n----- SESUT Test: iprouting_ios_call_debug_cmd() -----");

```

! ===== 1 API from router\_af\_actions\_registry.reg =====

! 1. DEFINE address\_family\_action\_named\_router REMOTE 3

```
sesrc = reg_invoke_address_family_action_named_router(NULL);  
printf("\n----- SESUT Test Reg: address_family_action_named_router -----");
```

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-  
tar/iprouting\_cmn/test/iproutingcmn\_router\_cmd.sesut  
No license file was found, but licenses were detected in source scan.

```
/*-----  
* route3_ionized.c  
*  
* ION specific route3.c parser functions.  
*  
* March 2002, Victor Kamensky  
*  
* Copyright (c) 2002, 2005-2008 by cisco Systems, Inc.  
* All rights reserved.  
*-----  
*/
```

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/route3\_ionized.c  
No license file was found, but licenses were detected in source scan.

```
/* $Id$  
* $Source$  
*-----  
* Registry for IP routing infrastructure in ION  
*  
* September 2001, Fan Kong  
*  
* Copyright (c) 2001-2003, 2005, 2007-2008, 2010 by cisco Systems, Inc.  
* All rights reserved.  
*-----  
* $Log$  
*-----  
* $Endlog$  
*/
```

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/include/iprouting\_registry.h  
No license file was found, but licenses were detected in source scan.

```
/* $Id: route_map.h,v 3.3.12.6 1996/05/04 01:22:42 wilber Exp $
```

```
* $Source: /release/112/cvs/Xsys/iprouting/route_map.h,v $
*-----
* policylist.h -- Policy list support data structures
*
* April 2000, Rex Fernando
*
* Copyright (c) 2000, 2002-2003, 2005, 2007-2011 by cisco Systems, Inc.
* All rights reserved.
*-----
*/
```

Found in path(s):

```
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/internal_inc/policylist.h
No license file was found, but licenses were detected in source scan.
```

```
/* $Id$
* $Source$
*-----
* cfg_routemap_set.h
*
* Process route-map set subcommands.
*
* Copyright (c) 1992-1998, 2001-2003, 2007-2019 by cisco Systems, Inc.
* All rights reserved.
*-----
* $Log$
*-----
* $Endlog$
*/
```

Found in path(s):

```
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/src/cfg_routemap_set.h
No license file was found, but licenses were detected in source scan.
```

```
/*
*-----
* routemap_ios_chain.c -- Route-map generic ios parse chains that
* will be in both RP and VIP/LC
*
* July 1998, Wilber Su
*
* Copyright (c) 1998, 2004-2008 by cisco Systems, Inc.
* All rights reserved.
*-----
*/
```

Found in path(s):

```
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/src/routemap_ios_chain.c
```

No license file was found, but licenses were detected in source scan.

```
/* $Id: cfg_router_distance.h,v 3.2.60.1 1996/05/04 01:21:16 wilber Exp $
* $Source: /release/112/cvs/Xsys/iprouting/cfg_router_distance.h,v $
*-----
* C F G _ R O U T E R _ D I S T A N C E . H
*
* The bgp version must come before the weight version so that both NVGEN
* and normal processing happen correctly.
*
* Copyright (c) 1992-1999, 2001-2010, 2015-2016, 2019-2020 by cisco Systems, Inc.
* All rights reserved.
*-----
* $Log: cfg_router_distance.h,v $
* Revision 3.2.60.1 1996/05/04 01:21:16 wilber
* Branch: California_branch
*
* Constrained Multicast Flooding
* - Define MOSPF hello option bit.
*
* Name Access List
*
* Revision 3.2 1995/11/17 17:32:05 hampton
* Remove old entries from the RCS header logs.
*
* Revision 3.1 1995/11/09 12:05:29 shaker
* Bump version
  numbers from 2.x to 3.x.
*
* Revision 2.1 1995/07/01 12:15:50 tli
* CSCdi36508: Rationalize parser file placement, part I
* Rationalize iprouting
*
* Revision 2.1 1995/06/07 22:12:30 hampton
* Bump version numbers from 1.x to 2.x.
*
*-----
* $Endlog$
*/
```

Found in path(s):

```
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-
tar/iprouting_cmn/internal_inc/cfg_router_distance.h
```

No license file was found, but licenses were detected in source scan.

```
/*
*-----
* protofltr_debug.c - Debug functions for protocol filter manager
```

\*  
\* Mercia Zheng, Jan 2006  
\*  
\* Copyright (c) 2006-2008 by cisco Systems, Inc.  
\* All rights reserved.  
\*-----  
\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/protofltr\_debug.c  
No license file was found, but licenses were detected in source scan.

/\*  
\*-----  
\* cfg\_router\_topology.h - router topology configuration mode command  
\*  
\* Sept 2004, Mercia Zheng  
\*  
\* Copyright (c) 2004-2005, 2007-2009, 2013 by cisco Systems, Inc.  
\* All rights reserved.  
\*-----  
\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/cfg\_router\_topology.h  
No license file was found, but licenses were detected in source scan.

/\*  
\*-----  
\* iprouting\_init\_ionblob.c -- IP Routing Init code for blog in ION only  
\*  
\* October 2001, Rashmi Shrivastava  
\*  
\* Copyright (c) 2001-2017 by cisco Systems, Inc.  
\* All rights reserved.  
\*-----  
\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/iprouting\_init\_ionblob.c  
No license file was found, but licenses were detected in source scan.

/\* \$Id\$  
\* \$Source\$  
\*-----  
\* Registry for routing context for RP and LC common code.  
\*  
\* September 2009, Derek Yeung

```
*
* Copyright (c) 2009 by cisco Systems, Inc.
* All rights reserved.
*-----
* $Log$
*-----
* $Endlog$
*/
```

Found in path(s):

```
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-
tar/iprouting_cmn/include/routing_context_registry.h
No license file was found, but licenses were detected in source scan.
```

```
/* $Id$
* $Source$
*-----
* Address Family configuration mode commands.
*
* April 1998, Bob Thomas
*
* Copyright (c) 1998-1999, 2007-2008 by cisco Systems, Inc.
* All rights reserved.
*-----
* $Log$
*-----
* $Endlog$
*/
```

Found in path(s):

```
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/internal_inc/cfg_af_mode.h
No license file was found, but licenses were detected in source scan.
```

```
/*-----
* ip_stats.h - IP for topology aware stats
*
* Feburary 2006, Jonsky Hsu
*
* Copyright (c) 2006-2008 by cisco Systems, Inc.
* All rights reserved.
*-----
*/
```

Found in path(s):

```
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/include/ip_stats.h
No license file was found, but licenses were detected in source scan.
```

```
/*
*-----
* protofltr_debug_flags.h -- Protofltr manager debug flags declarations
*
* Jan 2006, Mercia Zheng
*
* Copyright (c) 2005-2008 by Cisco Systems, Inc.
* All rights reserved.
*-----
*/
```

Found in path(s):

```
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/src/protofltr_debug_flags.h
No license file was found, but licenses were detected in source scan.
```

```
/*
*-----
* route_map_ionized.c - Route Maps support for IONized processes
*
* July 2001, Siva Yaragalla
*
* Route map subsystem for IOS style processes.
*
* Copyright (c) 2001-2009, 2011, 2016-2017 by cisco Systems, Inc.
* All rights reserved.
*-----
*/
```

Found in path(s):

```
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/src/route_map_ionized.c
No license file was found, but licenses were detected in source scan.
```

```
/* $Id$
* $Source$
*-----
* C F G _ R O U T E R _ T A B L E - M A P . H
*
* Copyright (c) 1993-1996, 1999, 2001, 2003, 2005-2019 by cisco Systems, Inc.
* All Rights Reserved
*-----
* $Log$
*-----
* $Endlog$
*/
```

Found in path(s):

```
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/src/cfg_router_table-map.h
```



No license file was found, but licenses were detected in source scan.

```
/*-----  
* iprouting_actions_registry.h  
*  
* Router address family actions registry.  
*  
* May 2002, Victor Kamensky  
*  
* Copyright (c) 2002-2003, 2007-2008, 2010 by cisco Systems, Inc.  
* All rights reserved.  
*-----  
*/
```

Found in path(s):

```
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-  
tar/iprouting_cmn/include/router_af_actions_registry.h  
No license file was found, but licenses were detected in source scan.
```

```
/* $Id$  
* $Source$  
*-----  
* routing_context_registry.c  
*  
* September 2009, Derek Yeung  
*  
* Copyright (c) 2009 by cisco Systems, Inc.  
* All rights reserved.  
*-----  
* $Log$  
*-----  
* $Endlog$  
*/
```

Found in path(s):

```
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/src/routing_context_registry.c  
No license file was found, but licenses were detected in source scan.
```

```
/* $Id: iprouting_actions.h,v 3.2 1995/11/17 17:34:39 hampton Exp $  
* $Source: /swtal/cherf.111/ios/sys/iprouting/iprouting_actions.h,v $  
*-----  
* IP routing specific parsing functions.  
*  
* August 1994, Bruce Cole  
*  
* Copyright (c) 1994, 2004-2008, 2015 by cisco Systems, Inc.  
* All rights reserved.  
*-----
```

```
* $Log: iprouting_actions.h,v $
* Revision 3.2 1995/11/17 17:34:39 hampton
* Remove old entries from the RCS header logs.
*
* Revision 3.1 1995/11/09 12:08:30 shaker
* Bump version numbers from 2.x to 3.x.
*
* Revision 2.1 1995/06/07 21:07:35 hampton
* Bump version numbers from 1.x to 2.x.
*
*-----
* $Endlog$
*/
```

Found in path(s):

```
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/internal_inc/iprouting_actions.h
No license file was found, but licenses were detected in source scan.
```

```
/*-----
* routemap_api.c -- Dynamic routemap APIs.
*
* May 2003, Tanya Shastri
*
* Copyright (c) 2003, 2005-2015, 2018-2019 by cisco Systems, Inc.
* All rights reserved.
*-----
*/
```

Found in path(s):

```
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/src/routemap_api.c
No license file was found, but licenses were detected in source scan.
```

```
/*
*-----
* router_topology_parse.h
*
* Router topology parser functions declarations.
*
* Sept 2004, Mercia Zheng
*
* Copyright (c) 2004-2008 by cisco Systems, Inc.
* All rights reserved.
*-----
*/
```

Found in path(s):

```
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/include/router_topology_parse.h
```

No license file was found, but licenses were detected in source scan.

```
/* $Id: exec_debug_ip_routing.h,v 3.3.20.1 1996/06/27 04:40:57 mikel Exp $
* $Source: /release/112/cvs/Xsys/iprouting/exec_debug_ip_routing.h,v $
*-----
* IP routing debug commands
*
* May 1993, Robert Widmer
*
* Copyright (c) 1993-2003, 2005-2009, 2019 by cisco Systems, Inc.
* All rights reserved.
*
*-----
* $Log: exec_debug_ip_routing.h,v $
* Revision 3.3.20.1 1996/06/27 04:40:57 mikel
* CSCdi37749: <debug ip eigrp> help wrong
* Branch: California_branch
* clean up ip-eigrp AS debugging
*
* Revision 3.3 1996/02/01 23:34:07 widmer
* CSCdi45325: Change Keyword/Set to use Keyword_Id macro
*
* Revision 3.2 1995/11/17 17:33:17 hampton
* Remove old entries from the RCS header logs.
*
* Revision 3.1 1995/11/09 12:07:09 shaker
* Bump version numbers from 2.x to 3.x.
*
* Revision 2.2 1995/11/08 21:06:22 shaker
* Merge Arkansas_branch into 11.1 mainline.
*
* Revision 2.1 1995/07/01 12:16:15 tli
* CSCdi36508: Rationalize parser file placement, part I
* Rationalize iprouting
*
* Revision 2.1 1995/06/07 22:18:58 hampton
* Bump version numbers from 1.x to 2.x.
*
*-----
* $Endlog$
*/
```

Found in path(s):

```
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/src/exec_debug_ip_routing.h
```

No license file was found, but licenses were detected in source scan.

```
/*
```

```
*-----
```

```

* protofltr_public.h
*
* Routing protocol filter manager Public API definitions
*
* Dec 2008, Mercia Zheng
*
* Copyright (c) 2008-2009 by cisco Systems, Inc.
* All rights reserved.
*-----
*/

```

Found in path(s):

```

* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/include/protofltr_public.h
No license file was found, but licenses were detected in source scan.

```

```

/* $Id: cfg_routemap_exit.h,v 3.2.60.1 1996/08/12 16:03:34 widmer Exp $
* $Source: /release/112/cvs/Xsys/iprouting/cfg_routemap_exit.h,v $
*-----
* cfg_routemap_exit.h
*
* exit - exit from route-map configuration mode
*
* Copyright (c) 1992-1996, 2007-2009 by cisco Systems, Inc.
* All Rights Reserved
*-----
* $Log: cfg_routemap_exit.h,v $
* Revision 3.2.60.1 1996/08/12 16:03:34 widmer
* CSCdi65725: Create Eolns macro that defaults csb->which to 0
* Branch: California_branch
* Add Eolns and Nvgenns macro that default csb->which to 0
* Remove hidden keyword help strings
*
* Revision 3.2 1995/11/17 17:31:42 hampton
* Remove old entries from the RCS header logs.
*
* Revision 3.1 1995/11/09 12:05:03 shaker
* Bump version numbers from 2.x to 3.x.
*
* Revision 2.1 1995/07/01
  12:15:44 tli
* CSCdi36508: Rationalize parser file placement, part I
* Rationalize iprouting
*
* Revision 2.1 1995/06/07 22:12:09 hampton
* Bump version numbers from 1.x to 2.x.
*
*-----
* $Endlog$

```

\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/cfg\_routemap\_exit.h  
No license file was found, but licenses were detected in source scan.

/\*

\*-----  
\* iprouting\_parser\_macros.h - Routing macros moved out of  
\* sys/parser/macros.h  
\*

\* November, 2004

\*

\* Copyright (c) 2004-2011, 2013, 2015, 2018 by cisco Systems, Inc.

\* All rights reserved.

\*-----

\*

\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-  
tar/iprouting\_cmn/include/iprouting\_parser\_macros.h  
No license file was found, but licenses were detected in source scan.

/\* \$Id: cfg\_router\_traffic-share.h,v 3.3.20.1 1996/08/12 16:03:58 widmer Exp \$

\* \$Source: /release/112/cvs/Xsys/iprouting/cfg\_router\_traffic-share.h,v \$

\*-----

\* cfg\_router\_traffic-share.h - parsing of the traffic-share command

\*

\* Oct 1993 Tony Li

\*

\* Copyright (c) 1993-1999, 2001-2002, 2004-2009, 2015 by cisco Systems, Inc.

\* All rights reserved.

\*-----

\* \$Log: cfg\_router\_traffic-share.h,v \$

\* Revision 3.3.20.1 1996/08/12 16:03:58 widmer

\* CSCdi65725: Create Eolns macro that defaults csb->which to 0

\* Branch: California\_branch

\* Add Eolns and Nvgenns macro that default csb->which to 0

\* Remove hidden keyword help strings

\*

\* Revision 3.3 1996/02/01 23:34:03 widmer

\* CSCdi45325: Change Keyword/Set to use Keyword\_Id macro

\*

\* Revision 3.2 1995/11/17 17:32:35 hampton

\* Remove old entries from the RCS header logs.

\*

\* Revision 3.1 1995/11/09 12:06:21 shaker

```

* Bump version numbers from 2.x to 3.x.
*
* Revision 2.1 1995/07/01 12:16:07 tli
* CSCdi36508: Rationalize parser file placement, part I
* Rationalize iprouting
*
* Revision 2.1 1995/06/07 22:13:22 hampton
* Bump version numbers from 1.x to 2.x.
*
*-----
* $Endlog$
*/

```

Found in path(s):

```

* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/internal_inc/cfg_router_traffic-
share.h

```

No license file was found, but licenses were detected in source scan.

```

/* $Id$
* $Source$
*-----
* route.h -- IP routing definitions
*
* 22-March-1986, Kirk Lougheed
*
* Copyright (c) 1986-2020 by cisco Systems, Inc.
* All rights reserved.
*-----
* $Log$
*-----
* $Endlog$
*/

```

Found in path(s):

```

* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/include/route.h

```

No license file was found, but licenses were detected in source scan.

```

/*
*-----
* routemap_ios_blob.c -- Route map support routines that can be shared
* by RP and VIP/LC
*
* October 14, 2001 Siva Yaragalla
*
* Copyright (c) 2001-2020 by cisco Systems, Inc.
* All rights reserved.
*-----
*/

```

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/routemap\_ios\_blob.c

No license file was found, but licenses were detected in source scan.

/\*

\*-----

\* protofltr\_debug.h -- Routing protocol filter manager debug flag

\*

\* Jan 2006, Mercia Zheng

\*

\* Copyright (c) 2005-2008 by Cisco Systems, Inc.

\* All rights reserved.

\*-----

\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/protofltr\_debug.h

No license file was found, but licenses were detected in source scan.

/\*

\* \$Id\$

\* \$Source\$

\*-----

\* route3.c -- Routing Support: Router command and related routines

\*

\* 15-June-1987, Kirk Lougheed

\*

\* Copyright (c) 1987-2021 by cisco Systems, Inc.

\* All rights reserved.

\*-----

\* \$Log\$

\*-----

\* \$Endlog\$

\*/

/\*

\* If its not a per-user distribute-list, we have to configure the  
\* route-map for pflist\_def too - its used to restore default when  
\* a per-user distribute-list is un-configured as well as for  
\* nvgen purposes. All this mess, only for the interface specific  
\* version.

\*/

/\*

\* This command is only valid for ipv4 and nsap AFs in BGP.  
\* However it is accepted for other BGP AFs  
\* for backwards compatibility. However, no action  
\* is taken for these

AFs and it is not nvgen'ed

- \* either. Check out cfg\_router\_default.h for
- \* more details.
- \*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/route3.c  
No license file was found, but licenses were detected in source scan.

```
/*
*-----
* cfg_router_maximum-paths.h
*
* 22-May-2016, Les Ginsberg
*
* Copyright (c) 2016 by cisco Systems, Inc.
* All rights reserved.
*-----
*/
```

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-  
tar/iprouting\_cmn/internal\_inc/cfg\_router\_maximum-sec-paths.h  
No license file was found, but licenses were detected in source scan.

```
/* $Id: cfg_router_metric.h,v 3.2 1995/11/17 17:32:13 hampton Exp $
* $Source: /swtcl/cherf.111/ios/sys/iprouting/cfg_router_metric.h,v $
*-----
* C F G _ R O U T E R _ M E T R I C . H
*
* Copyright (c) 1992-2002, 2004, 2006-2009 by cisco Systems, Inc.
* All Rights Reserved
*-----
* $Log: cfg_router_metric.h,v $
* Revision 3.2 1995/11/17 17:32:13 hampton
* Remove old entries from the RCS header logs.
*
* Revision 3.1 1995/11/09 12:05:41 shaker
* Bump version numbers from 2.x to 3.x.
*
* Revision 2.1 1995/07/01 12:15:54 tli
* CSCdi36508: Rationalize parser file placement, part I
* Rationalize iprouting
*
* Revision 2.1 1995/06/07 22:12:46 hampton
* Bump version numbers from 1.x to 2.x.
*
*-----
```



\* \$Endlog\$

\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/internal\_inc/cfg\_router\_metric.h

No license file was found, but licenses were detected in source scan.

/\* \$Id: ip\_routing.h,v 3.2 1995/11/17 17:34:12 hampton Exp \$

\* \$Source: /swtal/cherf.111/ios/sys/iprouting/ip\_routing.h,v \$

\*-----

\* ip\_routing.h -- Generic IP routing declarations

\*

\* Mar 1995 Tony Li

\*

\* Copyright (c) 1995, 1998, 2004, 2006-2008 by cisco Systems, Inc.

\* All rights reserved.

\*-----

\* \$Log: ip\_routing.h,v \$

\* Revision 3.2 1995/11/17 17:34:12 hampton

\* Remove old entries from the RCS header logs.

\*

\* Revision 3.1 1995/11/09 12:08:06 shaker

\* Bump version numbers from 2.x to 3.x.

\*

\* Revision 2.1 1995/06/07 21:07:05 hampton

\* Bump version numbers from 1.x to 2.x.

\*

\*-----

\* \$Endlog\$

\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/internal\_inc/ip\_routing.h

No license file was found, but licenses were detected in source scan.

/\* \$Id\$

\* \$Source\$

\*-----

\* Exit from BGP Address Family mode.

\*

\* Sept 1998, Bob Thomas

\*

\* Copyright (c) 1998-1999, 2007-2009 by cisco Systems, Inc.

\* All rights reserved.

\*-----

\* \$Log\$

\*-----

\* \$Endlog\$

\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/internal\_inc/cfg\_af\_exit.h  
No license file was found, but licenses were detected in source scan.

/\*

\*-----  
\* iprouting\_debug.h -- Debugging declarations for IP routing  
\*  
\* May 1993, John Bashinski  
\*  
\* Copyright (c) 1993-2010 by Cisco Systems, Inc.  
\* All rights reserved.

\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/include/iprouting\_debug.h  
No license file was found, but licenses were detected in source scan.

/\* \$Id: cfg\_router\_offset.h,v 3.3.20.4 1996/09/04 23:46:26 mikel Exp \$

\* \$Source: /release/112/cvs/Xsys/iprouting/cfg\_router\_offset.h,v \$

\*-----  
\* C F G \_ R O U T E R \_ O F F S E T . H

\*  
\* Copyright (c) 1992-1998, 2002, 2004-2008 by cisco Systems, Inc.  
\* All Rights Reserved

\*-----  
\* \$Log: cfg\_router\_offset.h,v \$

\* Revision 3.3.20.4 1996/09/04 23:46:26 mikel

\* CSCdi65889: offset-list doesnt work for EIGRP

\* Branch: California\_branch

\* Re-enable offset-list command as well as adding offset-list out support,  
\* and fix offset-list to work with access-lists

\*  
\* Revision 3.3.20.3 1996/08/12 16:03:48 widmer

\* CSCdi65725: Create Eolns macro that defaults csb->which to 0

\* Branch: California\_branch

\* Add Eolns and Nvgenns macro that default csb->which to 0

\* Remove hidden keyword

help strings

\*  
\* Revision 3.3.20.2 1996/05/04 01:21:23 wilber

\* Branch: California\_branch

\*  
\* Constrained Multicast Flooding

\* - Define MOSPF hello option bit.

```

*
* Name Access List
*
* Revision 3.3.20.1 1996/04/09 05:54:35 mikel
* CSCdi49628: EIGRP ignores outgoing offset-list
* Branch: California_branch
* disable offset-list command from eigrp router config
*
* Revision 3.3 1996/02/01 23:33:59 widmer
* CSCdi45325: Change Keyword/Set to use Keyword_Id macro
*
* Revision 3.2 1995/11/17 17:32:19 hampton
* Remove old entries from the RCS header logs.
*
* Revision 3.1 1995/11/09 12:05:53 shaker
* Bump version numbers from 2.x to 3.x.
*
* Revision 2.1 1995/07/01 12:15:58 tli
* CSCdi36508: Rationalize parser file placement, part I
* Rationalize iprouting
*
* Revision 2.1 1995/06/07 22:12:58 hampton
* Bump version numbers from 1.x to 2.x.
*
*-----
* $Endlog$
*/

```

Found in path(s):

```

*
/opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/internal_inc/cfg_router_offset.h
No license file was found, but licenses were detected in source scan.

```

```

#
#-----
# iprouting_api.enum - IP Routing public API enum definitions
#
# August 2009, Prashant Srinivas
#
# Copyright (c) 2009-2010 by cisco Systems, Inc.
# All rights reserved.
#-----
#

```

BEGIN IPROUTING\_API

```

#
# Enumeration of the possible reasons for disabling routing on an interface

```

```

#
# Note, string length of the LONG description, should be <= 16 chars,
#   and contain nothing but alfanumerical characters and _
#
ENUM routing_disable_flag_t

    ITEM ROUTING_DISABLE_FLAG_INT_IF
    LONG "Internal_IF"
    END ITEM

END ENUM

END

```

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/include/enum/iprouting\_api.enum  
No license file was found, but licenses were detected in source scan.

```

/*
*-----
* routemap_track.c -- Route map support for tracking
*           Functions which run on RP (not VIP).
*
* March 2003 Shyan Wignarajah
*
* Copyright (c) 2003-2008, 2013-2014 by cisco Systems, Inc.
* All rights reserved.
*-----
*/

```

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/routemap\_track.c  
No license file was found, but licenses were detected in source scan.

```

/* $Id
* $Source
*-----
* iprib_api_svr.c -- IP Routing Information Base (RIB) API definitions
*
* August-2001, Fan Kong
*
* Copyright (c) 2001-2012, 2019 by cisco Systems, Inc.
* All rights reserved.
*-----
* $Log
*-----
* $Endlog$
*/

```

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/iprib\_api\_svr.c

No license file was found, but licenses were detected in source scan.

```
/*-----  
* router_topology_registry.h  
*  
* Router topology registry.  
*  
* Sept 2004, Mercia Zheng  
*  
* Copyright (c) 2004, 2007-2008 by cisco Systems, Inc.  
* All rights reserved.  
*-----  
*/
```

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/internal\_inc/router\_topology\_registry.h

No license file was found, but licenses were detected in source scan.

```
/*-----  
* iprouting_parser_linkpoints.c - iprouting parser linkpoint defs.  
*  
* April, 2005  
*  
* Copyright (c) 2005, 2007-2008 by cisco Systems, Inc.  
* All rights reserved.  
*-----  
*/
```

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/iprouting\_parser\_linkpoints.c

No license file was found, but licenses were detected in source scan.

```
/*-----  
* routing_context_chain.c  
*  
* Parse chain file for routing context support.  
*  
* March 2009, Derek Yeung  
*  
* Copyright (c) 2009, 2015 by cisco Systems, Inc.  
* All rights reserved.  
*-----
```

\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/routing\_context\_chain.c

No license file was found, but licenses were detected in source scan.

/\* \$Id\$

\* \$Source\$

\*-----

\* cfg\_routemap\_match.h

\*

\* Process route-map match subcommands.

\*

\* Copyright (c) 1992-1999, 2002-2005, 2007-2012, 2018 by cisco Systems, Inc.

\* All rights reserved.

\*-----

\* \$Log\$

\*-----

\* \$Endlog\$

\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/cfg\_routemap\_match.h

No license file was found, but licenses were detected in source scan.

##

## content.lst file for iprouting\_cmn

## See EDCS-905060 for more details.

##

## Oct 2010, Manu Pathak

##

## Copyright (c) 2010-2011, 2016 by cisco Systems, Inc.

## All rights reserved.

##

syntax: 1.0.0

# iprouting\_cmn meta-source files

group: iprouting\_cmn-generic

{

enum:

    iprouting\_cmn/include/enum/iprouting\_api.enum

reg:

    iprouting\_cmn/include/reg/ion\_iprouting\_cmd\_registry.reg

    iprouting\_cmn/include/reg/iprouting\_registry.reg

    iprouting\_cmn/include/reg/lfafr\_registry.reg

    iprouting\_cmn/include/reg/route\_map\_registry.reg

```

    iprouting_cmn/include/reg/router_af_actions_registry.reg
    iprouting_cmn/include/reg/router_topology_registry.reg
    iprouting_cmn/include/reg/routing_context_registry.reg
}
# end of group: iprouting_cmn-generic

# iprouting_cmn source files
group: iprouting_cmn
{
    includes:
        ../generic/routing/iprouting_cmn/include
        $(COMPONENT_ROOT)/routing/iprouting_cmn/include
        $(COMPONENT_ROOT)/routing/iprouting_cmn/internal_inc
        $(COMPONENT_ROOT)/routing/iprouting_cmn/src
        $(COMPONENT_ROOT)/routing
        $(COMPONENT_ROOT)/posix/include
        $(IOS_SYSROOT)/ion/include
        $(IOS_SYSROOT)/crypto/ca
        $(IOS_SYSROOT)/crypto/ca/certcinc
        $(IOS_SYSROOT)/crypto/ca/bsafeinc
        $(IOS_SYSROOT)/crypto/ca/provider/include
    defines: CRYPTOCv5 CERTCv5
    cflags: -Wno-parentheses -Wno-uninitialized
    sub: ion_iprouting_cmd_registry
    {
        context: os==ion
        contains:
            iprouting_cmn/src/ion_iprouting_cmd_registry.c
    }
    sub: iprouting_blob
    {
        contains:
            iprouting_cmn/src/ip_routing.c
            iprouting_cmn/src/ip_stats.c
            iprouting_cmn/src/iprouting_actions.c
            iprouting_cmn/src/iprouting_chain.c
            iprouting_cmn/src/iprouting_debug.c
            iprouting_cmn/src/iprouting_init_blob.c
            iprouting_cmn/src/iprouting_setup.c
            iprouting_cmn/src/protofltr_debug.c
            iprouting_cmn/src/route3_blob.c
            iprouting_cmn/src/routemap_debug.c
            iprouting_cmn/src/router_af_chain.c
            iprouting_cmn/src/router_topology_chain.c
            iprouting_cmn/src/routing_context_chain.c
    }
    sub: iprouting_cmn
    {

```

```

contains:
    iprouting_cmn/include/msg_iproute.rc
    iprouting_cmn/src/iprouting_cmn.c
}
sub: iprouting_common_blob
{
    contains:
        iprouting_cmn/src/ip_prefixlist_chain.c
        iprouting_cmn/src/policylist_blob.c
        iprouting_cmn/src/route_map_blob.c
        iprouting_cmn/src/routemap_track.c
    }
sub: iprouting_common_ionblob
{
    context: os==ion
    contains:
        iprouting_cmn/src/ip_prefixlist_ionblob.c
        iprouting_cmn/src/route_map_ionblob.c
    }
sub: iprouting_common_ionized
{
    context: os==ion
    contains:
        iprouting_cmn/src/ip_prefixlist_ionized.c
        iprouting_cmn/src/policylist_ionized.c
        iprouting_cmn/src/route_map_ionized.c
    }
sub: iprouting_common_misc
{
    contains:
        iprouting_cmn/src/ip_prefixlist.c
        iprouting_cmn/src/msg_routemap.c
        iprouting_cmn/src/policylist.c
        iprouting_cmn/src/route_map.c
        iprouting_cmn/src/routetag_list.c
    }
sub: iprouting_common_nbcmn
{
    contains:
        iprouting_cmn/src/route_map_nbcmn.c
    }
sub: iprouting_common_nonblob
{
    contains:
        iprouting_cmn/src/ip_prefixlist_ios.c
        iprouting_cmn/src/policylist_ios.c
    }
sub: iprouting_init_ios

```



```

{
  contains:
    iprouting_cmn/src/iprouting_init_ios.c
}
sub: iprouting_ionblob
{
  context: os==ion
  contains:
    iprouting_cmn/src/iprouting_init_ionblob.c
    iprouting_cmn/src/iprouting_parse_blob.c
    iprouting_cmn/src/router_af_parse_blob.c
}
sub: iprouting_ionized
{
  context: os==ion
  contains:
    iprouting_cmn/src/iprouting_init_ionized.c
    iprouting_cmn/src/route3_ionized.c
}
sub: iprouting_misc
{
  contains:
    iprouting_cmn/src/routemap_api.c
    iprouting_cmn/src/routemap_api_util.c
    iprouting_cmn/src/routemap_internal.c
}
sub: iprouting_nonblob
{
  contains:
    iprouting_cmn/src/iprib_api_svr.c
    iprouting_cmn/src/iprouting_init.c
    iprouting_cmn/src/iprouting_stats.c
    iprouting_cmn/src/protofltr.c
    iprouting_cmn/src/route1.c
    iprouting_cmn/src/route2.c
    iprouting_cmn/src/route3.c
    iprouting_cmn/src/router_af_parse.c
    iprouting_cmn/src/router_topology_parse.c
}
sub: iprouting_parser
{
  contains:
    iprouting_cmn/src/iprouting_parser_linkpoints.c
}
sub: iprouting_registry
{
  contains:
    iprouting_cmn/src/iprouting_registry.c
}

```

```

}
sub: ipv4_subsys
{
  contains:
    iprouting_cmn/src/ipv4_subsys.c
}
sub: lfafrr_registry
{
  contains:
    iprouting_cmn/src/lfafrr_registry.c
}
sub: route_map_globs
{
  contains:
    iprouting_cmn/src/route_map_globs.c
}
sub: route_map_registry
{
  contains:
    iprouting_cmn/src/route_map_registry.c
}
sub: routemap_common_blob
{
  contains:
    iprouting_cmn/src/routemap_ios_blob.c
}
sub: routemap_common_ionized
{
  context: os==ion
  contains:
    iprouting_cmn/src/route_map_http_ion.c
}
sub: routemap_common_nonblob
{
  contains:
    iprouting_cmn/src/routemap_ios.c
    iprouting_cmn/src/routemap_track_ios.c
}
sub: routemap_ios_chain
{
  contains:
    iprouting_cmn/src/routemap_ios_chain.c
}
sub: routemap_lc_ipc
{
  context: os==ios
  contains:
    iprouting_cmn/src/route_map_globs.c
}

```

```

    iprouting_cmn/src/routemap_api.c
    iprouting_cmn/src/routemap_api_util.c
    iprouting_cmn/src/routemap_debug.c
    iprouting_cmn/src/routemap_internal.c
    iprouting_cmn/src/routemap_ios_chain.c
    iprouting_cmn/src/routetag_list.c
}
sub: router_af_actions_registry
{
    contains:
        iprouting_cmn/src/router_af_actions_registry.c
}
sub: router_topology_registry
{
    contains:
        iprouting_cmn/src/router_topology_registry.c
}
sub: routing_context
{
    contains:
        iprouting_cmn/src/routing_context.c
}
sub: routing_context_registry
{
    contains:
        iprouting_cmn/src/routing_context_registry.c
}
}
# end of group: iprouting_cmn

```

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/content.lst

No license file was found, but licenses were detected in source scan.

```

/* $Id$
* $Source$
*-----
* route1.c -- Routing Support: Common Routines
*
* 22-March-1986, Kirk Lougheed
*
* Copyright (c) 1986-2020 by cisco Systems, Inc.
* All rights reserved.
*-----
* $Log$
*-----
* $Endlog$
*/

```

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/route1.c

No license file was found, but licenses were detected in source scan.

/\*

\*

\*-----

\* Generic tag list support.

\*

\* June 2011, Karthik Subramaniam

\*

\* Copyright (c) 1997-2008, 2010-2012 by cisco Systems, Inc.

\* All rights reserved.

\*-----

\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/routetag\_list.c

No license file was found, but licenses were detected in source scan.

/\* \$Id: cfg\_routemap\_match\_policy.h,v 3.3 1995/11/28 19:50:34 widmer Exp \$

\* \$Source: /swt/cherf.111/ios/sys/iprouting/cfg\_routemap\_match\_policy.h,v \$

\*-----

\* cfg\_routemap\_match\_policy.h -- Route map match clauses for policy

\* routing.

\*

\* Mar 1995 Tony Li

\*

\* Copyright (c) 1995, 2001-2002, 2007-2009, 2014-2015 by cisco Systems, Inc.

\* All rights reserved.

\*-----

\* \$Log: cfg\_routemap\_match\_policy.h,v \$

\* Revision 3.3 1995/11/28 19:50:34 widmer

\* CSCdi44251: Replace Ifelse(csb->in\_help)/Eval with Func

\*

\* Revision 3.2 1995/11/17 17:31:48 hampton

\* Remove old entries from the RCS header logs.

\*

\* Revision 3.1 1995/11/09 12:05:10 shaker

\* Bump version numbers from 2.x to 3.x.

\*

\* Revision 2.3 1995/06/21 18:16:00 widmer

\* CSCdi36227: Fix parse chain alternates

\*

\* Revision 2.2 1995/06/15 15:18:44 widmer

\* CSCdi35889: parser transition structures should be static

\*

\* Revision 2.1 1995/06/07 21:05:32 hampton

\* Bump version numbers from 1.x to 2.x.

\*

\*-----

\* \$Endlog\$

\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-

tar/iprouting\_cmn/include/cfg\_routemap\_match\_policy.h

No license file was found, but licenses were detected in source scan.

/\*

\*-----

\* exec\_debug\_protofltr.h

\*

\* Jan 2006, Mercia Zheng

\*

\* Copyright (c) 2005-2009 by cisco Systems, Inc.

\*

\* All Rights Reserved

\*-----

\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/exec\_debug\_protofltr.h

No license file was found, but licenses were detected in source scan.

/\*-----

\* route3\_parse.h

\*

\* Route parser functions declarations.

\*

\* March 2002, Victor Kamensky

\*

\* Copyright (c) 2002, 2005-2008 by cisco Systems, Inc.

\* All rights reserved.

\*-----

\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/internal\_inc/route3\_parse.h

No license file was found, but licenses were detected in source scan.

/\* \$Id: cfg\_int\_ip2\_routing.h,v 3.2.60.1 1996/08/12 16:03:24 widmer Exp \$

\* \$Source: /release/112/cvs/Xsys/iprouting/cfg\_int\_ip2\_routing.h,v \$

\*-----

\* cfg\_int\_ip2\_routing.h

\*  
\* May 1994, Derek Yeung  
\*  
\* Copyright (c) 1993-1996, 1998-1999, 2007-2009 by cisco Systems, Inc.  
\* All rights reserved.  
\*  
\* IP routing interface commands that must be after the encapsulation command  
\* in NV order.

\*-----

\* \$Log: cfg\_int\_ip2\_routing.h,v \$  
\* Revision 3.2.60.1 1996/08/12 16:03:24 widmer  
\* CSCdi65725: Create Eolns macro that defaults csb->which to 0  
\* Branch: California\_branch  
\* Add Eolns and Nvgenns macro that default csb->which to 0  
\* Remove hidden keyword help strings

\*  
\* Revision 3.2 1995/11/17 17:31:23 hampton  
\* Remove old entries from the RCS header logs.

\*  
\* Revision 3.1 1995/11/09  
12:04:31 shaker  
\* Bump version numbers from 2.x to 3.x.

\*  
\* Revision 2.2 1995/08/04 03:07:45 dstine  
\* CSCdi37681: Need event logging for EIGRP

\*  
\* Revision 2.1 1995/07/01 12:15:32 tli  
\* CSCdi36508: Rationalize parser file placement, part I  
\* Rationalize iprouting

\*  
\* Revision 2.1 1995/06/07 22:05:27 hampton  
\* Bump version numbers from 1.x to 2.x.

\*  
\*-----

\* \$Endlog\$  
\*/

Found in path(s):

\*/opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/cfg\_int\_ip2\_routing.h  
No license file was found, but licenses were detected in source scan.

/\* \$Id: rouource\_commande\_map.c,v 3.4.10.11 1996/07/09 07:35:58 dawnli Exp \$  
\* \$Source: /release/112/cvs/Xsys/iprouting/route\_map.c,v \$  
\*-----  
\* route\_map.c -- Route map support routines.  
\*  
\* 23-January-1993  
\*

\* Copyright (c) 1986-2020 by cisco Systems, Inc.  
 \* All rights reserved.  
 \* -----  
 \* \$Log: route\_map.c,v \$  
 \* Revision 3.4.10.11 1996/07/09 07:35:58 dawnli  
 \* CSCdi57006: route-map in configuration are stored/displayed in reverse  
 \* order  
 \* Branch: California\_branch  
 \*  
 \* Revision 3.4.10.10 1996/06/28 23:19:51 hampton  
 \* Remove gratuitous casting. [CSCdi61655]  
 \* Branch: California\_branch  
 \*  
 \* Revision 3.4.10.9 1996/06/05 08:27:06 rchandra  
 \* CSCdi59547: Routemap: %SYS-4-REGEXP: NULL string parameter error  
 \* Branch: California\_branch  
 \* - do not pass null path to route\_map\_match\_aspath  
 \*  
 \* Revision 3.4.10.8 1996/06/03 23:24:12 ahh  
 \* CSCdi59119: IP: NAT should support named access-lists  
 \* And extended access-lists and non-contiguous address pools.  
 \* Branch: California\_branch  
 \*  
 \* Revision 3.4.10.7 1996/05/04 01:22:39 wilber  
 \* Branch: California\_branch  
 \*  
 \* Constrained Multicast Flooding  
 \* - Define MOSPF hello option bit.  
 \*  
 \* Name Access List  
 \*  
 \* Revision 3.4.10.6 1996/04/16 19:02:21 rchandra  
 \* CSCdi54830: IP features commit  
 \* Branch: California\_branch  
 \*  
 \* Revision 3.4.10.5 1996/04/05 03:46:40 rchandra  
 \* CSCdi53755: BGP: flap dampening settings not flexible enough  
 \* Branch: California\_branch  
 \* - add route-map support to set flap dampening parameters  
 \*  
 \* Revision 3.4.10.4 1996/04/02 07:29:30 dkatz  
 \* CSCdi52277: Redistribution metric problems with IGRP/EIGRP  
 \* Branch: California\_branch  
 \* Always store canonical metrics scaled for IGRP, and make EIGRP do  
 \* its own scaling internally. Get the scaling right in all  
 \* three  
 \* places.  
 \*

- \* Revision 3.4.10.3 1996/03/28 23:59:18 rchandra
- \* CSCdi52098: BGP: exact keyword not accepted by route-map in community
- \* match
- \* Branch: California\_branch
- \* - fix my silly bug in handling exact community matching
- \* - limit the range of valid community to 0xFFFF0000
- \* - fix a cosmetic bug in show ip community-list
- \*
- \* Revision 3.4.10.2 1996/03/28 22:28:25 rchandra
- \* CSCdi52880: BGP: generate error message for unsupported route-map
- \* options
- \* Branch: California\_branch
- \* - generate error message when unsupported route-map option is used
- \* - tread confederation EBGp neighbors similar to internal neighbors in
- \* best path selection
- \* - fix the bug in bgp\_compare\_med, so that during MED comparison,
- \* confederation information is skipped properly
- \* - confederation EBGp paths should be inserted into the IP table with
- \* internal distance
- \* - do not consider common-AS neighbors as confederation neighbors
- \* - during 'clear ip bgp dampening'
- avoid skipping paths
- \* - undo the patch to the radix version walker
- \*
- \* Revision 3.4.10.1 1996/03/18 20:29:32 gstovall
- \* Branch: California\_branch
- \* Elvis has left the building. He headed out to California, and took the
- \* port ready changes with him.
- \*
- \* Revision 3.2.26.3 1996/03/16 06:58:25 gstovall
- \* Branch: DeadKingOnAThrone\_branch
- \* Make the king aware of V111\_1\_3.
- \*
- \* Revision 3.2.26.2 1996/03/07 09:50:41 mdb
- \* Branch: DeadKingOnAThrone\_branch
- \* cisco and ANSI/POSIX libraries.
- \*
- \* Revision 3.2.26.1 1996/02/20 01:04:27 dstine
- \* Branch: DeadKingOnAThrone\_branch
- \* Sync from DeadKingOnAThrone\_baseline\_960122 to
- \* DeadKingOnAThrone\_baseline\_960213
- \*
- \* Revision 3.4 1996/02/24 02:01:55 pst
- \* CSCdi49774: modularize regexp's for bgp (part 3)
- \*
- \* Revision 3.3 1996/02/01 06:06:17 hampton
- \* Migrate files out of the parser directory. [CSCdi47717]
- \* Step 2: Change all files which reference the moved parser files to



```

*
point to their new locations.
*
* Revision 3.2 1995/11/17 17:37:13 hampton
* Remove old entries from the RCS header logs.
*
* Revision 3.1 1995/11/09 12:10:35 shaker
* Bump version numbers from 2.x to 3.x.
*
* Revision 2.6 1995/09/25 08:31:19 tli
* CSCdi40960: ISP jumbo patch 2
*
* Revision 2.5 1995/07/06 23:12:39 rchandra
* CSCdi36759: BGP : Add conditional per neighbor default generation
* - add 'neighbor <x.x.x.x> default-originate route-map <tag>' command.
*
* Revision 2.4 1995/06/23 14:26:05 widmer
* CSCdi36318: multiple route-map commands are not accepted
* Fix route-map command NV generation
*
* Revision 2.3 1995/06/15 15:18:52 widmer
* CSCdi35889: parser transition structures should be static
*
* Revision 2.2 1995/06/08 08:59:19 tli
* CSCdi35274: route-map test-1 crashes IOS
* - If a route map does not set any routing information, it should be
* equivalent to not having policy routed the packet.
* - "match length" clauses
were having their flag stepped on because the
* flag update routine didn't know about the clause.
*
* Revision 2.1 1995/06/07 21:10:53 hampton
* Bump version numbers from 1.x to 2.x.
*
*-----
* $Endlog$
*/

```

Found in path(s):

```

* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/src/route_map.c
No license file was found, but licenses were detected in source scan.

```

```

/*-----
* router_af_parse.h
*
* Route Address Family parser functions declarations.
*
* May 2002, Victor Kamensky

```

```
*
* Copyright (c) 2002, 2007-2008 by cisco Systems, Inc.
* All rights reserved.
*-----
*/
```

Found in path(s):

```
*/opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/internal_inc/router_af_parse.h
No license file was found, but licenses were detected in source scan.
```

```
/* $Id$
* $Source$
*-----
* Registry for IP FRR infrastructure
*
* July 6, 2010 Ahmed Bashandy
*
* Copyright (c) 2001-2003, 2005, 2007-2008, 2010 by cisco Systems, Inc.
* All rights reserved.
*-----
* $Log$
*-----
* $Endlog$
*/
```

Found in path(s):

```
*/opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/include/lfafr_registry.h
No license file was found, but licenses were detected in source scan.
```

```
/* $Id$
* $Source$
*-----
* cfg_route_map.h
*
* Enter route-map subcommand mode
*
* Copyright (c) 1992-1996, 2001-2002, 2007-2010, 2017 by cisco Systems, Inc.
* All rights reserved.
*-----
* $Log$
*-----
* $Endlog$
*/
```

Found in path(s):

```
*/opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/src/cfg_route_map.h
No license file was found, but licenses were detected in source scan.
```

```

/* $Id$
* $Source$
* -----
* exec_show_ip_extcommunity-list.h
*
* April 2000, Rex Fernando
*
* Copyright (c) 2000, 2002-2003, 2007-2008 by cisco Systems, Inc.
* All rights reserved.
* -----
* $Endlog$
*/

```

Found in path(s):

```

* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-
tar/iprouting_cmn/internal_inc/exec_show_ip_policylist.h

```

No license file was found, but licenses were detected in source scan.

```

/* $Id: cfg_routemap_set_ip_policy.h,v 3.3.52.1 1996/06/18 19:06:39 widmer Exp $
* $Source: /release/112/cvs/Xsys/iprouting/cfg_routemap_set_ip_policy.h,v $
* -----
* cfg_routemap_set_ip_policy.h -- IP policy specific route map clauses
*
* Mar 1995 Tony Li
*
* Copyright (c) 1995-1998, 2000, 2002, 2004, 2007-2009 by cisco Systems, Inc.
* All rights reserved.
* -----
* $Log: cfg_routemap_set_ip_policy.h,v $
* Revision 3.3.52.1 1996/06/18 19:06:39 widmer
* CSCdi59706: parser lets you set tos/precedence bits forever (input
* loop)
* Branch: California_branch
*
* Revision 3.3 1995/11/28 19:50:38 widmer
* CSCdi44251: Replace Ifelse(csb->in_help)/Eval with Func
*
* Revision 3.2 1995/11/17 17:31:53 hampton
* Remove old entries from the RCS header logs.
*
* Revision 3.1 1995/11/09
12:05:16 shaker
* Bump version numbers from 2.x to 3.x.
*
* Revision 2.5 1995/08/16 01:01:15 tli
* CSCdi38512: Policy: TOS and precedence long help says match instead of
* set
*

```

```

* Revision 2.4 1995/07/12 07:19:09 tli
* CSCdi36426: Policy routing will not disable on an interface
* - Policy routed packets were creating fastswitching cache entries.
* That's not till _next_ release.
* - Add counters to record packet and byte count on a per route map entry
* basis.
* - Marketing identified a catastrophic deficiency. Implemented "set ip
* tos" and "set ip precedence" to cover this deficiency.
*
* Revision 2.3 1995/06/21 18:16:02 widmer
* CSCdi36227: Fix parse chain alternates
*
* Revision 2.2 1995/06/15 15:18:47 widmer
* CSCdi35889: parser transition structures should be static
*
* Revision 2.1 1995/06/07 21:05:39 hampton
* Bump version numbers from 1.x to 2.x.
*
*-----
*
$Endlog$
*/

```

Found in path(s):

```

* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-
tar/iprouting_cmn/include/cfg_routemap_set_ip_policy.h

```

No license file was found, but licenses were detected in source scan.

```

/* $Id: cfg_router_passive-interface.h,v 3.2.60.1 1996/08/12 16:03:49 widmer Exp $
* $Source: /release/112/cvs/Xsys/iprouting/cfg_router_passive-interface.h,v $
*-----
* C F G _ R O U T E R _ P A S S I V E _ I N T . H
*
* Copyright (c) 1992-1999, 2001-2010, 2018 by cisco Systems, Inc.
* All Rights Reserved
*-----
* $Log: cfg_router_passive-interface.h,v $
*-----
* $Endlog$
*/

```

Found in path(s):

```

* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/internal_inc/cfg_router_passive-
interface.h

```

No license file was found, but licenses were detected in source scan.

```

/*
*-----

```

```
* routemap_debug.c -- Routemap debugging support
*
* July 1998, Wilber Su
*
* Copyright (c) 1998, 2004, 2006-2008 by cisco Systems, Inc.
* All rights reserved.
*-----
*/
```

Found in path(s):

```
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/src/routemap_debug.c
No license file was found, but licenses were detected in source scan.
```

```
/*
*-----
* CFG_ROUTER_TOPO_REDISTRIBUTE.H
*
* October 2004, Lisa Z Xu
*
* Copied from and modified based on cfg_router_redistribute.h.
* Warning:
* If you modify this file, please also check cfg_router_redistribute.h
* to see if the changes apply to config-router mode as well.
*
* Copyright (c) 2004-2011, 2018-2021 by Cisco Systems, Inc.
* All Rights Reserved
*-----
*/
```

Found in path(s):

```
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-
tar/iprouting_cmn/src/cfg_router_topo_redistribute.h
No license file was found, but licenses were detected in source scan.
```

```
/*
*-----
* route_map_ionblob.c -- Route Maps support for ION Blob
*
* October 2001, Siva Yaragalla
*
* Copyright (c) 2001-2009, 2011, 2013, 2020 by cisco Systems, Inc.
* All rights reserved.
*-----
*/
```

Found in path(s):

```
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/src/route_map_ionblob.c
```

No license file was found, but licenses were detected in source scan.

```
/*-----  
* router_af_parse_blob.c  
*  
* Address family submode command - proxy EOLs  
*  
* May 2002, Victor Kamensky  
*  
* Copyright (c) 2002-2005, 2007-2009 by cisco Systems, Inc.  
* All Rights Reserved  
*-----  
*/
```

Found in path(s):

```
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/src/router_af_parse_blob.c  
No license file was found, but licenses were detected in source scan.
```

```
/*  
*-----  
* topo_aware.h - Define multi-topology awareness  
*  
* March 2005, Les Ginsberg  
*  
* Copyright (c) 2005, 2007-2008 by cisco Systems, Inc.  
* All rights reserved.  
*-----  
*/
```

Found in path(s):

```
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/include/topo_aware.h  
No license file was found, but licenses were detected in source scan.
```

```
/* $Id$  
* $Source$  
*-----  
*  
* parser_defs_route_map.h  
*  
* Constant definition for route-map command and associated subcommands.  
*  
* Copyright (c) 1985-1996, 1999, 2001, 2004-2005, 2007-2008, 2011, 2014-2015 by cisco Systems, Inc.  
* All rights reserved.  
*-----  
* $Log$  
*-----  
* $Endlog$  
*/
```

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/include/parser\_defs\_route\_map.h

No license file was found, but licenses were detected in source scan.

/\* \$Id\$

\* \$Source\$

\*-----

\* Parse chains for router Address Family mode

\*

\* June 2002, Donnie Savage

\*

\* Copyright (c) 1998-2011, 2013-2014, 2016, 2018-2019 by cisco Systems, Inc.

\* All rights reserved.

\*-----

\* \$Log\$

\*-----

\* \$Endlog\$

\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/router\_af\_chain.c

No license file was found, but licenses were detected in source scan.

/\*

\*-----

\* exec\_debug\_routemap.h -- Debugging for Route-map IPC

\*

\* July 1998, Wilber Su

\*

\* Copyright (c) 1998, 2001-2002, 2004-2008 by cisco Systems, Inc.

\* All rights reserved.

\*-----

\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/include/exec\_debug\_routemap.h

No license file was found, but licenses were detected in source scan.

/\* \$Id: exec\_clear\_ip\_prefixlist.h,v 3.1.2.1 1997/12/17 21:36:58 enkechen Exp \$

\* \$Source: /release/111/cvs/Xsys/ip/exec\_clear\_ip\_prefixlist.h,v \$

\*-----

\* exec\_clear\_ip\_prefixlist.h

\*

\* July 1997, Enke Chen

\*

\* Copyright (c) 1995-1998, 2000-2001, 2007-2008 by cisco Systems, Inc.

\* All rights reserved.

```

*-----
* $Log: exec_clear_ip_prefixlist.h,v $
* Revision 3.1.2.1 1997/12/17 21:36:58 enkechen
* CSCdj61356: Prefix-list - facility for efficient route filtering
* Branch: FIB_branch
*
* Revision 3.1 1997/12/17 01:46:34 enkechen
* Start with the new file.
*
*-----
* $Endlog$
*/

```

Found in path(s):

`/opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/src/exec_clear_ip_prefixlist.h`

No license file was found, but licenses were detected in source scan.

```

/* $Id$
* $Source$
*-----
* iprouting_blob_undef.c -- undefined symbols from blob when
* routing subsystems are pulled out
*
* October, 2002 Phil Winterfield
*
* Copyright (c) 2001-2005, 2007-2008 by cisco Systems, Inc.
* All rights reserved.
*-----
* $Log$
*-----
* $Endlog$
*/

```

Found in path(s):

`/opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/src/iprouting_blob_undef.c`

No license file was found, but licenses were detected in source scan.

```

/*-----
* iprouting_cmn.c
*
* This file has global definitions common to blob and iprouting proceses.
*
* Copyright (c) 2002-2009, 2011, 2013 by cisco Systems, Inc.
* All rights reserved.
*-----
*/

```

Found in path(s):



\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/iprouting\_cmn.c

No license file was found, but licenses were detected in source scan.

/\* \$Id: ip\_prefixlist.c,v 1.1 2011/02/02 21:47:40 vkoshi Exp vkoshi \$

\* \$Source: /view/vkoshi-

comp\_routing\_rel5.rel4\_1\_1\_19.2460.ss.comp1.port/vob/ss.comp1/routing/iprouting\_cmn/src/ip\_prefixlist.c,v \$

\*-----

\* Generic prefix list support.

\*

\* June 1997, Enke Chen

\*

\* Copyright (c) 1997-2012, 2016, 2020 by cisco Systems, Inc.

\* All rights reserved.

\*-----

\* \$Log: ip\_prefixlist.c,v \$

\* Revision 1.1 2011/02/02 21:47:40 vkoshi

\* checkin by port\_commit

\*

\* Revision 3.1.2.4 1998/03/20 17:03:32 enkechen

\* CSCdj88889: Prefix-list: sho ip prefix-list summ does not pause

\* Branch: FIB\_branch

\*

\* Revision 3.1.2.3 1998/02/23 19:43:44 enkechen

\* CSCdj75270: Prefix-list: optimization for downloading large lists

\* Branch: FIB\_branch

\*

\* Revision 3.1.2.2 1998/02/11 01:55:32 soma

\* Merge FIB\_L3 branch into FIB branch

\*

\* Revision 3.1.2.1.8.1 1998/01/29 00:59:02 enkechen

\* CSCdj77190: Prefix-list: mishandling of long prefix-list names

\* Branch: FIB\_L3\_branch

\*

\* Revision 3.1.2.1 1997/12/17 21:37:00 enkechen

\* CSCdj61356: Prefix-list - facility for efficient route filtering

\* Branch: FIB\_branch

\*

\* Revision 3.1 1997/12/17 01:46:33 enkechen

\* Start with the new file.

\*

\*-----

\* \$Endlog\$

\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/ip\_prefixlist.c

No license file was found, but licenses were detected in source scan.

```
/* $Id: cfg_router_redistribute.h,v 3.4.20.3 1996/08/12 16:03:50 widmer Exp $
* $Source: /release/112/cvs/Xsys/iprouting/cfg_router_redistribute.h,v $
*-----
* CFG_ROUTER_REDISTRIBUTE.H

* Warning:
* If you modify this file, please also check cfg_router_topo_redistribute.h
* to see if the changes apply to config-router-topo mode as well.
*
* Copyright (c) 1992-2012, 2014-2015, 2018-2021 by cisco Systems, Inc.
* All Rights Reserved
*-----
* $Log: cfg_router_redistribute.h,v $
*
*-----
* $Endlog$
*/
```

Found in path(s):

```
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-
tar/iprouting_cmn/internal_inc/cfg_router_redistribute.h
No license file was found, but licenses were detected in source scan.
```

```
/*
*-----
* iprouting_DEBUG_FLAG_BB.h -- Debugging flag declarations for IP routing
*
* May 1993, John Bashinski
*
* Copyright (c) 1993-2011, 2013, 2015, 2018-2020 by Cisco Systems, Inc.
* All rights reserved.
*-----
*/
```

Found in path(s):

```
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/include/iprouting_debug_flags.h
No license file was found, but licenses were detected in source scan.
```

```
/* $Id$
* $Source$
*-----
* iprouting_parser.h -- IP routing parser API header file
*
* April - 2007, Selva Subramanian
*
* Copyright (c) 2001-2009 by cisco Systems, Inc.
* All rights reserved.
*-----
```

\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/iprouting\_parser.h  
No license file was found, but licenses were detected in source scan.

```
# $Id$
#
#-----
#
# iprouting.startup - ION iprouting process .startup file
#
# October, 2001, Fan Kong
#
#-----
#
# Copyright (c) 2001-2002, 2004-2007 by cisco Systems, Inc.
# All rights reserved.
#
#-----
```

```
name:iprouting.iosproc
path:/sbin
feature:iprouting
level:100
envs:RLIMIT_NOFILE=65535
```

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/iprouting.startup  
No license file was found, but licenses were detected in source scan.

```
/* $Id: ip_routing.c,v 3.2 1995/11/17 17:34:11 hampton Exp $
* $Source: /swtal/cherf.111/ios/sys/iprouting/ip_routing.c,v $
*-----
* ip_routing.c -- Generic IP routing functions
*
* Mar 1995 Tony Li
*
* Copyright (c) 1995-1998, 2002-2008, 2010 by cisco Systems, Inc.
* All rights reserved.
*-----
* $Log: ip_routing.c,v $
* Revision 3.2 1995/11/17 17:34:11 hampton
* Remove old entries from the RCS header logs.
*
* Revision 3.1 1995/11/09 12:08:05 shaker
* Bump version numbers from 2.x to 3.x.
*
```

\* Revision 2.1 1995/06/07 21:07:03 hampton

\* Bump version numbers from 1.x to 2.x.

\*

\*-----

\* \$Endlog\$

\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/ip\_routing.c

No license file was found, but licenses were detected in source scan.

/\* \$Id\$

\* \$Source\$

\*-----

\* policylist.c - Routines to handle policy-list commands

\*

\* Apr. 2000, Rex Fernando

\*

\* Copyright (c) 2000, 2002-2011, 2016-2017, 2020 by cisco Systems, Inc.

\* All rights reserved.

\*-----

\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/policylist.c

No license file was found, but licenses were detected in source scan.

/\*-----

\* router\_af\_parse.c

\*

\* Route Address Family command and action definitions. Derived from

\* router\_af\_chain.c

\*

\* May 2002, Victor Kamensky

\*

\* Copyright (c) 2002-2010, 2012, 2014-2016, 2019 by cisco Systems, Inc.

\* All rights reserved.

\*-----

\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/router\_af\_parse.c

No license file was found, but licenses were detected in source scan.

/\*

\*-----

\* ip\_prefixlist\_chain.c - Parse chains for IP Prefix Lists

\*

```
* August 2001, Siva Yaragalla
*
* Copyright (c) 2001-2008 by cisco Systems, Inc.
* All rights reserved.
*-----
*/
```

Found in path(s):

```
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/src/ip_prefixlist_chain.c
No license file was found, but licenses were detected in source scan.
```

```
/*
*-----
* Registry for IP route commands in ION
*
* September 2001, Rashmi Shrivastava
*
* Copyright (c) 2001, 2003-2008 by cisco Systems, Inc.
* All rights reserved.
*-----
*/
```

Found in path(s):

```
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-
tar/iprouting_cmn/internal_inc/ion_iprouting_cmd_registry.h
No license file was found, but licenses were detected in source scan.
```

```
/*-----
* routemap_api_util.c -- Dynamic routemap API utility functions.
*
* May 2003, Tanya Shastri
*
* Copyright (c) 2003, 2005-2010, 2020 by cisco Systems, Inc.
* All rights reserved.
*-----
*/
```

Found in path(s):

```
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/src/routemap_api_util.c
No license file was found, but licenses were detected in source scan.
```

```
/* $Id$
* $Source$
*-----
* iprouting_init_ios.c -- IP Routing Init code for Native IOS only
*
* October 2001, Rashmi Shrivastava
*
```

\* Copyright (c) 2001-2009 by cisco Systems, Inc.

\* All rights reserved.

\*-----

\* \$Log\$

\*-----

\* \$Endlog\$

\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/iprouting\_init\_ios.c

No license file was found, but licenses were detected in source scan.

/\* \$Id\$

\* \$Source\$

\*-----

\* cfg\_router\_summary\_addr.h

\*

\* Supports the router subcommand "summary-address". Provides IP aggregation configuration.

\*

\* Copyright (c) 1992-2004, 2007-2010, 2015, 2018 by cisco Systems, Inc.

\* All rights reserved.

\*

\* Longer description here.

\*-----

\* \$Log\$

\*-----

\* \$Endlog\$

\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-

tar/iprouting\_cmn/internal\_inc/cfg\_router\_summary\_addr.h

No license file was found, but licenses were detected in source scan.

/\* \$Id: cfg\_router\_neighbor.h,v 3.3.20.1 1996/08/12 16:03:45 widmer Exp \$

\* \$Source: /release/112/cvs/Xsys/iprouting/cfg\_router\_neighbor.h,v \$

\*-----

\* C F G \_ R O U T E R \_ N E I G H B O R . H

\*

\* Copyright (c) 1992-2002, 2004-2010, 2012, 2018 by cisco Systems, Inc.

\* All Rights Reserved

\*-----

\* \$Log: cfg\_router\_neighbor.h,v \$

\* Revision 3.3.20.1 1996/08/12 16:03:45 widmer

\* CSCdi65725: Create Eolns macro that defaults csb->which to 0

\* Branch: California\_branch

\* Add Eolns and Nvgenns macro that default csb->which to 0

```

* Remove hidden keyword help strings
*
* Revision 3.3 1996/02/01 23:33:57 widmer
* CSCdi45325: Change Keyword/Set to use Keyword_Id macro
*
* Revision 3.2 1995/11/17 17:32:14 hampton
* Remove old entries from the RCS header logs.
*
* Revision 3.1
  1995/11/09 12:05:42 shaker
* Bump version numbers from 2.x to 3.x.
*
* Revision 2.1 1995/07/01 12:15:55 tli
* CSCdi36508: Rationalize parser file placement, part I
* Rationalize iprouting
*
* Revision 2.1 1995/06/07 22:12:48 hampton
* Bump version numbers from 1.x to 2.x.
*
*-----
* $Endlog$
*/

```

Found in path(s):

```

* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-
tar/iprouting_cmn/internal_inc/cfg_router_neighbor.h
No license file was found, but licenses were detected in source scan.

```

```

/*
*-----
* exec_clear_routemap.h -- clear route-map counters
*
* Copyright (c) 1986-2008 by cisco Systems, Inc.
* All rights reserved.
*-----
*/

```

Found in path(s):

```

* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/src/exec_clear_routemap.h
No license file was found, but licenses were detected in source scan.

```

```

/*-----
* router_topology_parse.c - Router topology command definitions.
*
* Sept 2004, Mercia Zheng
*
* Copyright (c) 2004-2010, 2019-2020 by cisco Systems, Inc.
* All rights reserved.

```

\*-----  
\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/router\_topology\_parse.c

No license file was found, but licenses were detected in source scan.

/\* \$Id: ip\_prefixlist.h,v 3.1.2.3 1998/02/23 19:43:44 enkechen Exp \$

\* \$Source: /release/111/cvs/Xsys/ip/ip\_prefixlist.h,v \$

\*-----

\* Generic prefix list support.

\*

\* June 1997, Enke Chen

\*

\* Copyright (c) 1997-2008, 2010 by cisco Systems, Inc.

\* All rights reserved.

\*-----

\* \$Log: ip\_prefixlist.h,v \$

\* Revision 3.1.2.3 1998/02/23 19:43:44 enkechen

\* CSCdj75270: Prefix-list: optimization for downloading large lists

\* Branch: FIB\_branch

\*

\* Revision 3.1.2.2 1998/02/11 01:55:34 soma

\* Merge FIB\_L3 branch into FIB branch

\*

\* Revision 3.1.2.1.8.1 1998/01/29 01:02:13 enkechen

\* CSCdj77191: Reduce several chunk size parameters to save memory

\* Branch: FIB\_L3\_branch

\*

\* Revision 3.1.2.1 1997/12/17 21:37:00 enkechen

\* CSCdj61356: Prefix-list - facility for efficient route  
filtering

\* Branch: FIB\_branch

\*

\* Revision 3.1 1997/12/17 01:46:32 enkechen

\* Start with the new file.

\*

\*-----

\* \$Endlog\$

\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/include/ip\_prefixlist.h

No license file was found, but licenses were detected in source scan.

/\*

\*-----

\* route\_map\_blob.c -- Route Map Subsystem



\*  
\* Aug 2001, Siva Yaragalla  
\*  
\* Copyright (c) 2001-2012, 2014-2018 by cisco Systems, Inc.  
\* All rights reserved.  
\*-----  
\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/route\_map\_blob.c  
No license file was found, but licenses were detected in source scan.

/\*  
\*-----  
\* iprouting\_parser\_linkpoints.h - iprouting parser linkpoint decls.  
\*  
\* April, 2005  
\*  
\* Copyright (c) 2005, 2007-2008, 2015 by cisco Systems, Inc.  
\* All rights reserved.  
\*  
\*-----  
\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/include/iprouting\_parser\_linkpoints.h  
No license file was found, but licenses were detected in source scan.

/\* \$Id: cfg\_ip\_routing\_routing.h,v 3.3.46.3 1996/08/12 16:03:33 widmer Exp \$  
\* \$Source: /release/112/cvs/Xsys/iprouting/cfg\_ip\_routing\_routing.h,v \$  
\*-----  
\* IP routing routing commands  
\*  
\* May 1993, Robert Widmer  
\*  
\* Copyright (c) 1993-2000, 2002-2009 by cisco Systems, Inc.  
\* All rights reserved.  
\*  
\*-----  
\* \$Log: cfg\_ip\_routing\_routing.h,v \$  
\* Revision 3.3.46.3 1996/08/12 16:03:33 widmer  
\* CSCdi65725: Create Eolns macro that defaults csb->which to 0  
\* Branch: California\_branch  
\* Add Eolns and Nvgenns macro that default csb->which to 0  
\* Remove hidden keyword help strings  
\*  
\* Revision 3.3.46.2 1996/06/17 23:33:31 hampton

\* Implement the long sought parser "default" keyword. [CSCdi60510]  
 \* Branch: California\_branch  
 \*  
 \* Revision 3.3.46.1 1996/04/15 21:17:41 bcole  
 \*  
 CSCdi54649: IP Host Modularity, IP Automatic Stub Routing feature  
 \* commit  
 \* Branch: California\_branch  
 \*  
 \* Revision 3.3 1995/12/10 00:42:36 pst  
 \* CSCdi38750: Allow static routes with both next hop and interface  
 \* also add "permanent" keyword for non-flapping static routes  
 \*  
 \* Revision 3.2 1995/11/17 17:31:40 hampton  
 \* Remove old entries from the RCS header logs.  
 \*  
 \* Revision 3.1 1995/11/09 12:04:59 shaker  
 \* Bump version numbers from 2.x to 3.x.  
 \*  
 \* Revision 2.4 1995/10/23 18:33:19 pst  
 \* CSCdi42608: allow IP cache ager to be shut down, make the  
 \* "ip cache-ager" and "ip cache-invalidate-delay"  
 \* commands internal only.  
 \*  
 \* Revision 2.3 1995/07/13 21:39:05 ahh  
 \* CSCdi36962: UDP parsing of tacacs-ds port name broken  
 \* Restore "tacacs-ds" as a keyword, but hide it and map it to TACACS\_PORT  
 \* for backwards compatibility.  
 \*  
 \* Revision 2.2 1995/07/11 21:52:08 raj  
 \* CSCdi36510: parser doesnt accept ip forward-protocol  
 udp xdmcp  
 \* (Actually the parser didn't accept \*any\* symbolic names in the position  
 \* of the UDP port number; only numbers. It now uses the UDP\_PORT macro  
 \* instead.  
 \*  
 \* Revision 2.1 1995/07/01 12:15:42 tli  
 \* CSCdi36508: Rationalize parser file placement, part I  
 \* Rationalize iprouting  
 \*  
 \* Revision 2.1 1995/06/07 22:08:34 hampton  
 \* Bump version numbers from 1.x to 2.x.  
 \*  
 \*-----  
 \* \$Endlog\$  
 \*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/cfg\_ip\_routing\_routing.h  
No license file was found, but licenses were detected in source scan.

```
/*-----  
* router_topology_registry.c  
*  
* Router topology registry.  
*  
* Sept 2004, Mercia Zheng  
*  
* Copyright (c) 2004-2005, 2007-2008 by cisco Systems, Inc.  
* All rights reserved.  
*-----  
*/
```

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/router\_topology\_registry.c  
No license file was found, but licenses were detected in source scan.

```
/* $Id$  
* $Source$  
*-----  
* route2.c -- Routing Support: User Interface Routines  
*  
* 22-March-1986, Kirk Lougheed  
*  
* Copyright (c) 1986-2020 by cisco Systems, Inc.  
* All rights reserved.  
*-----  
* $Log$  
*-----  
* $Endlog$  
*/
```

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/route2.c  
No license file was found, but licenses were detected in source scan.

```
/* $Id$  
* $Source$  
*-----  
* IP routing parse chains  
*  
* May 1993, Robert Widmer  
*  
* Copyright (c) 1993-2012, 2015-2016 by cisco Systems, Inc.  
* All rights reserved.  
*  
*-----
```

```
*-----  
* $Log$  
*-----  
* $Endlog$  
*/
```

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/iprouting\_chain.c  
No license file was found, but licenses were detected in source scan.

```
/* $Id$  
* $Source$  
*-----  
* lfafr_registry.c  
*  
* July 2010, Ahmed Bashandy  
*  
* Copyright (c) 2001, 2003, 2005, 2007-2008, 2010 by cisco Systems, Inc.  
* All rights reserved.  
*-----  
* $Log$  
*-----  
* $Endlog$  
*/
```

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/lfafr\_registry.c  
No license file was found, but licenses were detected in source scan.

```
/*  
*-----  
* ip_prefixlist_ionblob.c - IP Prefix Lists support for IONized clients  
*  
* January 2002, Siva Yaragalla  
*  
* Copyright (c) 2002-2003, 2005, 2007-2008 by cisco Systems, Inc.  
* All rights reserved.  
*-----  
*/
```

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/ip\_prefixlist\_ionblob.c  
No license file was found, but licenses were detected in source scan.

```
/*-----  
* exec_routing_context.h  
*  
* This file defines the routing-context command syntax.
```

\*  
\* March 2009, Derek Yeung  
\*  
\* Copyright (c) 2009-2010, 2015, 2020 by cisco Systems, Inc.  
\* All rights reserved.  
\*-----  
\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/exec\_routing\_context.h  
No license file was found, but licenses were detected in source scan.

/\*  
\*-----  
\* cfg\_router\_topology\_exit.h - Exit from router topology sub mode.  
\*  
\* Sept 2004, Mercia Zheng  
\*  
\* Copyright (c) 2004, 2006-2009 by cisco Systems, Inc.  
\* All rights reserved.  
\*-----  
\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/cfg\_router\_topology\_exit.h  
No license file was found, but licenses were detected in source scan.

/\* \$Id: iprouting\_init.c,v 1.1 2003/06/13 18:30:09 dsavage Exp dsavage \$  
\* \$Source: /view/dsavage-CSCdy77097-rip-V123/vob/ios.sys2/sys/iprouting/iprouting\_init.c,v \$  
\*-----  
\* iprouting\_init.c -- initialize IP Routing Protocol support.  
\*  
\* 20-August-1985, Kirk Lougheed  
\*  
\* Copyright (c) 1985-2012, 2016, 2018-2019 by cisco Systems, Inc.  
\* All rights reserved.  
\*-----  
\* \$Log: iprouting\_init.c,v \$  
\* Revision 1.1 2003/06/13 18:30:09 dsavage  
\* Initial revision  
\*  
\*-----  
\* \$Endlog\$  
\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/iprouting\_init.c

No license file was found, but licenses were detected in source scan.

```
/* $Id$
 * $Source$
 *-----
 * Address-family command; enters Address Family mode.
 *
 * Sept 1998, Bob Thomas
 *
 * Copyright (c) 1998-1999, 2001-2010, 2012, 2018 by cisco Systems, Inc.
 * All rights reserved.
 *-----
 * $Log$
 *-----
 * $Endlog$
 */
```

Found in path(s):

`/opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/src/cfg_router_af.h`

No license file was found, but licenses were detected in source scan.

```
/*
 *-----
 * cfg_routetag_list.h -- Route Tag List Parser Command
 *
 * June 2011, Karthik Subramaniam
 *
 * Copyright (c) 1997-2001, 2004, 2007-2008, 2011, 2013 by cisco Systems, Inc.
 * All rights reserved.
 *-----
 * $Endlog$
 */
```

Found in path(s):

`/opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/src/cfg_routetag_list.h`

No license file was found, but licenses were detected in source scan.

```
/* $Id$
 * $Source$
 *-----
 * protofltr.c -- Routing protocol filter manager support routines
 *
 * Jan 2006, Mercia Zheng
 *
 * Copyright (c) 2005-2011, 2020 by cisco Systems, Inc.
 * All rights reserved.
 *-----
```

\* \$Log\$

\*-----

\* \$Endlog\$

\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/protofltr.c

No license file was found, but licenses were detected in source scan.

/\*

\*-----

\* exec\_show\_routetag\_list.h

\*

\* Copyright (c) 1993-1996, 1998, 2003-2008, 2011 by cisco Systems, Inc.

\* All rights reserved.

\*

\* Command parsing chain for "show route-tag".

\*-----

\*

\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/exec\_show\_routetag\_list.h

No license file was found, but licenses were detected in source scan.

/\*

\*-----

\* Debugging flag declarations for protocol filter manager - ION

\*

\* Jan 2006, Mercia Zheng

\*

\* Copyright (c) 2005-2008 by cisco Systems, Inc.

\* All Rights Reserved

\*-----

\*/

Found in path(s):

\* /opt/cola/permits/1130450046\_1615190725.52/0/iproute-254-tar/iprouting\_cmn/src/protofltr\_debug\_flags\_ion.h

No license file was found, but licenses were detected in source scan.

/\*

\*-----

\* ipv4\_subsys.c - IPv4 Routing Startup Subsystem

\*

\* July 2005, Mark Schaefer

\*

\* Copyright (c) 2005-2010, 2013 by cisco Systems, Inc.

\* All rights reserved.

```
*-----  
*/
```

Found in path(s):

```
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/src/ipv4_subsys.c
```

No license file was found, but licenses were detected in source scan.

```
/*-----
```

```
* routemap_internal.c -- Internal funtions of routemap code.
```

```
*
```

```
* May 2003, Tanya Shastri
```

```
*
```

```
* Copyright (c) 2003, 2005-2009, 2011-2019 by cisco Systems, Inc.
```

```
* All rights reserved.
```

```
*-----
```

```
*/
```

Found in path(s):

```
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/src/routemap_internal.c
```

No license file was found, but licenses were detected in source scan.

```
/*-----
```

```
* iprouting_parse_blob.c
```

```
*
```

```
* Parser support for IP ROUTING .
```

```
* This file implements proxy eols that call iprouting parser remote
```

```
* registries.
```

```
*
```

```
* September 2001, Rashmi Shrivastava
```

```
*
```

```
* Copyright (c) 2001-2009 by cisco Systems, Inc.
```

```
* All Rights Reserved
```

```
*-----
```

```
*/
```

Found in path(s):

```
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/src/iprouting_parse_blob.c
```

No license file was found, but licenses were detected in source scan.

```
/*
```

```
*-----
```

```
* policylist_ionized.c - Routines to handle policy-list commands for
```

```
*
```

```
IONized processes.
```

```
*
```

```
* November 2003, Siva Yaragalla
```

```
*
```

```
* Copyright (c) 2003-2005, 2007-2008 by cisco Systems, Inc.
```

```
* All rights reserved.
```



```
*-----  
*/
```

Found in path(s):

```
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/src/policylist_ionized.c
```

No license file was found, but licenses were detected in source scan.

```
/* $Id$
```

```
* $Source$
```

```
*-----  
* CFG_ROUTER_OUTPUT_DELAY.H
```

```
*
```

```
* router RIP inter-frame gap subcommand
```

```
*
```

```
* Aug 1996, Dawn Li
```

```
*
```

```
* Copyright (c) 1996, 1998-1999, 2001, 2007-2008 by cisco Systems, Inc.
```

```
* All rights reserved.
```

```
*-----
```

```
* $Log$
```

```
*-----
```

```
* $Endlog$
```

```
*/
```

Found in path(s):

```
* /opt/cola/permits/1130450046_1615190725.52/0/iproute-254-tar/iprouting_cmn/internal_inc/cfg_router_output-delay.h
```

## 1.63 libsemanage-common 2.9-4.el8

### 1.63.1 Available under license :

GNU GENERAL PUBLIC LICENSE

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.

59 Temple Place, Suite 330, Boston, MA 02111-1307 USA

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

#### Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to

using it. (Some other Free Software Foundation software is covered by the GNU Library General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

GNU GENERAL PUBLIC LICENSE  
TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program

or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide

a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

- a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program

in object code or executable form with such  
an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent

infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies

a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

#### END OF TERMS AND CONDITIONS

##### How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest

to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

```
<one line to give the program's name and a brief idea of what it does.>  
Copyright (C) <year> <name of author>
```

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

```
Gnomovision version 69, Copyright (C) year name of author  
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.  
This is free software, and you are welcome to redistribute it  
under certain conditions; type `show c' for details.
```

The hypothetical commands

`show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

```
Yoyodyne, Inc., hereby disclaims all copyright interest in the program  
'Gnomovision' (which makes passes at compilers) written by James Hacker.
```

```
<signature of Ty Coon>, 1 April 1989
```

```
Ty Coon, President of Vice
```



This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Library General Public License instead of this License.

## 1.64 selinux 2.9-5.el8

### 1.64.1 Available under license :

This library (libselenium) is public domain software, i.e. not copyrighted.

#### Warranty Exclusion

-----  
You agree that this software is a non-commercially developed program that may contain "bugs" (as that term is used in the industry) and that it may not function as intended. The software is licensed "as is". NSA makes no, and hereby expressly disclaims all, warranties, express, implied, statutory, or otherwise with respect to the software, including noninfringement and the implied warranties of merchantability and fitness for a particular purpose.

#### Limitation of Liability

-----  
In no event will NSA be liable for any damages, including loss of data, lost profits, cost of cover, or other special, incidental, consequential, direct or indirect damages arising from the software or the use thereof, however caused and on any theory of liability. This limitation will apply even if NSA has been advised of the possibility of such damage. You acknowledge that this is a reasonable allocation of risk.

## 1.65 polycoreutils 2.9-9.el8

### 1.65.1 Available under license :

GNU GENERAL PUBLIC LICENSE

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.

59 Temple Place, Suite 330, Boston, MA 02111-1307 USA

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Library General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and

modification follow.

GNU GENERAL PUBLIC LICENSE  
TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further

restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will

be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

```
<one line to give the program's name and a brief idea of what it does.>  
Copyright (C) <year> <name of author>
```

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

```
Gnomovision version 69, Copyright (C) year name of author  
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.  
This is free software, and you are welcome to redistribute it  
under certain conditions; type `show c' for details.
```

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:



Yoyodyne, Inc., hereby disclaims all copyright interest in the program  
'Gnomovision' (which makes passes at compilers) written by James Hacker.

<signature of Ty Coon>, 1 April 1989  
Ty Coon, President of Vice

This General Public License does not permit incorporating your program into  
proprietary programs. If your program is a subroutine library, you may  
consider it more useful to permit linking proprietary applications with the  
library. If this is what you want to do, use the GNU Library General  
Public License instead of this License.

## 1.66 acl 2.2.53-1.el8

### 1.66.1 Available under license :

Most components of the "acl" package are licensed under  
Version 2.1 of the GNU Lesser General Public License (see COPYING.LGPL).

Some components (as annotated in the source) are licensed  
under Version 2 of the GNU General Public License (see below),

-----  
GNU GENERAL PUBLIC LICENSE  
Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.,  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA  
Everyone is permitted to copy and distribute verbatim copies  
of this license document, but changing it is not allowed.

#### Preamble

The licenses for most software are designed to take away your  
freedom to share and change it. By contrast, the GNU General Public  
License is intended to guarantee your freedom to share and change free  
software--to make sure the software is free for all its users. This  
General Public License applies to most of the Free Software  
Foundation's software and  
to any other program whose authors commit to  
using it. (Some other Free Software Foundation software is covered by  
the GNU Lesser General Public License instead.) You can apply it to  
your programs, too.

When we speak of free software, we are referring to freedom, not  
price. Our General Public Licenses are designed to make sure that you  
have the freedom to distribute copies of free software (and charge for

this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

## GNU GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in

the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

- a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.
- b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.
- c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If

identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include

anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by

all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author

to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

## NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

## END OF TERMS AND CONDITIONS

### How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

```
<one  
line to give the program's name and a brief idea of what it does.>  
Copyright (C) <year> <name of author>
```

This program is free software; you can redistribute it and/or modify

it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA.

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

```
Gnomovision version 69, Copyright (C) year name of author
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute it
under certain conditions; type `show c' for details.
```

The hypothetical commands ``show w'` and ``show c'` should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than ``show w'` and ``show c'`; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

```
Yoyodyne, Inc., hereby disclaims all copyright interest in the program
`Gnomovision' (which makes passes at compilers) written by James Hacker.
```

```
<signature of Ty Coon>, 1 April 1989
Ty Coon, President of Vice
```

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Lesser General Public License instead of this License.

Most components of the "acl" package are licensed under Version 2.1 of the GNU Lesser General Public License (see below).  
below.



Some components (as annotated in the source) are licensed under Version 2 of the GNU General Public License (see COPYING).

---

## GNU LESSER GENERAL PUBLIC LICENSE

Version 2.1, February 1999

Copyright (C) 1991, 1999 Free Software Foundation, Inc.  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA  
Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

[This is the first released version of the Lesser GPL. It also counts as the successor of the GNU Library Public License, version 2, hence the version number 2.1.]

### Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public Licenses are intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users.

This license, the Lesser General Public License, applies to some specially designated software packages--typically libraries--of the Free Software Foundation and other authors who decide to use it. You can use it too, but we suggest you first think carefully about whether this license or the ordinary General Public License is the better strategy to use in any particular case, based on the explanations below.

When we speak of free software, we are referring to freedom of use, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish); that you receive source code or can get it if you want it; that you can change the software and use pieces of it in new free programs; and that you are informed that you can do these things.

To protect your rights, we need to make restrictions that forbid distributors to deny you these rights or to ask you to surrender these rights. These restrictions translate to certain responsibilities for you if you distribute copies of the library or if you modify it.

For example, if you distribute copies of the library, whether gratis

or for a fee, you must give the recipients all the rights that we gave you. You must make sure that they, too, receive or can get the source code. If you link other code with the library, you must provide complete object files to the recipients, so that they can relink them with the library after making changes to the library and recompiling it. And you must show them these terms so they know their rights.

We protect your rights with a two-step method: (1) we copyright the library, and (2) we offer you this license, which gives you legal permission to copy, distribute and/or modify the library.

To protect each distributor, we want to make it very clear that there is no warranty for the free library. Also, if the library is modified by someone else and passed on, the recipients should know that what they have is not the original version, so that the original author's reputation will not be affected by problems that might be introduced by others.

Finally, software patents pose a constant threat to the existence of any free program. We wish to make sure that a company cannot effectively restrict the users of a free program by obtaining a restrictive license from a patent holder. Therefore, we insist that any patent license obtained for a version of the library must be consistent with the full freedom of use specified in this license.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License. This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License. We use this license for certain libraries in order to permit linking those libraries into non-free programs.

When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.

We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain

special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

## GNU LESSER GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License Agreement applies to any software library or other program which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Lesser General Public License (also called "this License"). Each licensee is addressed as "you".

A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a

portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

1. You may copy and distribute verbatim copies of the Library's complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and distribute a copy of this License along with the Library.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

- a) The modified work must itself be a software library.
- b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.
- c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.
- d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility

is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6,

whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

- e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:

- a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.
- b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

8. You may not copy, modify, sublicense, link with, or distribute the Library except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the Library is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

9. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Library or its derivative works. These actions are



prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Library (or any work based on the Library), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Library or works based on it.

10. Each time you redistribute the Library (or any work based on the Library), the recipient automatically receives a license from the original licensor to copy, distribute, link with or modify the Library subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties with this License.

11. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Library at all. For example, if a patent license would not permit royalty-free redistribution of the Library by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Library.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

12. If the distribution and/or use of the Library is restricted in

certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Library under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

13. The Free Software Foundation may publish revised and/or new versions of the Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Library does not specify a license version number, you may choose any version ever published by the Free Software Foundation.

14. If you wish to incorporate parts of the Library into other free programs whose distribution conditions are incompatible with these, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

15. BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE LIBRARY "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE LIBRARY AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR

CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE LIBRARY (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

## END OF TERMS AND CONDITIONS

### How to Apply These Terms to Your New Libraries

If you develop a new library, and you want it to be of the greatest possible use to the public, we recommend making it free software that everyone can redistribute and change. You can do so by permitting redistribution under these terms (or, alternatively, under the terms of the ordinary General Public License).

To apply these terms, attach the following notices to the library. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the library's name and a brief 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!

# 1.67 bridgeutils 1.7.1

## 1.67.1 Available under license :

GNU GENERAL PUBLIC LICENSE

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.

59 Temple Place, Suite 330, Boston, MA 02111-1307 USA

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

### Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Library General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their

rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

## GNU GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate

copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program

except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is



implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED

OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

#### END OF TERMS AND CONDITIONS

#### How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the program's name and a brief idea of what it does.>  
Copyright (C) 19yy <name of author>

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

```
Gnomovision version 69, Copyright (C) 19yy name of author
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute it
under certain conditions; type `show c' for details.
```

The hypothetical commands ``show w'` and ``show c'` should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than ``show w'` and ``show c'`; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

```
Yoyodyne, Inc., hereby disclaims all copyright interest in the program
`Gnomovision' (which makes passes at compilers) written by James Hacker.
```

```
<signature of Ty Coon>, 1 April 1989
Ty Coon, President of Vice
```

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Library General Public License instead of this License.

## 1.68 d-bus 1.12.20

### 1.68.1 Available under license :

D-Bus is licensed to you under your choice of the Academic Free License version 2.1, or the GNU General Public License version 2 (or, at your option any later version).

Both licenses are included here. Some of the standalone binaries are under the GPL only; in particular, but not limited to, `tools/dbus-cleanup-sockets.c` and `test/decode-gcov.c`. Each source code file is marked with the proper copyright information - if you find a file that isn't marked please bring it to our attention.

The Academic Free License  
v. 2.1

This Academic Free License (the "License") applies to any original work of authorship (the "Original Work") whose owner (the "Licensor") has placed the following notice immediately following the copyright notice for the Original Work:

Licensed under the Academic Free License version 2.1

1) Grant of Copyright License. Licensor hereby grants You a world-wide, royalty-free, non-exclusive, perpetual, sublicenseable license to do the following:

a) to reproduce the Original Work in copies;

b) to prepare derivative works ("Derivative Works") based upon the Original Work;

c) to distribute copies of the Original Work and Derivative Works to the public;

d) to perform the Original Work publicly; and

e) to display the Original Work publicly.

2) Grant of Patent License. Licensor hereby grants You a world-wide, royalty-free, non-exclusive, perpetual, sublicenseable license, under patent claims owned or controlled by the Licensor that are embodied in the Original Work as furnished by the Licensor, to make, use, sell and offer for sale the Original Work and Derivative Works.

3) Grant of Source Code License. The term "Source Code" means the preferred form of the Original Work for making modifications to it and all available documentation describing how to modify the Original Work. Licensor hereby agrees to provide a machine-readable copy of the Source Code of the Original Work along with each copy of the Original Work that Licensor distributes. Licensor reserves the right to satisfy this obligation by placing a machine-readable copy of the Source Code in an information repository reasonably calculated to permit inexpensive and convenient access by You for as long as Licensor continues to distribute the Original Work, and by publishing the address of that information repository in a notice immediately following the copyright notice that applies to the Original Work.

4) Exclusions From License Grant. Neither the names of Licensor, nor the names of any contributors to the Original Work, nor any of their trademarks or service marks, may be used to endorse or promote products derived from this Original Work without express prior written permission of the Licensor. Nothing in this License shall be deemed to grant any rights to trademarks, copyrights, patents, trade secrets or

any other intellectual property of Licensor except as expressly stated herein. No patent license is granted to make, use, sell or offer to sell embodiments of any patent claims other than the licensed claims defined in Section 2. No right is granted to the trademarks of Licensor even if such marks are included in the Original Work. Nothing in this License shall be interpreted to prohibit Licensor from licensing under different terms from this License any Original Work that Licensor otherwise would have a right to license.

5) This section intentionally omitted.

6) Attribution Rights. You must retain, in the Source Code of any Derivative Works that You create, all copyright, patent or trademark notices from the Source Code of the Original Work, as well as any notices of licensing and any descriptive text identified therein as an "Attribution Notice." You must cause the Source Code for any Derivative Works that You create to carry a prominent Attribution Notice reasonably calculated to inform recipients that You have modified the Original Work.

7) Warranty of Provenance and Disclaimer of Warranty. Licensor warrants that the copyright in and to the Original Work and the patent rights granted herein by Licensor are owned by the Licensor or are sublicensed to You under the terms of this License with the permission of the contributor(s) of those copyrights and patent rights. Except as expressly stated in the immediately preceding sentence, the Original Work is provided under this License on an "AS IS" BASIS and WITHOUT WARRANTY, either express or implied, including, without limitation, the warranties of NON-INFRINGEMENT, MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY OF THE ORIGINAL WORK IS WITH YOU. This DISCLAIMER OF WARRANTY constitutes an essential part of this License. No license to Original Work is granted hereunder except under this disclaimer.

8) Limitation of Liability. Under no circumstances and under no legal theory, whether in tort (including negligence), contract, or otherwise, shall the Licensor be liable to any person for any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or the use of the Original Work including, without limitation, damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses. This limitation of liability shall not apply to liability for death or personal injury resulting from Licensor's negligence to the extent applicable law prohibits such limitation. Some jurisdictions do not allow the exclusion or

limitation of incidental or consequential damages, so this exclusion and limitation may not apply to You.

9) Acceptance and Termination. If You distribute copies of the Original Work or a Derivative Work, You must make a reasonable effort under the circumstances to obtain the express assent of recipients to the terms of this License. Nothing else but this License (or another written agreement between Licensor and You) grants You permission to create Derivative Works based upon the Original Work or to exercise any

of the rights granted in Section 1 herein, and any attempt to do so except under the terms of this License (or another written agreement between Licensor and You) is expressly prohibited by U.S. copyright law, the equivalent laws of other countries, and by international treaty. Therefore, by exercising any of the rights granted to You in Section 1 herein, You indicate Your acceptance of this License and all of its terms and conditions.

10) Termination for Patent Action. This License shall terminate automatically and You may no longer exercise any of the rights granted to You by this License as of the date You commence an action, including a cross-claim or counterclaim, against Licensor or any licensee alleging that the Original Work infringes a patent. This termination provision shall not apply for an action alleging patent infringement by combinations of the Original Work with other software or hardware.

11) Jurisdiction, Venue and Governing Law. Any action or suit relating to this

License may be brought only in the courts of a jurisdiction wherein the Licensor resides or in which Licensor conducts its primary business, and under the laws of that jurisdiction excluding its conflict-of-law provisions. The application of the United Nations Convention on Contracts for the International Sale of Goods is expressly excluded. Any use of the Original Work outside the scope of this License or after its termination shall be subject to the requirements and penalties of the U.S. Copyright Act, 17 U.S.C. 101 et seq., the equivalent laws of other countries, and international treaty. This section shall survive the termination of this License.

12) Attorneys Fees. In any action to enforce the terms of this License or seeking damages relating thereto, the prevailing party shall be entitled to recover its costs and expenses, including, without limitation, reasonable attorneys' fees and costs incurred in connection with such action, including any appeal of such action. This section

shall survive the termination of this License.

13) Miscellaneous. This License represents the complete agreement concerning the subject matter hereof. If any provision of this License is held to be unenforceable, such provision shall be reformed only to the extent necessary to make it enforceable.

14) Definition of "You" in This License. "You" throughout this License, whether in upper or lower case, means an individual or a legal entity exercising rights under, and complying with all of the terms of, this License. For legal entities, "You" includes any entity that controls, is controlled by, or is under common control with you. For purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

15) Right to Use. You may use the Original Work in all ways not otherwise restricted or conditioned by this License or by law, and Licensor promises not to interfere with or be responsible for such uses by You.

This license is Copyright (C) 2003-2004 Lawrence E. Rosen. All rights reserved. Permission is hereby granted to copy and distribute this license without modification. This license may not be modified without the express written permission of its copyright owner.

--

END OF ACADEMIC FREE LICENSE. The following is intended to describe the essential differences between the Academic Free License (AFL) version 1.0 and other open source licenses:

The Academic Free License is similar to the BSD, MIT, UoI/NCSA and Apache licenses in many respects but it is intended to solve a few problems with those licenses.

\* The AFL is written so as to make it clear what software is being licensed (by the inclusion of a statement following the copyright notice in the software). This way, the license functions better than a template license. The BSD, MIT and UoI/NCSA licenses apply to unidentified software.

\* The AFL contains a complete copyright grant to the software. The BSD and Apache licenses are vague and incomplete in that respect.

\* The AFL contains a complete patent grant to the software. The BSD, MIT, UoI/NCSA and Apache licenses rely on an implied patent license and contain

no explicit patent grant.

\* The AFL makes it clear that no trademark rights are granted to the licensor's trademarks. The Apache license contains such a provision, but the BSD, MIT and UoI/NCSA licenses do not.

\* The AFL includes the warranty by the licensor that it either owns the copyright or that it is distributing the software under a license. None of the other licenses contain that warranty. All other warranties are disclaimed, as is the case for the other licenses.

\* The AFL is itself copyrighted (with the right granted to copy and distribute without modification). This ensures that the owner of the copyright to the

license will control changes. The Apache license contains a copyright notice, but the BSD, MIT and UoI/NCSA licenses do not.

--

START OF GNU GENERAL PUBLIC LICENSE

--

## GNU GENERAL PUBLIC LICENSE

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

### Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Library General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.



To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

## GNU GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not

covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

- a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.
- b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.
- c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those

sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place,  
then offering equivalent  
access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program),  
you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License  
and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and

of promoting the sharing and reuse of software generally.

#### NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

#### END OF TERMS AND CONDITIONS

##### How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

```
<one line to give the program's name and a brief idea of what it does.>  
Copyright (C) <year> <name of author>
```

```
This program is free software;  
you can redistribute it and/or modify  
it under the terms of the GNU General Public License as published by  
the Free Software Foundation; either version 2 of the License, or  
(at your option) any later version.
```

This program is distributed in the hope that it will be useful,  
but WITHOUT ANY WARRANTY; without even the implied warranty of  
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the  
GNU General Public License for more details.

You should have received a copy of the GNU General Public License  
along with this program; if not, write to the Free Software  
Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this  
when it starts in an interactive mode:

```
Gnomovision version 69, Copyright (C) year name of author  
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details  
type `show w'.
```

```
This is free software, and you are welcome to redistribute it  
under certain conditions; type `show c' for details.
```

The hypothetical commands `show w' and `show c' should show the appropriate  
parts of the General Public License. Of course, the commands you use may  
be called something other than `show w' and `show c'; they could even be  
mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your  
school, if any, to sign a "copyright disclaimer" for the program, if  
necessary. Here is a sample; alter the names:

```
Yoyodyne, Inc., hereby disclaims all copyright interest in the program  
'Gnomovision' (which makes passes at compilers) written by James Hacker.
```

```
<signature of Ty Coon>, 1 April 1989  
Ty Coon, President of Vice
```

This General Public License does not permit incorporating your program into  
proprietary programs. If your program is a subroutine library, you may  
consider it more useful

to permit linking proprietary applications with the  
library. If this is what you want to do, use the GNU Library General  
Public License instead of this License.

Redistribution and use in source and binary forms, with or without  
modification, are permitted provided that the following conditions  
are met:

1. Redistributions of source code must retain the copyright  
notice, this list of conditions and the following disclaimer.

2. Redistributions in binary form must reproduce the 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 THE AUTHOR ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

## 1.69 procps 3.3.15

### 1.69.1 Available under license :

GNU GENERAL PUBLIC LICENSE

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.,  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA  
Everyone is permitted to copy and distribute verbatim copies  
of this license document, but changing it is not allowed.

#### Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Lesser General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price.

Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it



in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

#### GNU GENERAL PUBLIC LICENSE

#### TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not

covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those

sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and

of promoting the sharing and reuse of software generally.

## NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE,  
THERE IS NO WARRANTY

FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR

THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

## END OF TERMS AND CONDITIONS

### How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

```
<one line to give the program's name and a brief idea of what it does.>  
Copyright (C) <year> <name of author>
```

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful,  
but WITHOUT ANY WARRANTY; without even the implied warranty of  
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the  
GNU General Public License for more details.

You should have received a copy of the GNU General Public License along  
with this program; if not, write to the Free Software Foundation, Inc.,  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA.

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this  
when it starts in an interactive mode:

```
Gnomovision version 69, Copyright (C) year name of author
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute
it
under certain conditions; type `show c' for details.
```

The hypothetical commands `show w' and `show c' should show the appropriate  
parts of the General Public License. Of course, the commands you use may  
be called something other than `show w' and `show c'; they could even be  
mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your  
school, if any, to sign a "copyright disclaimer" for the program, if  
necessary. Here is a sample; alter the names:

```
Yoyodyne, Inc., hereby disclaims all copyright interest in the program
`Gnomovision' (which makes passes at compilers) written by James Hacker.
```

```
<signature of Ty Coon>, 1 April 1989
Ty Coon, President of Vice
```

This General Public License does not permit incorporating your program into  
proprietary programs. If your program is a subroutine library, you may  
consider it more useful to permit linking proprietary applications with the  
library. If this  
is what you want to do, use the GNU Lesser General  
Public License instead of this License.

GNU LIBRARY GENERAL PUBLIC LICENSE  
Version 2, June 1991

Copyright (C) 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.

[This is the first released version of the library GPL. It is numbered 2 because it goes with version 2 of the ordinary GPL.]

## Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public Licenses are intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users.

This license, the Library General Public License, applies to some specially designated Free Software Foundation software, and to any other libraries whose authors decide to use it. You can use it for your libraries, too.

## When

we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the library, or if you modify it.

For example, if you distribute copies of the library, whether gratis or for a fee, you must give the recipients all the rights that we gave you. You must make sure that they, too, receive or can get the source code. If you link a program with the library, you must provide complete object files to the recipients so that they can relink them with the library, after making changes to the library and recompiling it. And you must show them these terms so they know their rights.

Our method of protecting your rights has two steps: (1) copyright the library, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the library.

Also, for each distributor's protection, we want to make certain that everyone understands that there is no warranty for this free library. If the library is modified by someone else and passed on, we want its recipients to know that what they have is not the original version, so that any problems introduced by others will not reflect on the original authors' reputations.



Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that companies distributing free software will individually obtain patent licenses, thus in effect transforming the program into proprietary software. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License, which was designed for utility programs. This license, the GNU Library General Public License, applies to certain designated libraries. This license is quite different from the ordinary one; be sure to read it in full, and don't assume that anything in it is the same as in the ordinary license.

The reason we have a separate public license for some libraries is that they blur the distinction we usually make between modifying or adding to a program and simply using it. Linking a program with a library, without changing the library, is in some sense simply using the library, and is analogous to running a utility program or application program. However, in a textual and legal sense, the linked executable is a combined work, a derivative of the original library, and the ordinary General Public License treats it as such.

Because of this blurred distinction, using the ordinary General Public License for libraries did not effectively promote software sharing, because most developers did not use the libraries. We concluded that weaker conditions might promote sharing better.

However, unrestricted linking of non-free programs would deprive the users of those programs of all benefit from the free status of the libraries themselves. This Library General Public License is intended to permit developers of non-free programs to use free libraries, while preserving your freedom as a user of such programs to change the free libraries that are incorporated in them. (We have not seen how to achieve this as regards changes in header files, but we have achieved it as regards changes in the actual functions of the Library.) The hope is that this will lead to faster development of free libraries.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, while the latter only works together with the library.

Note that it is possible for a library to be covered by the ordinary General Public License rather than by this special one.

GNU LIBRARY GENERAL PUBLIC LICENSE  
TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License Agreement applies to any software library which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Library General Public License (also called "this License"). Each licensee is addressed as "you".

A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

1. You may copy and distribute verbatim copies of the Library's complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and distribute a copy of this License along with the Library.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

- a) The modified work must itself be a software library.
- b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.
- c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.
- d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of

derivative or  
collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the

library". The executable is therefore covered by this License.  
Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also compile or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

- a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the

Library will not necessarily be able to recompile the application to use the modified definitions.)

b) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

c) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

d) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:

a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.

b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

8. You may not copy, modify, sublicense, link with, or distribute the Library except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the Library is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

9. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Library or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Library (or any work based on the Library), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Library or works based on it.

10. Each time you redistribute the Library (or any work based on the Library), the recipient automatically receives a license from the original licensor to copy, distribute, link with or modify the Library subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

11. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Library at all. For example, if a patent license would not permit royalty-free redistribution of the Library by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Library.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system which is

implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

12. If the distribution and/or use of the Library is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Library under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

13. The Free Software Foundation may publish revised and/or new versions of the Library General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Library does not specify a license version number, you may choose any version ever published by the Free Software Foundation.

14. If you wish to incorporate parts of the Library into other free programs whose distribution conditions are incompatible with these, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

15. BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR



OTHER PARTIES PROVIDE THE LIBRARY "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE LIBRARY AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE LIBRARY

(INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

#### END OF TERMS AND CONDITIONS

#### How to Apply These Terms to Your New Libraries

If you develop a new library, and you want it to be of the greatest possible use to the public, we recommend making it free software that everyone can redistribute and change. You can do so by permitting redistribution under these terms (or, alternatively, under the terms of the ordinary General Public License).

To apply these terms, attach the following notices to the library. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the library's name and a brief idea of what it does.>

Copyright (C) <year> <name of author>

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Library General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Library General Public License for more details.

You should have received a copy of the GNU Library General Public License along with this library; if not, write to the Free Software Foundation, Inc., 51 Franklin 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!

## 1.70 pam 1.3.1-14.el8

### 1.70.1 Available under license :

Unless otherwise \*explicitly\* stated the following text describes the licensed conditions under which the contents of this Linux-PAM release may be distributed:

-----  
Redistribution and use in source and binary forms of Linux-PAM, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain any existing copyright notice, and this entire permission notice in its entirety, including the disclaimer of warranties.
2. Redistributions in binary form must reproduce all prior and current copyright notices, this list of conditions, and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. The name of any author may not be used to endorse or promote products derived from this software without their specific prior written permission.

ALTERNATIVELY, this product may be distributed under the terms of the GNU General Public License, in which case the provisions of the GNU

GPL are required INSTEAD OF the above restrictions. (This clause is necessary due to a potential conflict between the GNU GPL and the restrictions contained in a BSD-style copyright.)

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(S) BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

-----  
Unless otherwise \*explicitly\* stated the following text describes the licensed conditions under which the contents of this libpamc release may be distributed:

-----  
Redistribution and use in source and binary forms of libpamc, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain any existing copyright notice, and this entire permission notice in its entirety, including the disclaimer of warranties.
2. Redistributions in binary form must reproduce all prior and current copyright notices, this list of conditions, and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. The name of any author may not be used to endorse or promote products derived from this software without their specific prior written permission.

ALTERNATIVELY, this product may be distributed under the terms of the GNU Library General Public License (LGPL), in which case the provisions of the GNU LGPL are required INSTEAD OF the above restrictions. (This clause is necessary due to a potential conflict between the GNU LGPL and the restrictions contained in a BSD-style copyright.)

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(S) BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

-----  
GNU GENERAL PUBLIC LICENSE

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.,  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA  
Everyone is permitted to copy and distribute verbatim copies  
of this license document, but changing it is not allowed.

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Lesser General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price.

Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

## GNU GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty;

and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program

with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License.

However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that



system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE

PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

#### END OF TERMS AND CONDITIONS

#### How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

```
<one line to give the program's name and a brief idea of what it does.>  
Copyright (C) <year> <name of author>
```

```
This program is free software; you can redistribute it and/or modify  
it under the terms of the GNU  
General Public License as published by  
the Free Software Foundation; either version 2 of the License, or  
(at your option) any later version.
```

```
This program is distributed in the hope that it will be useful,  
but WITHOUT ANY WARRANTY; without even the implied warranty of  
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the  
GNU General Public License for more details.
```

```
You should have received a copy of the GNU General Public License along  
with this program; if not, write to the Free Software Foundation, Inc.,  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA.
```

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this

when it starts in an interactive mode:

```
Gnomovision version 69, Copyright (C) year name of author
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute
it
under certain conditions; type `show c' for details.
```

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

```
Yoyodyne, Inc., hereby disclaims all copyright interest in the program
`Gnomovision' (which makes passes at compilers) written by James Hacker.
```

```
<signature of Ty Coon>, 1 April 1989
Ty Coon, President of Vice
```

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Lesser General Public License instead of this License.

The licensing conditions for each module in this package are detailed in the module source files.

```
GNU GENERAL PUBLIC LICENSE
Version 2, June 1991
```

Copyright (C) 1989, 1991 Free Software Foundation, Inc.  
59 Temple Place, Suite 330, Boston, MA 02111-1307 USA  
Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

#### Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by

the GNU Library General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

GNU GENERAL PUBLIC LICENSE  
TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which

contains

a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies  
of the Program's

source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide

a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or

executable form with such  
an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent

infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number



of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW.

EXCEPT WHEN

OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN

IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

#### END OF TERMS AND CONDITIONS

##### How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest

to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

```
<one line to give the program's name and a brief idea of what it does.>  
Copyright (C) 19yy <name of author>
```

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or  
(at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

```
Gnomovision version 69, Copyright (C) 19yy name of author  
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.  
This is free software, and you are welcome to redistribute it  
under certain conditions; type `show c' for details.
```

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

```
Yoyodyne, Inc., hereby disclaims all copyright interest in the program  
'Gnomovision' (which makes passes at compilers) written by James Hacker.
```

```
<signature of Ty Coon>, 1 April 1989  
Ty Coon, President of Vice
```

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Library General Public License instead of this License.

## 1.71 shadow 4.8.1

### 1.71.1 Available under license :

NOTE:

This license has been obsoleted by the change to the BSD-style copyright. You may continue to use this license if you wish, but you are under no obligation to do so.

(\*

This document is freely plagiarised from the 'Artistic Licence', distributed as part of the Perl v4.0 kit by Larry Wall, which is available from most major archive sites. I stole it from CrackLib.

\$Id\$

\*)

This documents purpose is to state the conditions under which this Package (See definition below) viz: "Shadow", the Shadow Password Suite which is held by Julianne Frances Haugh, may be copied, such that the copyright holder maintains some semblance of artistic control over the development of the package, while giving the users of the package the right to use and distribute the Package in a more-or-less customary fashion, plus the right to make reasonable modifications.

So there.

\*\*\*\*\*

Definitions:

A "Package" refers to the collection of files distributed by the Copyright Holder, and derivatives of that collection of files created through textual modification, or segments thereof.

"Standard Version" refers to such a Package if it has not been modified, or has been modified in accordance with the wishes of the Copyright Holder.

"Copyright Holder" is whoever is named in the copyright or copyrights for the package.

"You" is you, if you're thinking about copying or distributing this Package.

"Reasonable copying fee" is whatever you can justify on the basis of media cost, duplication charges, time of people involved, and so on. (You will not be required to justify it to the Copyright Holder, but only to the computing community at large as a market that must bear the fee.)

"Freely Available" means that no fee is charged for the item itself, though there may be fees involved in handling the item. It also means that recipients of the item may redistribute it under the same conditions they received it.

1. You

may make and give away verbatim copies of the source form of the Standard Version of this Package without restriction, provided that you duplicate all of the original copyright notices and associated disclaimers.

2. You may apply bug fixes, portability fixes and other modifications derived from the Public Domain or from the Copyright Holder. A Package modified in such a way shall still be considered the Standard Version.

3. You may otherwise modify your copy of this Package in any way, provided that you insert a prominent notice in each changed file stating how and when AND WHY you changed that file, and provided that you do at least ONE of the following:

a) place your modifications in the Public Domain or otherwise make them Freely Available, such as by posting said modifications to Usenet or an equivalent medium, or placing the modifications on a major archive site such as uunet.uu.net, or by allowing the Copyright Holder to include your modifications in the Standard Version of the Package.

b) use the modified Package only within your corporation or organization.

c) rename any non-standard executables so the names do not conflict with standard executables, which must also be provided, and provide separate documentation for each non-standard executable that clearly documents how it differs from the Standard Version.

d) make other distribution arrangements with the Copyright Holder.

4. You may distribute the programs of this Package in object code or executable form, provided that you do at least ONE of the following:

a) distribute a Standard Version of the executables and library files, together with instructions (in the manual page or equivalent) on where to get the Standard Version.

b) accompany the distribution with the machine-readable source of the Package with your modifications.

c) accompany any non-standard executables with their corresponding Standard Version executables, giving the non-standard executables non-standard names, and clearly documenting the differences in manual pages (or equivalent), together with instructions on where to get the Standard Version.

d) make other distribution arrangements with the Copyright Holder.

5. You may charge a reasonable copying fee for any distribution of this Package. You may charge any fee you choose for support of this Package. YOU MAY NOT CHARGE A FEE FOR THIS PACKAGE ITSELF. However, you may distribute this Package in aggregate with other (possibly commercial) programs as part of a larger (possibly commercial) software distribution provided that YOU DO NOT ADVERTISE this package as a product of your own.

6. The name of the Copyright Holder may not be used to endorse or promote products derived from this software without specific prior written permission.

7. THIS PACKAGE IS PROVIDED "AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

The End

GNU GENERAL PUBLIC LICENSE

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.

675 Mass Ave, Cambridge, MA 02139, USA

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

Preamble

The licenses for most software are designed to take away your

freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Library General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

GNU GENERAL PUBLIC LICENSE  
TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

- a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.
- b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,



c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6.

Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein.

You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to

address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS

# 1.72 util-linux 2.36

## 1.72.1 Available under license :

```
NR START  END SECTORS SIZE NAME UUID
1  32 7679  7648 3.7M  8f8378c0-01
2 7680 16383  8704 4.3M  8f8378c0-02
5 7936 12799  4864 2.4M
6 12544 16127  3584 1.8M
```

GNU LESSER GENERAL PUBLIC LICENSE

Version 2.1, February 1999

Copyright (C) 1991, 1999 Free Software Foundation, Inc.  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA  
Everyone is permitted to copy and distribute verbatim copies  
of this license document, but changing it is not allowed.

[This is the first released version of the Lesser GPL. It also counts  
as the successor of the GNU Library Public License, version 2, hence  
the version number 2.1.]

### Preamble

The licenses for most software are designed to take away your  
freedom to share and change it. By contrast, the GNU General Public  
Licenses are intended to guarantee your freedom to share and change  
free software--to make sure the software is free for all its users.

This license, the Lesser General Public License, applies to some  
specially designated software packages--typically libraries--of the  
Free Software Foundation and other authors who  
decide to use it. You  
can use it too, but we suggest you first think carefully about whether  
this license or the ordinary General Public License is the better  
strategy to use in any particular case, based on the explanations below.

When we speak of free software, we are referring to freedom of use,  
not price. Our General Public Licenses are designed to make sure that  
you have the freedom to distribute copies of free software (and charge  
for this service if you wish); that you receive source code or can get  
it if you want it; that you can change the software and use pieces of  
it in new free programs; and that you are informed that you can do  
these things.

To protect your rights, we need to make restrictions that forbid  
distributors to deny you these rights or to ask you to surrender these  
rights. These restrictions translate to certain responsibilities for  
you if you distribute copies of the library or if you modify it.

For example, if you distribute copies of the library, whether gratis or for a fee, you must give the recipients all the rights that we gave you. You must make sure that they, too, receive or can get the source code. If you link other code with the library, you must provide complete object files to the recipients, so that they can relink them with the library after making changes to the library and recompiling it. And you must show them these terms so they know their rights.

We protect your rights with a two-step method: (1) we copyright the library, and (2) we offer you this license, which gives you legal permission to copy, distribute and/or modify the library.

To protect each distributor, we want to make it very clear that there is no warranty for the free library. Also, if the library is modified by someone else and passed on, the recipients should know that what they have is not the original version, so that the original author's reputation will not be affected by problems that might be introduced by others.

Finally, software patents pose a constant threat to the existence of any free program. We wish to make sure that a company cannot effectively restrict the users of a free program by obtaining a restrictive license from a patent holder. Therefore, we insist that any patent license obtained for a version of the library must be consistent with the full freedom of use specified in this license.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License. This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License. We use this license for certain libraries in order to permit linking those libraries into non-free programs.

When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.

We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less

of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

## GNU LESSER GENERAL PUBLIC LICENSE

### TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License Agreement applies to any software library or other program which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Lesser General Public License (also called "this License"). Each licensee is addressed as "you".

A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the

Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

1. You may copy and distribute verbatim copies of the Library's complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and distribute a copy of this License along with the Library.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

- a) The modified work must itself be a software library.
- b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.
- c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.

d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

### 3. You may opt to apply the terms of the ordinary GNU General Public

License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for



that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may

distribute the

object code for the work under the terms of Section 6.

Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

a) Accompany

the work with the complete corresponding

machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate

properly with a modified version of the library, if

the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy

from a designated place, offer equivalent access to copy the above specified materials from the same place.

e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally

distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:

a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.

b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

8. You may not copy, modify, sublicense, link with, or distribute the Library except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the Library is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

9. You are not required to accept this License, since you have not

signed it. However, nothing else grants you permission to modify or distribute the Library or its derivative works. These actions are prohibited by law if

you do not accept this License. Therefore, by modifying or distributing the Library (or any work based on the Library), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Library or works based on it.

10. Each time you redistribute the Library (or any work based on the Library), the recipient automatically receives a license from the original licensor to copy, distribute, link with or modify the Library subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties with this License.

11. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Library at all. For example, if a patent license would not permit royalty-free redistribution of the Library by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Library.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to

be a consequence of the rest of this License.

12. If the distribution and/or use of the Library is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Library under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

13. The Free Software Foundation may publish revised and/or new versions of the Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Library does not specify a license version number, you may choose any version ever published by the Free Software Foundation.

14. If you wish to incorporate parts of the Library into other free programs whose distribution conditions are incompatible with these, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

15. BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE LIBRARY "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY

AND/OR REDISTRIBUTE THE LIBRARY AS PERMITTED ABOVE,  
BE LIABLE TO YOU  
FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR  
CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE  
LIBRARY (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING  
RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A  
FAILURE OF THE LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE), EVEN IF  
SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH  
DAMAGES.

#### END OF TERMS AND CONDITIONS

#### How to Apply These Terms to Your New Libraries

If you develop a new library, and you want it to be of the greatest possible use to the public, we recommend making it free software that everyone can redistribute and change. You can do so by permitting redistribution under these terms (or, alternatively, under the terms of the ordinary General Public License).

To apply these terms, attach the following notices to the library. It is safest to attach them to the start of each source file to most effectively convey

the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the library's name and a brief idea of what it does.>

Copyright (C) <year> <name of author>

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

You should have received a copy of the GNU Lesser General Public License along with this library; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA

Also add information on how to contact you by electronic and paper mail.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the library, if

necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the library `Frob' (a library for tweaking knobs) written by James Random Hacker.

<signature of Ty Coon>, 1 April 1990

Ty Coon, President of Vice

That's all there is to it!

## GNU GENERAL PUBLIC LICENSE

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.,  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA  
Everyone is permitted to copy and distribute verbatim copies  
of this license document, but changing it is not allowed.

### Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Lesser General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price.

Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

## GNU GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License



along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of

a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

- a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under

this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to

decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING,

## REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

## END OF TERMS AND CONDITIONS

### How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the program's name and a brief idea of what it does.>  
Copyright (C) <year> <name of author>

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA.

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

Gnomovision version 69, Copyright (C) year name of author  
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.  
This is free software, and you are welcome to redistribute  
it  
under certain conditions; type `show c' for details.

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the program  
`Gnomovision' (which makes passes at compilers) written by James Hacker.

<signature of Ty Coon>, 1 April 1989  
Ty Coon, President of Vice

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Lesser General Public License instead of this License.

GNU GENERAL PUBLIC LICENSE  
Version 3, 29 June 2007

Copyright (C) 2007 Free Software Foundation, Inc. <<https://fsf.org/>>  
Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

Preamble

The GNU General Public License is a free, copyleft license for software and other kinds of works.

The licenses for most software and other practical works are designed to take away your freedom to share and change the works. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change all versions of a program--to make sure it remains free software for all its users. We, the Free Software Foundation, use the GNU General Public License for most of our software; it applies also to any other work released this way by its authors. You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for them if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs, and that you know you can do these things.

To protect your rights, we need to prevent others from denying you these rights or asking you to surrender the rights. Therefore, you have certain responsibilities if you distribute copies of the software, or if you modify it: responsibilities to respect the freedom of others.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must pass on to the recipients the same freedoms that you received. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

Developers that use the GNU GPL protect your rights with two steps:

- (1) assert copyright on the software, and (2) offer you this License giving you legal permission to copy, distribute and/or modify it.

For the developers' and authors' protection, the GPL clearly explains that there is no warranty for this free software. For both users' and authors' sake, the GPL requires that modified versions be marked as changed, so that their problems will not be attributed erroneously to authors of previous versions.

Some devices are designed to deny users access to install or run modified versions of the software inside them, although the manufacturer can do so. This is fundamentally incompatible with the aim of protecting users' freedom to change the software. The systematic pattern of such abuse occurs in the area of products for individuals to use, which is precisely where it is most unacceptable. Therefore, we have designed this version of the GPL to prohibit the practice for those products. If such problems arise substantially in other domains, we stand

ready to extend this provision to those domains in future versions of the GPL, as needed to protect the freedom of users.

Finally, every program is threatened constantly by software patents. States should not allow patents to restrict development and use of software on general-purpose computers, but in those that do, we wish to avoid the special danger that patents applied to a free program could make it effectively proprietary. To prevent this, the GPL assures that

patents cannot be used to render the program non-free.

The precise terms and conditions for copying, distribution and modification follow.

## TERMS AND CONDITIONS

### 0. Definitions.

"This License" refers to version 3 of the GNU General Public License.

"Copyright" also means copyright-like laws that apply to other kinds of works, such as semiconductor masks.

"The Program" refers to any copyrightable work licensed under this License. Each licensee is addressed as "you". "Licensees" and "recipients" may be individuals or organizations.

To "modify" a work means to copy from or adapt all or part of the work in a fashion requiring copyright permission, other than the making of an exact copy. The resulting work is called a "modified version" of the earlier work or a work "based on" the earlier work.

A "covered work" means either the unmodified Program or a work based on the Program.

To "propagate" a work means to do anything with it that, without permission, would make you directly or secondarily liable for infringement under applicable copyright law, except executing it on a computer or modifying a private copy. Propagation includes copying, distribution (with or without modification), making available to the public, and in some countries other activities as well.

To "convey" a work means any kind of propagation that enables other parties to make or receive copies. Mere interaction with a user through a computer network, with no transfer of a copy, is not conveying.

An interactive user interface displays "Appropriate Legal Notices" to the extent that it includes a convenient and prominently visible feature that (1) displays an appropriate copyright notice, and (2) tells the user that there is no warranty for the work (except to the extent that warranties are provided), that licensees may convey the work under this License, and how to view a copy of this License. If the interface presents a list of user commands or options, such as a menu, a prominent item in the list meets this criterion.



## 1. Source Code.

The "source code" for a work means the preferred form of the work for making modifications to it. "Object code" means any non-source form of a work.

A "Standard Interface" means an interface that either is an official standard defined by a recognized standards body, or, in the case of interfaces specified for a particular programming language, one that is widely used among developers working in that language.

The

"System Libraries" of an executable work include anything, other than the work as a whole, that (a) is included in the normal form of packaging a Major Component, but which is not part of that Major Component, and (b) serves only to enable use of the work with that Major Component, or to implement a Standard Interface for which an implementation is available to the public in source code form. A "Major Component", in this context, means a major essential component (kernel, window system, and so on) of the specific operating system (if any) on which the executable work runs, or a compiler used to produce the work, or an object code interpreter used to run it.

The "Corresponding Source" for a work in object code form means all the source code needed to generate, install, and (for an executable work) run the object code and to modify the work, including scripts to control those activities. However, it does not include the work's System Libraries, or general-purpose tools or generally available free programs which are used unmodified in performing those activities but which are not part of the work. For example, Corresponding Source includes interface definition files associated with source files for the work, and the source code for shared libraries and dynamically linked subprograms that the work is specifically designed to require, such as by intimate data communication or control flow between those subprograms and other parts of the work.

The Corresponding Source need not include anything that users can regenerate automatically from other parts of the Corresponding Source.

The Corresponding Source for a work in source code form is that same work.

## 2. Basic Permissions.

All rights granted under this License are granted for the term of copyright on the Program, and are irrevocable provided the stated

conditions are met. This License explicitly affirms your unlimited permission to run the unmodified Program. The output from running a covered work is

covered by this License only if the output, given its content, constitutes a covered work. This License acknowledges your rights of fair use or other equivalent, as provided by copyright law.

You may make, run and propagate covered works that you do not convey, without conditions so long as your license otherwise remains in force. You may convey covered works to others for the sole purpose of having them make modifications exclusively for you, or provide you with facilities for running those works, provided that you comply with the terms of this License in conveying all material for which you do not control copyright. Those thus making or running the covered works for you must do so exclusively on your behalf, under your direction and control, on terms that prohibit them from making any copies of your copyrighted material outside their relationship with you.

Conveying under any other circumstances is permitted solely under the conditions stated below. Sublicensing is not allowed; section 10 makes it unnecessary.

### 3. Protecting Users' Legal Rights From Anti-Circumvention Law.

No covered work shall be deemed part of an effective technological measure under any applicable law fulfilling obligations under article 11 of the WIPO copyright treaty adopted on 20 December 1996, or similar laws prohibiting or restricting circumvention of such measures.

When you convey a covered work, you waive any legal power to forbid circumvention of technological measures to the extent such circumvention is effected by exercising rights under this License with respect to the covered work, and you disclaim any intention to limit operation or modification of the work as a means of enforcing, against the work's users, your or third parties' legal rights to forbid circumvention of technological measures.

### 4. Conveying Verbatim Copies.

You may convey verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately

publish on each copy an appropriate copyright notice;  
keep intact all notices stating that this License and any non-permissive terms added in accord with section 7 apply to the code;  
keep intact all notices of the absence of any warranty; and give all

recipients a copy of this License along with the Program.

You may charge any price or no price for each copy that you convey, and you may offer support or warranty protection for a fee.

#### 5. Conveying Modified Source Versions.

You may convey a work based on the Program, or the modifications to produce it from the Program, in the form of source code under the terms of section 4, provided that you also meet all of these conditions:

- a) The work must carry prominent notices stating that you modified it, and giving a relevant date.
- b) The work must carry prominent notices stating that it is released under this License and any conditions added under section 7. This requirement modifies the requirement in section 4 to "keep intact all notices".
- c) You must license the entire work, as a whole, under this License to anyone who comes into possession of a copy. This License will therefore apply, along with any applicable section 7 additional terms, to the whole of the work, and all its parts, regardless of how they are packaged. This License gives no permission to license the work in any other way, but it does not invalidate such permission if you have separately received it.
- d) If the work has interactive user interfaces, each must display Appropriate Legal Notices; however, if the Program has interactive interfaces that do not display Appropriate Legal Notices, your work need not make them do so.

A compilation of a covered work with other separate and independent works, which are not by their nature extensions of the covered work, and which are not combined with it such as to form a larger program, in or on a volume of a storage or distribution medium, is called an "aggregate" if the compilation and its resulting copyright are not used to limit the access or legal rights of the compilation's users beyond what the individual works permit. Inclusion of a covered work in an aggregate does not cause this License to apply to the other parts of the aggregate.

#### 6. Conveying Non-Source Forms.

You may convey a covered work in object code form under the terms of sections 4 and 5, provided that you also convey the

machine-readable Corresponding Source under the terms of this License, in one of these ways:

a) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by the Corresponding Source fixed on a durable physical medium customarily used for software interchange.

b) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by a written offer, valid for at least three years and valid for as long as you offer spare parts or customer support for that product model, to give anyone who possesses the object code either (1) a copy of the Corresponding Source for all the software in the product that is covered by this License, on a durable physical medium customarily used for software interchange, for a price no more than your reasonable cost of physically performing this conveying of source, or (2) access to copy the Corresponding Source from a network server at no charge.

c) Convey individual copies of the object code with a copy of the written offer to provide the Corresponding Source. This alternative is allowed only occasionally and noncommercially, and only if you received the object code with such an offer, in accord with subsection 6b.

d) Convey the object code by offering access from a designated place (gratis or for a charge), and offer equivalent access to the Corresponding Source in the same way through the same place at no further charge. You need not require recipients to copy the Corresponding Source along with the object code. If the place to copy the object code is a network server, the Corresponding Source may be on a different server (operated by you or a third party) that supports equivalent copying facilities, provided you maintain clear directions next to the object code saying where to find the Corresponding Source. Regardless of what server hosts the Corresponding Source, you remain obligated to ensure that it is available for as long as needed to satisfy these requirements.

e) Convey the object code using peer-to-peer transmission, provided you inform other peers where the object code and Corresponding Source of the work are being offered to the general public at no charge under subsection 6d.

A separable portion of the object code, whose source code is excluded from the Corresponding Source

as a System Library, need not be included in conveying the object code work.

A "User Product" is either (1) a "consumer product", which means any tangible personal property which is normally used for personal, family, or household purposes, or (2) anything designed or sold for incorporation into a dwelling. In determining whether a product is a consumer product, doubtful cases shall be resolved in favor of coverage. For a particular product received by a particular user, "normally used" refers to a typical or common use of that class of product, regardless of the status of the particular user or of the way in which the particular user actually uses, or expects or is expected to use, the product. A product is a consumer product regardless of whether the product has substantial commercial, industrial or non-consumer uses, unless such uses represent the only significant mode of use of the product.

"Installation Information" for a User Product means any methods, procedures, authorization keys, or other information required to install and execute modified versions of a covered work in that User Product from a modified version of its Corresponding Source. The information must suffice to ensure that the continued functioning of the modified object code is in no case prevented or interfered with solely because modification has been made.

If you convey an object code work under this section in, or with, or specifically for use in, a User Product, and the conveying occurs as part of a transaction in which the right of possession and use of the User Product is transferred to the recipient in perpetuity or for a fixed term (regardless of how the transaction is characterized), the Corresponding Source conveyed under this section must be accompanied by the Installation Information. But this requirement does not apply if neither you nor any third party retains the ability to install modified object code on the User Product (for example, the work has been installed in ROM).

The requirement to provide Installation Information does not include a requirement to continue to provide support service, warranty, or updates for a work that has been modified or installed by the recipient, or for the User Product in which it has been modified or installed. Access to a network may be denied when the modification itself materially and adversely affects the operation of the network or violates the rules and protocols for communication across the network.

Corresponding Source conveyed, and Installation Information provided, in accord with this section must be in a format that is publicly documented (and with an implementation available to the public in

source code form), and must require no special password or key for unpacking, reading or copying.

## 7. Additional Terms.

"Additional permissions" are terms that supplement the terms of this License by making exceptions from one or more of its conditions. Additional permissions that are applicable to the entire Program shall be treated as though they were included in this License, to the extent that they are valid under applicable law. If additional permissions apply only to part of the Program, that part may be used separately under those permissions, but the entire Program remains governed by this License without regard to the additional permissions.

When you convey a copy of a covered work, you may at your option remove any additional permissions from that copy, or from any part of it. (Additional permissions may be written to require their own removal in certain cases when you modify the work.) You may place additional permissions on material, added by you to a covered work, for which you have or can give appropriate copyright permission.

Notwithstanding any other provision of this License, for material you add to a covered work, you may (if authorized by the copyright holders of that material) supplement the terms of this License with terms:

- a) Disclaiming warranty or limiting liability differently from the terms of sections 15 and 16 of this License; or
- b) Requiring preservation of specified reasonable legal notices or author attributions in that material or in the Appropriate Legal Notices displayed by works containing it; or
- c) Prohibiting misrepresentation of the origin of that material, or requiring that modified versions of such material be marked in reasonable ways as different from the original version; or
- d) Limiting the use for publicity purposes of names of licensors or authors of the material; or
- e) Declining to grant rights under trademark law for use of some trade names, trademarks, or service marks; or
- f) Requiring indemnification of licensors and authors of that material by anyone who conveys the material (or modified versions of it) with contractual assumptions of liability to the recipient, for any liability that these contractual assumptions directly impose on

those licensors and authors.

All other non-permissive additional terms are considered "further restrictions" within the meaning of section 10. If the Program as you received it, or any part of it, contains a notice stating that it is governed by this License along with a term that is a further restriction, you may remove that term. If a license document contains a further restriction but permits relicensing or conveying under this License, you may add to a covered work material governed by the terms of that license document, provided that the further restriction does not survive such relicensing or conveying.

If you add terms to a covered work in accord with this section, you must place, in the relevant source files, a statement of the additional terms that apply to those files, or a notice indicating where to find the applicable terms.

Additional terms, permissive or non-permissive, may be stated in the form of a separately written license, or stated as exceptions; the above requirements apply either way.

## 8. Termination.

You may not propagate or modify a covered work except as expressly provided under this License. Any attempt otherwise to propagate or modify it is void, and will automatically terminate your rights under this License (including any patent licenses granted under the third paragraph of section 11).

However, if you cease all violation of this License, then your license from a particular copyright holder is reinstated (a) provisionally, unless and until the copyright holder explicitly and finally terminates your license, and (b) permanently, if the copyright holder fails to notify you of the violation by some reasonable means prior to 60 days after the cessation.

Moreover, your license from a particular copyright holder is reinstated permanently if the copyright holder notifies you of the violation by some reasonable means, this is the first time you have received notice of violation of this License (for any work) from that copyright holder, and you cure the violation prior to 30 days after your receipt of the notice.

Termination of your rights under this section does not terminate the licenses of parties who have received copies or rights from you under

this License. If your rights have been terminated and not permanently reinstated, you do not qualify to receive new licenses for the same material under section 10.

#### 9. Acceptance Not Required for Having Copies.

You are not required to accept this License in order to receive or run a copy of the Program. Ancillary propagation of a covered work occurring solely as a consequence of using peer-to-peer transmission to receive a copy likewise does not require acceptance. However, nothing other than this License grants you permission to propagate or modify any covered work. These actions infringe copyright if you do not accept this License. Therefore, by modifying or propagating a covered work, you indicate your acceptance of this License to do so.

#### 10. Automatic Licensing of Downstream Recipients.

Each time you convey a covered work, the recipient automatically receives a license from the original licensors, to run, modify and propagate that work, subject to this License. You are not responsible for enforcing compliance by third parties with this License.

An "entity transaction" is a transaction transferring control of an organization, or substantially all assets of one, or subdividing an organization, or merging organizations. If propagation of a covered work results from an entity transaction, each party to that transaction who receives a copy of the work also receives whatever licenses to the work the party's predecessor in interest had or could give under the previous paragraph, plus a right to possession of the Corresponding Source of the work from the predecessor in interest, if the predecessor has it or can get it with reasonable efforts.

You may not impose any further restrictions on the exercise of the rights granted or affirmed under this License. For example, you may not impose a license fee, royalty, or other charge for exercise of rights granted under this License, and you may not initiate litigation (including a cross-claim or counterclaim in a lawsuit) alleging that any patent claim is infringed by making, using, selling, offering for sale, or importing the Program or any portion of it.

#### 11. Patents.

A "contributor" is a copyright holder who authorizes use under this License of the Program or a work on which the Program is based. The work thus licensed is called the contributor's "contributor version".

A contributor's "essential patent claims" are all patent claims



owned or controlled by the contributor, whether already acquired or hereafter acquired, that would be infringed by some manner, permitted by this License, of making, using, or selling its contributor version, but do not include claims that would be infringed only as a consequence of further modification of the contributor version. For purposes of this definition, "control" includes the right to grant patent sublicenses in a manner consistent with the requirements of this License.

Each contributor grants you a non-exclusive, worldwide, royalty-free patent license under the contributor's essential patent claims, to make, use, sell, offer for sale, import and otherwise run, modify and propagate the contents of its contributor version.

In the following three paragraphs, a "patent license" is any express agreement or commitment, however denominated, not to enforce a patent (such as an express permission to practice a patent or covenant not to sue for patent infringement). To "grant" such a patent license to a party means to make such an agreement or commitment not to enforce a patent against the party.

If you convey a covered work, knowingly relying on a patent license, and the Corresponding Source of the work is not available for anyone to copy, free of charge and under the terms of this License, through a publicly available network server or other readily accessible means, then you must either (1) cause the Corresponding Source to be so available, or (2) arrange to deprive yourself of the benefit of the patent license for this particular work, or (3) arrange, in a manner consistent with the requirements of this License, to extend the patent license to downstream recipients. "Knowingly relying" means you have actual knowledge that, but for the patent license, your conveying the covered work in a country, or your recipient's use of the covered work in a country, would infringe one or more identifiable patents in that country that you have reason to believe are valid.

If, pursuant to or in connection with a single transaction or arrangement, you convey, or propagate by procuring conveyance of, a covered work, and grant a patent license to some of the parties receiving the covered work authorizing them to use, propagate, modify or convey a specific copy of the covered work, then the patent license you grant is automatically extended to all recipients of the covered work and works based on it.

A patent license is "discriminatory" if it does not include within the scope of its coverage, prohibits the exercise of, or is

conditioned on the non-exercise of one or more of the rights that are specifically granted under this License. You may not convey a covered work if you are a party to an arrangement with a third party that is in the business of distributing software, under which you make payment to the third party based on the extent of your activity of conveying the work, and under which the third party grants, to any of the parties who would receive the covered work from you, a discriminatory patent license (a) in connection with copies of the covered work conveyed by you (or copies made from those copies), or (b) primarily for and in connection with specific products or compilations that contain the covered work, unless you entered into that arrangement, or that patent license was granted, prior to 28 March 2007.

Nothing in this License shall be construed as excluding or limiting any implied license or other defenses to infringement that may otherwise be available to you under applicable patent law.

#### 12. No Surrender of Others' Freedom.

If conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot convey a covered work so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not convey it at all. For example, if you agree to terms that obligate you to collect a royalty for further conveying from those to whom you convey the Program, the only way you could satisfy both those terms and this License would be to refrain entirely from conveying the Program.

#### 13. Use with the GNU Affero General Public License.

Notwithstanding any other provision of this License, you have permission to link or combine any covered work with a work licensed under version 3 of the GNU Affero General Public License into a single combined work, and to convey the resulting work. The terms of this License will continue to apply to the part which is the covered work, but the special requirements of the GNU Affero General Public License, section 13, concerning interaction through a network will apply to the combination as such.

#### 14. Revised Versions of this License.

The Free Software Foundation may publish revised and/or new versions of the GNU General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies that a certain numbered version of the GNU General Public License "or any later version" applies to it, you have the option of following the terms and conditions either of that numbered version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of the GNU General Public License, you may choose any version ever published by the Free Software Foundation.

If the Program specifies that a proxy can decide which future versions of the GNU General Public License can be used, that proxy's public statement of acceptance of a version permanently authorizes you to choose that version for the Program.

Later license versions may give you additional or different permissions. However, no additional obligations are imposed on any author or copyright holder as a result of your choosing to follow a later version.

#### 15. Disclaimer of Warranty.

THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

#### 16. Limitation of Liability.

IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MODIFIES AND/OR CONVEYS THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

#### 17.

Interpretation of Sections 15 and 16.

If the disclaimer of warranty and limitation of liability provided above cannot be given local legal effect according to their terms, reviewing courts shall apply local law that most closely approximates an absolute waiver of all civil liability in connection with the Program, unless a warranty or assumption of liability accompanies a copy of the Program in return for a fee.

## END OF TERMS AND CONDITIONS

### How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively state the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

```
<one line to give the program's name and a brief idea of what it does.>  
Copyright (C) <year> <name of author>
```

This program is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program. If not, see <https://www.gnu.org/licenses/>.

Also add information on how to contact you by electronic and paper mail.

If the program does terminal interaction, make it output a short notice like this when it starts in an interactive mode:

```
<program> Copyright (C) <year> <name of author>  
This program comes with ABSOLUTELY NO WARRANTY; for details type `show w'.  
This is free software, and you are welcome to redistribute it  
under certain conditions; type `show c' for details.
```

The hypothetical commands `show w' and `show c' should show the appropriate

parts of the General Public License. Of course, your program's commands might be different; for a GUI interface, you would use an "about box".

You should also get your employer (if you work as a programmer) or school, if any, to sign a "copyright disclaimer" for the program, if necessary. For more information on this, and how to apply and follow the GNU GPL, see <https://www.gnu.org/licenses/>.

The GNU General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Lesser General Public License instead of this License. But first, please read <https://www.gnu.org/licenses/why-not-lgpl.html>.

WEV @@ WEV[B "1

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, and the entire permission notice in its entirety, including the disclaimer of warranties.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. The name of the author may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ALL OF WHICH ARE HEREBY DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL

DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF NOT ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

x ?"U@,5 @mISmIN<GimCN7g1u|E  
43mI,5WEV @@ WEV @mImImIAmImImI0mImImI\*mImI  
A0mImImI...  
lost+found...

;9GimCN7g

!"#\$%&'()\*+,-  
./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^\_`abcdefghijklmnopqrstuvwxyz{|}~

!"#\$%&'()\*+,-  
./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^\_`abcdefghijklmnopqrstuvwxyz{|}~

!"#\$%&'()\*+,-  
./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^\_`abcdefghijklmnopqrstuvwxyz{|}~

!"#\$%&'()\*+,-  
./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^\_`abcdefghijklmnopqrstuvwxyz{|}~WEV @@  
WEV[B "1

This library is free software; you can redistribute it and/or  
modify it under the terms of the Modified BSD License.

The complete text of the license is available in the  
../Documentation/licenses/COPYING.BSD-3-Clause file.

Permission to use, copy, modify, and/or distribute this software for any  
purpose with or without fee is hereby granted, provided that the above  
copyright notice and this permission notice appear in all copies.

THE SOFTWARE IS PROVIDED "AS IS" AND THE AUTHOR DISCLAIMS ALL WARRANTIES  
WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF  
MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR  
ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES  
WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN  
ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF  
OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

This library is free software; you can redistribute it and/or  
modify it under the terms of the GNU Lesser General Public  
License as published by the Free Software Foundation; either  
version 2.1 of the License, or (at your option) any later  
version.

The complete text of the license is available in the  
../Documentation/licenses/COPYING.LGPL-2.1-or-later

This library is free software; you can redistribute it and/or  
modify it under the terms of the GNU Lesser General Public  
License as published by the Free Software Foundation; either  
version 2.1 of the License, or (at your option) any later  
version.

The complete text of the license is available in the  
../Documentation/licenses/COPYING.LGPL-2.1-or-later file.

/\*

\* Copyright (c) 1989 The Regents of the University of California.

\* All rights reserved.

\*  
 \* Redistribution and use in source and binary forms, with or without  
 \* modification, are permitted provided that the following conditions  
 \* are met:  
 \* 1. Redistributions of source code must retain the above copyright  
 \* notice, this list of conditions and the following disclaimer.  
 \* 2. Redistributions in binary form must reproduce the above copyright  
 \* notice, this list of conditions and the following disclaimer in the  
 \* documentation and/or other materials provided with the distribution.  
 \* 3. All advertising materials mentioning features or use of this software  
 \* must display the following acknowledgement:  
 \* This product includes software developed by the University of  
 \* California, Berkeley and its contributors.  
 \* 4. Neither the name of the University nor the names of its contributors  
 \* may be used to endorse or promote products derived from this software  
 \*  
 \* without specific prior written permission.  
 \*  
 \* THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS ``AS IS" AND  
 \* ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE  
 \* IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE  
 \* ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE  
 \* FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL  
 \* DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS  
 \* OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)  
 \* HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT  
 \* LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY  
 \* OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF  
 \* SUCH DAMAGE.  
 \*/

## 1.73 binutils 2.35.1

### 1.73.1 Available under license :

GNU GENERAL PUBLIC LICENSE

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.

51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA

Everyone is permitted to copy and distribute verbatim copies  
 of this license document, but changing it is not allowed.

Preamble

The licenses for most software are designed to take away your  
 freedom to share and change it. By contrast, the GNU General Public  
 License is intended to guarantee your freedom to share and change free

software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Library General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

GNU GENERAL PUBLIC LICENSE



## TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

- a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.
- b) You must cause any work that you distribute or publish, that in

whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

- c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such

interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is

allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6.

Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

#### END OF TERMS AND CONDITIONS

#### How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

```
<one line to give the program's name and a brief idea of what it does.>  
Copyright (C) <year> <name of author>
```

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or  
(at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

```
Gnomovision version 69, Copyright (C) year name of author  
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.  
This is free software, and you are welcome to redistribute it  
under certain conditions; type `show c' for details.
```

The hypothetical commands  
`show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

```
Yoyodyne, Inc., hereby disclaims all copyright interest in the program  
'Gnomovision' (which makes passes at compilers) written by James Hacker.
```

<signature of Ty Coon>, 1 April 1989

Ty Coon, President of Vice

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Library General Public License instead of this License.

(This file is under construction.) -\*- text -\*-

If you've contributed to gas and your name isn't listed here, it is not meant as a slight. I just don't know about it. Email me, nickc@redhat.com and I'll correct the situation.

This file will eventually be deleted: The general info will go into the documentation, and info on specific files will go into an AUTHORS file, as requested by the FSF.

+++++

Dean Elsner wrote the original gas for vax. [more details?]

Jay Fenlason maintained gas for a while, adding support for gdb-specific debug information and the 68k series machines, most of the preprocessing pass, and extensive changes in messages.c, input-file.c, write.c.

K. Richard Pixley maintained gas for a while, adding various enhancements and many bug fixes, including merging support for several processors, breaking gas up to handle multiple object file format backends (including heavy rewrite, testing, an integration of the coff and b.out backends), adding configuration including heavy testing and verification of cross assemblers and file splits and renaming, converted gas to strictly ansi C including full prototypes, added support for m680[34]0 & cpu32, considerable work on i960 including a coff port (including considerable amounts of reverse engineering), a sparc opcode file rewrite, decstation, rs6000, and hp300hpux host ports, updated "know" assertions and made them work, much other reorganization, cleanup, and lint.

Ken Raeburn wrote the high-level BFD interface code to replace most of the code in format-specific I/O modules.

The original Vax-VMS support was contributed by David L. Kashtan. Eric Youngdale and Pat Rankin have done much work with it since.

The Intel 80386 machine description was written by Eliot Dresselhaus.

Minh Tran-Le at IntelliCorp contributed some AIX 386 support.

The Motorola 88k machine description was contributed by Devon Bowen of Buffalo University and Torbjorn Granlund of the Swedish Institute of Computer Science.

Keith

Knowles at the Open Software Foundation wrote the original MIPS back end (tc-mips.c, tc-mips.h), and contributed Rose format support that hasn't been merged in yet. Ralph Campbell worked with the MIPS code to support a.out format.

Support for the Zilog Z8k and Hitachi H8/300, H8/500 and SH processors (tc-z8k, tc-h8300, tc-h8500, tc-sh), and IEEE 695 object file format (obj-ieee), was written by Steve Chamberlain of Cygnus Solutions. Steve also modified the COFF back end (obj-coffbfd) to use BFD for some low-level operations, for use with the Hitachi, 29k and Zilog targets.

John Gilmore built the AMD 29000 support, added .include support, and simplified the configuration of which versions accept which pseudo-ops. He updated the 68k machine description so that Motorola's opcodes always produced fixed-size instructions (e.g. jsr), while synthetic instructions remained shrinkable (jbsr). John fixed many bugs, including true tested cross-compilation support, and one bug in relaxation that took a week and required the proverbial one-bit fix.

Ian Lance Taylor of Cygnus Solutions merged the Motorola and MIT syntaxes for the 68k, completed support for some COFF targets (68k, i386 SVR3, and SCO Unix), wrote the ECOFF support based on Michael Meissner's mips-tfile program, wrote the PowerPC and RS/6000 support, and made a few other minor patches. He handled the binutils releases for versions 2.7 through 2.9.

David Edelsohn contributed fixes for the PowerPC and AIX support.

Steve Chamberlain made gas able to generate listings.

Support for the HP9000/300 was contributed by Glenn Engel of HP.

Support for ELF format files has been worked on by Mark Eichin of Cygnus Solutions (original, incomplete implementation), Pete Hoogenboom at the University of Utah (HPPA mainly), Michael Meissner of the Open Software Foundation (i386 mainly), and Ken Raeburn of Cygnus Solutions (sparc, initial 64-bit support).



Several engineers at Cygnus Solutions have also provided many small bug fixes and configuration enhancements.

The initial Alpha support was contributed by Carnegie-Mellon University. Additional work was done by Ken Raeburn of Cygnus Solutions. Richard Henderson then rewrote much of the Alpha support.

Ian Dall updated the support code for the National Semiconductor 32000 series, and added support for Mach 3 and NetBSD running on the PC532.

Klaus Kaempf ported the assembler and the binutils to openVMS/Alpha.

Steve Haworth contributed the support for the Texas Instruction c30 (tms320c30).

H.J. Lu has contributed many patches and much testing.

Alan Modra reworked much of the i386 backend, improving the error checking, updating the code, and improving the 16 bit support, using patches from the work of Martynas Kunigelis and H.J. Lu.

Many others have contributed large or small bugfixes and enhancements. If you've contributed significant work and are not mentioned on this list, and want to be, let us know. Some of the history has been lost; we aren't intentionally leaving anyone out.

Copyright (C) 2012-2020 Free Software Foundation, Inc.

Copying and distribution of this file, with or without modification, are permitted in any medium without royalty provided the copyright notice and this notice are preserved.

@c The GNU Free Documentation License.

@center Version 1.3, 3 November 2008

@c This file is intended to be included within another document,

@c hence no sectioning command or @node.

@display

Copyright @copyright{ } 2000, 2001, 2002, 2007, 2008 Free Software Foundation, Inc.

@uref{<http://fsf.org/>}

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

@end display

@enumerate 0

@item

## PREAMBLE

The purpose of this License is to make a manual, textbook, or other functional and useful document @dfn{free} in the sense of freedom: to assure everyone the effective freedom to copy and redistribute it, with or without modifying it, either commercially or noncommercially. Secondly, this License preserves for the author and publisher a way to get credit for their work, while not being considered responsible for modifications made by others.

This License is a kind of ``copyleft'', which means that derivative works of the document must themselves be free in the same sense. It complements the GNU General Public License, which is a copyleft license designed for free software.

We have designed this License in order to use it for manuals for free software, because free software needs free documentation: a free program should come with manuals providing the same freedoms that the software does. But this License is not limited to software manuals; it can be used for any textual work, regardless of subject matter or whether it is published as a printed book. We recommend this License principally for works whose purpose is instruction or reference.

@item

## APPLICABILITY AND DEFINITIONS

This License applies to any manual or other work, in any medium, that contains a notice placed by the copyright holder saying it can be distributed under the terms of this License. Such a notice grants a world-wide, royalty-free license, unlimited in duration, to use that work under the conditions stated herein. The ``Document'', below, refers

to any such manual or work. Any member of the public is a licensee, and is addressed as ``you''. You accept the license if you copy, modify or distribute the work in a way requiring permission under copyright law.

A ``Modified Version'' of the Document means any work containing the Document or a portion of it, either copied verbatim, or with modifications and/or translated into another language.

A ``Secondary Section'' is a named appendix or a front-matter section of the Document that deals exclusively with the relationship of the publishers or authors of the Document to the Document's overall subject (or to related matters) and contains nothing that could fall directly within that overall subject. (Thus, if the Document is in

part a textbook of mathematics, a Secondary Section may not explain any mathematics.) The relationship could be a matter of historical connection with the subject or with related matters, or of legal, commercial, philosophical, ethical or political position regarding them.

The "Invariant Sections" are certain Secondary Sections whose titles are designated, as being those of Invariant Sections, in the notice that says that the Document is released under this License. If a section does not fit the above definition of Secondary then it is not allowed to be designated as Invariant. The Document may contain zero Invariant Sections. If the Document does not identify any Invariant Sections then there are none.

The "Cover Texts" are certain short passages of text that are listed, as Front-Cover Texts or Back-Cover Texts, in the notice that says that the Document is released under this License. A Front-Cover Text may be at most 5 words, and a Back-Cover Text may be at most 25 words.

A "Transparent" copy of the Document means a machine-readable copy, represented in a format whose specification is available to the general public, that is suitable for revising the document straightforwardly with generic text editors or (for images composed of pixels) generic paint programs or (for drawings) some widely available drawing editor, and that is suitable for input to text formatters or for automatic translation to a variety of formats suitable for input to text formatters. A copy made in an otherwise Transparent file format whose markup, or absence of markup, has been arranged to thwart or discourage subsequent modification by readers is not Transparent. An image format is not Transparent if used for any substantial amount of text. A copy that is not "Transparent" is called "Opaque".

Examples of suitable formats for Transparent copies include plain `@sc{ascii}` without markup, Texinfo input format, `La@TeX{}` input format, `@acronym{SGML}` or `@acronym{XML}` using a publicly available `@acronym{DTD}`, and standard-conforming simple `@acronym{HTML}`, PostScript or `@acronym{PDF}` designed for human modification. Examples of transparent image formats include `@acronym{PNG}`, `@acronym{XCF}` and `@acronym{JPG}`. Opaque formats include proprietary formats that can be read and edited only by proprietary word processors, `@acronym{SGML}` or `@acronym{XML}` for which the `@acronym{DTD}` and/or processing tools are not generally available, and the machine-generated `@acronym{HTML}`, PostScript or `@acronym{PDF}` produced by some word processors for output purposes only.

The ``Title Page" means, for a printed book, the title page itself, plus such following pages as are needed to hold, legibly, the material this License requires to appear in the title page. For works in formats which do not have any title page as such, ``Title Page" means the text near the most prominent appearance of the work's title, preceding the beginning of the body of the text.

The ``publisher" means any person or entity that distributes copies of the Document to the public.

A section ``Entitled XYZ" means a named subunit of the Document whose title either is precisely XYZ or contains XYZ in parentheses following text that translates XYZ in another language. (Here XYZ stands for a specific section name mentioned below, such as ``Acknowledgements", ``Dedications", ``Endorsements", or ``History".) To ``Preserve the Title" of such a section when you modify the Document means that it remains a section ``Entitled XYZ" according to this definition.

The Document may include Warranty Disclaimers next to the notice which states that this License applies to the Document. These Warranty Disclaimers are considered to be included by reference in this License, but only as regards disclaiming warranties: any other implication that these Warranty Disclaimers may have is void and has no effect on the meaning of this License.

@item

#### VERBATIM COPYING

You may copy and distribute the Document in any medium, either commercially or noncommercially, provided that this License, the copyright notices, and the license notice saying this License applies to the Document are reproduced in all copies, and that you add no other conditions whatsoever to those of this License. You may not use technical measures to obstruct or control the reading or further copying of the copies you make or distribute. However, you may accept compensation in exchange for copies. If you distribute a large enough number of copies you must also follow the conditions in section 3.

You may also lend copies, under the same conditions stated above, and you may publicly display copies.

@item

#### COPYING IN QUANTITY

If you publish printed copies (or copies in media that commonly have printed covers) of the Document, numbering more than 100, and the

Document's license notice requires Cover Texts, you must enclose the copies in covers that carry, clearly and legibly, all these Cover Texts: Front-Cover Texts on the front cover, and Back-Cover Texts on the back cover. Both covers must also clearly and legibly identify you as the publisher of these copies. The front cover must present the full title with all words of the title equally prominent and visible.

You may add other material on the covers in addition.

Copying with changes limited to the covers, as long as they preserve the title of the Document and satisfy these conditions, can be treated as verbatim copying in other respects.

If the required texts for either cover are too voluminous to fit legibly, you should put the first ones listed (as many as fit reasonably) on the actual cover, and continue the rest onto adjacent pages.

If you publish or distribute Opaque copies of the Document numbering more than 100, you must either include a machine-readable Transparent copy along with each Opaque copy, or state in or with each Opaque copy a computer-network location from which the general network-using public has access to download using public-standard network protocols a complete Transparent copy of the Document, free of added material. If you use the latter option, you must take reasonably prudent steps, when you begin distribution of Opaque copies in quantity, to ensure that

this Transparent copy will remain thus accessible at the stated location until at least one year after the last time you distribute an Opaque copy (directly or through your agents or retailers) of that edition to the public.

It is requested, but not required, that you contact the authors of the Document well before redistributing any large number of copies, to give them a chance to provide you with an updated version of the Document.

@item

## MODIFICATIONS

You may copy and distribute a Modified Version of the Document under the conditions of sections 2 and 3 above, provided that you release the Modified Version under precisely this License, with the Modified Version filling the role of the Document, thus licensing distribution and modification of the Modified Version to whoever possesses a copy of it. In addition, you must do these things in the Modified Version:

@enumerate A

@item

Use in the Title Page (and on the covers, if any) a title distinct

from that of the Document, and from those of previous versions (which should, if there were any, be listed in the History section of the Document). You may use the same title as a previous version if the original publisher of that version gives permission.

@item

List on the Title Page, as authors, one or more persons or entities responsible for authorship of the modifications in the Modified Version, together with at least five of the principal authors of the Document (all of its principal authors, if it has fewer than five), unless they release you from this requirement.

@item

State on the Title page the name of the publisher of the Modified Version, as the publisher.

@item

Preserve all the copyright notices of the Document.

@item

Add an appropriate copyright notice for your modifications adjacent to the other copyright notices.

@item

Include, immediately after the copyright notices, a license notice giving the public permission to use the Modified Version under the terms of this License, in the form shown in the Addendum below.

@item

Preserve in that license notice the full lists of Invariant Sections and required Cover Texts given in the Document's license notice.

@item

Include an unaltered copy of this License.

@item

Preserve the section Entitled ``History'', Preserve its Title, and add to it an item stating at least the title, year, new authors, and publisher of the Modified Version as given on the Title Page. If there is no section Entitled ``History'' in the Document, create one stating the title, year, authors, and publisher of the Document as given on its Title Page, then add an item describing the Modified Version as stated in the previous sentence.

@item

Preserve the network location, if any, given in the Document for

public access to a Transparent copy of the Document, and likewise the network locations given in the Document for previous versions it was based on. These may be placed in the ``History" section. You may omit a network location for a work that was published at least four years before the Document itself, or if the original publisher of the version it refers to gives permission.

@item

For any section Entitled ``Acknowledgements" or ``Dedications", Preserve the Title of the section, and preserve in the section all the substance and tone of each of the contributor acknowledgements and/or dedications given therein.

@item

Preserve all the Invariant Sections of the Document, unaltered in their text and in their titles. Section numbers or the equivalent are not considered part of the section titles.

@item

Delete any section Entitled ``Endorsements". Such a section may not be included in the Modified Version.

@item

Do not retitle any existing section to be Entitled ``Endorsements" or to conflict in title with any Invariant Section.

@item

Preserve any Warranty Disclaimers.

@end enumerate

If the Modified Version includes new front-matter sections or appendices that qualify as Secondary Sections and contain no material copied from the Document, you may at your option designate some or all of these sections as invariant. To do this, add their titles to the list of Invariant Sections in the Modified Version's license notice. These titles must be distinct from any other section titles.

You may add a section Entitled ``Endorsements", provided it contains nothing but endorsements of your Modified Version by various parties---for example, statements of peer review or that the text has been approved by an organization as the authoritative definition of a standard.

You may add a passage of up to five words as a Front-Cover Text, and a passage of up to 25 words as a Back-Cover Text, to the end of the list of Cover Texts in the Modified Version. Only one passage of

Front-Cover Text and one of Back-Cover Text may be added by (or through arrangements made by) any one entity. If the Document already includes a cover text for the same cover, previously added by you or by arrangement made by the same entity you are acting on behalf of, you may not add another; but you may replace the old one, on explicit permission from the previous publisher that added the old one.

The author(s) and publisher(s) of the Document do not by this License give permission to use their names for publicity for or to assert or imply endorsement of any Modified Version.

@item

## COMBINING DOCUMENTS

You may combine the Document with other documents released under this License, under the terms defined in section 4 above for modified versions, provided that you include in the combination all of the Invariant Sections of all of the original documents, unmodified, and list them all as Invariant Sections of your combined work in its license notice, and that you preserve all their Warranty Disclaimers.

The combined work need only contain one copy of this License, and multiple identical Invariant Sections may be replaced with a single copy. If there are multiple Invariant Sections with the same name but different contents, make the title of each such section unique by adding at the end of it, in parentheses, the name of the original author or publisher of that section if known, or else a unique number. Make the same adjustment to the section titles in the list of Invariant Sections in the license notice of the combined work.

In the combination, you must combine any sections Entitled ``History'' in the various original documents, forming one section Entitled ``History''; likewise combine any sections Entitled ``Acknowledgements'', and any sections Entitled ``Dedications''. You must delete all sections Entitled ``Endorsements''.

@item

## COLLECTIONS OF DOCUMENTS

You may make a collection consisting of the Document and other documents released under this License, and replace the individual copies of this License in the various documents with a single copy that is included in the collection, provided that you follow the rules of this License for verbatim copying of each of the documents in all other respects.

You may extract



a single document from such a collection, and distribute it individually under this License, provided you insert a copy of this License into the extracted document, and follow this License in all other respects regarding verbatim copying of that document.

@item

#### AGGREGATION WITH INDEPENDENT WORKS

A compilation of the Document or its derivatives with other separate and independent documents or works, in or on a volume of a storage or distribution medium, is called an "aggregate" if the copyright resulting from the compilation is not used to limit the legal rights of the compilation's users beyond what the individual works permit. When the Document is included in an aggregate, this License does not apply to the other works in the aggregate which are not themselves derivative works of the Document.

If the Cover Text requirement of section 3 is applicable to these copies of the Document, then if the Document is less than one half of the entire aggregate, the Document's Cover Texts may be placed on covers that bracket the Document within the aggregate, or the electronic equivalent of covers if the Document is in electronic form. Otherwise they must appear on printed covers that bracket the whole aggregate.

@item

#### TRANSLATION

Translation is considered a kind of modification, so you may distribute translations of the Document under the terms of section 4. Replacing Invariant Sections with translations requires special permission from their copyright holders, but you may include translations of some or all Invariant Sections in addition to the original versions of these Invariant Sections. You may include a translation of this License, and all the license notices in the Document, and any Warranty Disclaimers, provided that you also include the original English version of this License and the original versions of those notices and disclaimers. In case of a disagreement between the translation and the original version of this License or a notice or disclaimer, the original version will prevail.

If a section in the Document is Entitled "Acknowledgements", "Dedications", or "History", the requirement (section 4) to Preserve its Title (section 1) will typically require changing the actual title.

@item

## TERMINATION

You may not copy, modify, sublicense, or distribute the Document except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, or distribute it is void, and will automatically terminate your rights under this License.

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, receipt of a copy of some or all of the same material does not give you any rights to use it.

@item

## FUTURE REVISIONS OF THIS LICENSE

The Free Software Foundation may publish new, revised versions of the GNU Free Documentation 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. See [@uref{http://www.gnu.org/copyleft/}](http://www.gnu.org/copyleft/).

Each version of the License is given a distinguishing version number. If the Document specifies that a particular numbered version of this License "or any later version" applies to it, you have the option of following the terms and conditions either of that specified version or of any later version that has been published (not as a draft) by the Free Software Foundation. If the Document does not specify a version number of this License, you may choose any version ever published (not as a draft) by the Free Software Foundation. If the Document specifies that a proxy can decide which future versions of this

License can be used, that proxy's public statement of acceptance of a version permanently authorizes you to choose that version for the Document.

@item

RELICENSING

``Massive Multiauthor Collaboration Site" (or ``MMC Site") means any World Wide Web server that publishes copyrightable works and also provides prominent facilities for anybody to edit those works. A public wiki that anybody can edit is an example of such a server. A ``Massive Multiauthor Collaboration" (or ``MMC") contained in the site means any set of copyrightable works thus published on the MMC site.

``CC-BY-SA" means the Creative Commons Attribution-Share Alike 3.0 license published by Creative Commons Corporation, a not-for-profit corporation with a principal place of business in San Francisco, California, as well as future copyleft versions of that license published by that same organization.

``Incorporate" means to publish or republish a Document, in whole or in part, as part of another Document.

An MMC is ``eligible for relicensing" if it is licensed under this License, and if all works that were first published under this License somewhere other than this MMC, and subsequently incorporated in whole or in part into the MMC, (1) had no cover texts or invariant sections, and (2) were thus incorporated prior to November 1, 2008.

The operator of an MMC Site may republish an MMC contained in the site under CC-BY-SA on the same site at any time before August 1, 2009, provided the MMC is eligible for relicensing.

@end enumerate

@page

@heading ADDENDUM: How to use this License for your documents

To use this License in a document you have written, include a copy of the License in the document and put the following copyright and license notices just after the title page:

@smallexample

@group

Copyright (C) @var{year} @var{your name}.

Permission is granted to copy, distribute and/or modify this document under the terms of the GNU Free Documentation License, Version 1.3 or any later version published by the Free Software Foundation; with no Invariant Sections, no Front-Cover Texts, and no Back-Cover Texts. A copy of the license is included in the section entitled ``GNU Free Documentation License".

@end group

@end smallexample

If you have Invariant Sections, Front-Cover Texts and Back-Cover Texts, replace the ``with@dots{ }Texts." line with this:

@smallexample

@group

with the Invariant Sections being @var{list their titles}, with the Front-Cover

Texts being @var{list}, and with the Back-Cover Texts

being @var{list}.

@end group

@end smallexample

If you have Invariant Sections without Cover Texts, or some other combination of the three, merge those two alternatives to suit the situation.

If your document contains nontrivial examples of program code, we recommend releasing these examples in parallel under your choice of free software license, such as the GNU General Public License, to permit their use in free software.

@c Local Variables:

@c ispell-local-pdict: "ispell-dict"

@c End:

GNU LESSER GENERAL PUBLIC LICENSE

Version 2.1, February 1999

Copyright (C) 1991, 1999 Free Software Foundation, Inc.

51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

[This is the first released version of the Lesser GPL. It also counts as the successor of the GNU Library Public License, version 2, hence the version number 2.1.]

Preamble

The licenses for most software are designed to take away your

freedom to share and change it. By contrast, the GNU General Public Licenses are intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users.

This license, the Lesser General Public License, applies to some specially designated software packages--typically libraries--of the Free Software Foundation and other authors who decide to use it. You can use it too, but we suggest you first think carefully about whether this license or the ordinary General Public License is the better strategy to use in any particular case, based on the explanations below.

When we speak of free software, we are referring to freedom of use, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish); that you receive source code or can get it if you want it; that you can change the software and use pieces of it in new free programs; and that you are informed that you can do these things.

To protect your rights, we need to make restrictions that forbid distributors to deny you these rights or to ask you to surrender these rights. These restrictions translate to certain responsibilities for you if you distribute copies of the library or if you modify it.

For example, if you distribute copies of the library, whether gratis or for a fee, you must give the recipients all the rights that we gave you. You must make sure that they, too, receive or can get the source code. If you link other code with the library, you must provide complete object files to the recipients, so that they can relink them with the library after making changes to the library and recompiling it. And you must show them these terms so they know their rights.

We protect your rights with a two-step method: (1) we copyright the library, and (2) we offer you this license, which gives you legal permission to copy, distribute and/or modify the library.

To protect each distributor, we want to make it very clear that there is no warranty for the free library. Also, if the library is modified by someone else and passed on, the recipients should know that what they have is not the original version, so that the original author's reputation will not be affected by problems that might be introduced by others.

Finally, software patents pose a constant threat to the existence of any free program. We wish to make sure that a company cannot

effectively restrict the users of a free program by obtaining a restrictive license from a patent holder. Therefore, we insist that any patent license obtained for a version of the library must be consistent with the full freedom of use specified in this license.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License. This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License. We use this license for certain libraries in order to permit linking those libraries into non-free programs.

When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.

We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run

that program using a modified version of the Library.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

## GNU LESSER GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License Agreement applies to any software library or other program which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Lesser General Public License (also called "this License"). Each licensee is addressed as "you".

A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

1. You may copy and distribute verbatim copies of the Library's complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish

on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and distribute a copy of this License along with the Library.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) The modified work must itself be a software library.

b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.

c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.

d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves,

then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the



entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and

therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License.

Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

- a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under

Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library

facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:

a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed

under the terms of the Sections above.

b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

8. You may not copy, modify, sublicense, link with, or distribute the Library except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the Library is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

9. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Library or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying

or distributing the Library (or any work based on the Library), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Library or works based on it.

10. Each time you redistribute the Library (or any work based on the Library), the recipient automatically receives a license from the original licensor to copy, distribute, link with or modify the Library subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties with this License.

11. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute

so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Library at all. For example, if a patent license would not permit royalty-free redistribution of the Library by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Library.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

12. If the distribution and/or use of the Library is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Library under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

13. The Free Software Foundation may publish revised and/or new versions of the Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Library does not specify a license version number, you may choose any version ever published by the Free Software Foundation.

14. If you wish to incorporate parts of the Library into other free programs whose distribution conditions are incompatible with these, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

15. BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE LIBRARY "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE LIBRARY AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE LIBRARY (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

#### END OF TERMS AND CONDITIONS

##### How to Apply These Terms to Your New Libraries

If you develop a new library, and you want it to be of the greatest possible use to the public, we recommend making it free software that everyone can redistribute and change. You can do so by permitting redistribution under these terms (or, alternatively, under the terms of the ordinary General Public License).

To apply these terms, attach the following notices to the library. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the

"copyright" line  
and a pointer to where the full notice is found.

<one line to give the library's name and a brief 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 LIBRARY GENERAL PUBLIC LICENSE  
Version 2, June 1991

Copyright (C) 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.

[This is the first released version of the library GPL. It is  
numbered 2 because it goes with version 2 of the ordinary GPL.]

Preamble

The licenses for most software are designed to take away your

freedom to share and change it. By contrast, the GNU General Public Licenses are intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users.

This license, the Library General Public License, applies to some specially designated Free Software Foundation software, and to any other libraries whose authors decide to use it. You can use it for your libraries, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the library, or if you modify it.

For example, if you distribute copies of the library, whether gratis or for a fee, you must give the recipients all the rights that we gave you. You must make sure that they, too, receive or can get the source code. If you link a program with the library, you must provide complete object files to the recipients so that they can relink them with the library, after making changes to the library and recompiling it. And you must show them these terms so they know their rights.

Our method of protecting your rights has two steps: (1) copyright the library, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the library.

Also, for each distributor's protection, we want to make certain that everyone understands that there is no warranty for this free library. If the library is modified by someone else and passed on, we want its recipients to know that what they have is not the original version, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that companies distributing free software will individually obtain patent licenses, thus in effect transforming the program into proprietary software. To prevent this, we have made it clear that any patent must be licensed



for everyone's  
free use or not licensed at all.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License, which was designed for utility programs. This license, the GNU Library General Public License, applies to certain designated libraries. This license is quite different from the ordinary one; be sure to read it in full, and don't assume that anything in it is the same as in the ordinary license.

The reason we have a separate public license for some libraries is that they blur the distinction we usually make between modifying or adding to a program and simply using it. Linking a program with a library, without changing the library, is in some sense simply using the library, and is analogous to running a utility program or application program. However, in a textual and legal sense, the linked executable is a combined work, a derivative of the original library, and the ordinary General Public License treats it as such.

Because  
of this blurred distinction, using the ordinary General  
Public License for libraries did not effectively promote software  
sharing, because most developers did not use the libraries. We  
concluded that weaker conditions might promote sharing better.

However, unrestricted linking of non-free programs would deprive the users of those programs of all benefit from the free status of the libraries themselves. This Library General Public License is intended to permit developers of non-free programs to use free libraries, while preserving your freedom as a user of such programs to change the free libraries that are incorporated in them. (We have not seen how to achieve this as regards changes in header files, but we have achieved it as regards changes in the actual functions of the Library.) The hope is that this will lead to faster development of free libraries.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference  
between a  
"work based on the library" and a "work that uses the library". The former contains code derived from the library, while the latter only works together with the library.

Note that it is possible for a library to be covered by the ordinary General Public License rather than by this special one.

GNU LIBRARY GENERAL PUBLIC LICENSE  
TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License Agreement applies to any software library which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Library General Public License (also called "this License"). Each licensee is addressed as "you".

A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

1. You may copy and distribute verbatim copies of the Library's complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and distribute a copy of this License along with the Library.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and

distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

- a) The modified work must itself be a software library.
- b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.
- c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.
- d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition,  
mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under

the scope of this License.

3. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the

Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not.

Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also compile or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

b) Accompany the work with a written offer, valid for at least three years, to give the same user the materials

specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

c) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

d) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:

a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.

b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

8. You may not copy, modify, sublicense, link with, or distribute the Library except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the Library is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses

terminated so long as such parties remain in full compliance.

9. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Library or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Library (or any work based on the Library), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Library or works based on it.

10. Each time you redistribute the Library (or any work based on the Library), the recipient automatically receives a license from the original licensor to copy, distribute, link with or modify the Library subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

11. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Library at all. For example, if a patent license would not permit royalty-free redistribution of the Library by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Library.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot

impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

12. If the distribution and/or use of the Library is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Library under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

13. The Free Software Foundation may publish revised and/or new versions of the Library General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each

version is given a distinguishing version number. If the Library specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Library does not specify a license version number, you may choose any version ever published by the Free Software Foundation.

14. If you wish to incorporate parts of the Library into other free programs whose distribution conditions are incompatible with these, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

15. BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE LIBRARY "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.



16. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE LIBRARY AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE LIBRARY (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

#### END OF TERMS AND CONDITIONS

#### Appendix: 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 a brief idea of what it does.>  
Copyright (C) <year>  
<name of author>
```

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Library General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Library General Public License for more details.

You should have received a copy of the GNU Library General Public License along with this library; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301, USA

Also add information on how to contact you by electronic and paper mail.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the library, if necessary.

Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the library `Frob' (a library for tweaking knobs) written by James Random Hacker.

<signature of Ty Coon>, 1 April 1990  
Ty Coon, President of Vice

That's all there is to it!

GNU GENERAL PUBLIC LICENSE  
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.

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:

```
<program> Copyright (C) <year> <name of author>  
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>>.

## 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.

### 0. Additional Definitions.

As used herein, "this License" refers to version 3 of the GNU Lesser General Public License, and the "GNU GPL" refers to version 3 of the GNU General Public License.

"The Library" refers to a covered work governed by this License, other than an Application or a Combined Work as defined below.

An "Application" is any work that makes use of an interface provided by the Library, but which is not otherwise based on the Library.

Defining a subclass of a class defined by the Library is deemed a mode of using an interface provided by the Library.

A "Combined Work" is a work produced by combining or linking an Application with the Library. The particular version of the Library with which the Combined Work was made is also called the "Linked Version".

The "Minimal Corresponding Source" for a Combined Work means the Corresponding Source for the Combined Work, excluding any source code for portions of the Combined Work that, considered in isolation, are based on the Application, and not on the Linked Version.

The "Corresponding Application Code" for a Combined Work means the object code and/or source code for the Application, including any data and utility programs needed for reproducing the Combined Work from the Application, but excluding the System Libraries of the Combined Work.

### 1. Exception to Section 3 of the GNU GPL.

You may convey a covered work under sections 3 and 4 of this License without being bound by section 3 of the GNU GPL.

## 2. Conveying

### Modified Versions.

If you modify a copy of the Library, and, in your modifications, a facility refers to a function or data to be supplied by an Application that uses the facility (other than as an argument passed when the facility is invoked), then you may convey a copy of the modified version:

- a) under this License, provided that you make a good faith effort to ensure that, in the event an Application does not supply the function or data, the facility still operates, and performs whatever part of its purpose remains meaningful, or
- b) under the GNU GPL, with none of the additional permissions of this License applicable to that copy.

### 3. Object Code Incorporating Material from Library Header Files.

The object code form of an Application may incorporate material from a header file that is part of the Library. You may convey such object code under terms of your choice, provided that, if the incorporated material is not limited to numerical parameters, data structure layouts and accessors, or small macros, inline functions and templates (ten or fewer lines in length), you do both of the following:

- a) Give prominent notice with each copy of the object code that the Library is used in it and that the Library and its use are covered by this License.
- b) Accompany the object code with a copy of the GNU GPL and this license document.

### 4. Combined Works.

You may convey a Combined Work under terms of your choice that, taken together, effectively do not restrict modification of the portions of the Library contained in the Combined Work and reverse engineering for debugging such modifications, if you also do each of the following:

- a) Give prominent notice with each copy of the Combined Work that the Library is used in it and that the Library and its use are covered by this License.
- b) Accompany the Combined Work with a copy of the GNU GPL and this license document.

c) For a Combined Work that displays copyright notices during execution, include the copyright notice for the Library among these notices, as well as a reference directing the user to the copies of the GNU GPL and this license document.

d) Do one of the following:

0) Convey the Minimal Corresponding Source under the terms of this License, and the Corresponding Application Code in a form suitable for, and under terms that permit, the user to recombine or relink the Application with a modified version of the Linked Version to produce a modified Combined Work, in the manner specified by section 6 of the GNU GPL for conveying Corresponding Source.

1) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (a) uses at run time a copy of the Library already present on the user's computer system, and (b) will operate properly with a modified version of the Library that is interface-compatible with the Linked Version.

e) Provide Installation Information, but only if you would otherwise be required to provide such information under section 6 of the GNU GPL, and only to the extent that such information is necessary to install and execute a modified version of the Combined Work produced by recombining or relinking the Application with a modified version of the Linked Version. (If you use option 4d0, the Installation Information must accompany the Minimal Corresponding Source and Corresponding Application Code. If you use option 4d1, you must provide the Installation Information in the manner specified by section 6 of the GNU GPL for conveying Corresponding Source.)

## 5. Combined Libraries.

You may place library facilities that are a work based on the Library side by side in a single library together with other library facilities that are not Applications and are not covered by this License, and convey such a combined library under terms of your choice, if you do both of the following:

a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities,

conveyed under the terms of this License.

b) Give prominent notice with the combined library that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

#### 6. Revised Versions of the GNU Lesser General Public License.

The Free Software Foundation may publish revised and/or new versions of the GNU Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library as you received it specifies that a certain numbered version of the GNU Lesser General Public License "or any later version" applies to it, you have the option of following the terms and conditions either of that published version or of any later version published by the Free Software Foundation. If the Library as you received it does not specify a version number of the GNU Lesser General Public License, you may choose any version of the GNU Lesser General Public License ever published by the Free Software Foundation.

If the Library as you received it specifies that a proxy can decide whether future versions of the GNU Lesser General Public License shall apply, that proxy's public statement of acceptance of any version is permanent authorization for you to choose that version for the Library.

Boost Software License - Version 1.0 - August 17th, 2003

Permission is hereby granted, free of charge, to any person or organization obtaining a copy of the software and accompanying documentation covered by this license (the "Software") to use, reproduce, display, distribute, execute, and transmit the Software, and to prepare derivative works of the Software, and to permit third-parties to whom the Software is furnished to do so, all subject to the following:

The copyright notices in the Software and this entire statement, including the above license grant, this restriction and the following disclaimer, must be included in all copies of the Software, in whole or in part, and all derivative works of the Software, unless such copies or derivative works are solely in the form of machine-executable object code generated by a source language processor.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES

OF MERCHANTABILITY,  
FITNESS FOR A PARTICULAR PURPOSE, TITLE AND NON-INFRINGEMENT. IN NO EVENT  
SHALL THE COPYRIGHT HOLDERS OR ANYONE DISTRIBUTING THE SOFTWARE BE LIABLE  
FOR ANY DAMAGES OR OTHER LIABILITY, WHETHER IN CONTRACT, TORT OR OTHERWISE,  
ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER  
DEALINGS IN THE SOFTWARE.

## 1.74 tdb 1.43

### 1.74.1 Available under license :

#### GNU 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.

#### 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:

<program> Copyright (C) <year> <name of author>

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>>.

## 1.75 c-ares 1.18.1

### 1.75.1 Available under license :

# c-ares license

Copyright (c) 2007 - 2018, Daniel Stenberg with many contributors, see AUTHORS file.

Copyright 1998 by the Massachusetts Institute of Technology.

Permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of M.I.T. not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission. M.I.T. makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

## 1.76 kexec-tools 2.0.20

### 1.76.1 Available under license :

GNU GENERAL PUBLIC LICENSE

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.,  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA

Everyone is permitted to copy and distribute verbatim copies  
of this license document, but changing it is not allowed.

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Lesser General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not

price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

## GNU GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law:

that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

- a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any

associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you



may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW.

EXCEPT WHEN

OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN

IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

#### END OF TERMS AND CONDITIONS

##### How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the program's name and a brief idea of what it does.>

Copyright (C) <year> <name of author>

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or  
(at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA.

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

```
Gnomovision version 69, Copyright (C) year name of author
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute it
under certain conditions; type `show c' for details.
```

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

```
Yoyodyne, Inc., hereby disclaims all copyright interest in the program
`Gnomovision' (which makes passes at compilers) written by James Hacker.
```

```
<signature of Ty Coon>, 1 April 1989
Ty Coon, President of Vice
```

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Lesser General Public License instead of this License.

## GNU GENERAL PUBLIC LICENSE

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.

59 Temple Place, Suite 330, Boston, MA 02111-1307 USA

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

### Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Library General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we

want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

## GNU GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and

distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

- a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.
- b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.
- c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are

prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.



8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING

OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

#### END OF TERMS AND CONDITIONS

#### How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the program's name and a brief idea of what it does.>  
Copyright (C) 19yy <name of author>

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

Gnomovision version 69, Copyright (C) 19yy name of author  
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.  
This is free software, and you are welcome to redistribute it under certain conditions; type `show c' for details.

The hypothetical commands

`show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the program `Gnomovision' (which makes passes at compilers) written by James Hacker.

<signature of Ty Coon>, 1 April 1989

Ty Coon, President of Vice

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Library General Public License instead of this License.

## 1.77 libdevmapper 1.02.165

### 1.77.1 Available under license :

GNU LESSER GENERAL PUBLIC LICENSE

Version 2.1, February 1999

Copyright (C) 1991, 1999 Free Software Foundation, Inc.  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA  
Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

[This is the first released version of the Lesser GPL. It also counts as the successor of the GNU Library Public License, version 2, hence the version number 2.1.]

#### Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public Licenses are intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users.

This license, the Lesser General Public License, applies to some specially designated software packages--typically libraries--of the

Free Software Foundation and other authors who decide to use it. You can use it too, but we suggest you first think carefully about whether this license or the ordinary General Public License is the better strategy to use in any particular case, based on the explanations below.

When we speak of free software, we are referring to freedom of use, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish); that you receive source code or can get it if you want it; that you can change the software and use pieces of it in new free programs; and that you are informed that you can do these things.

To protect your rights, we need to make restrictions that forbid distributors to deny you these rights or to ask you to surrender these rights. These restrictions translate to certain responsibilities for you if you distribute copies of the library or if you modify it.

For example, if you distribute copies of the library, whether gratis or for a fee, you must give the recipients all the rights that we gave you. You must make sure that they, too, receive or can get the source code. If you link other code with the library, you must provide complete object files to the recipients, so that they can relink them with the library after making changes to the library and recompiling it. And you must show them these terms so they know their rights.

We protect your rights with a two-step method: (1) we copyright the library, and (2) we offer you this license, which gives you legal permission to copy, distribute and/or modify the library.

To protect each distributor, we want to make it very clear that there is no warranty for the free library. Also, if the library is modified by someone else and passed on, the recipients should know that what they have is not the original version, so that the original author's reputation will not be affected by problems that might be introduced by others.

Finally, software patents pose a constant threat to the existence of any free program. We wish to make sure that a company cannot effectively restrict the users of a free program by obtaining a restrictive license from a patent holder. Therefore, we insist that any patent license obtained for a version of the library must be consistent with the full freedom of use specified in this license.

Most GNU software, including some libraries, is covered by the

ordinary GNU General Public License. This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License. We use this license for certain libraries in order to permit linking those libraries into non-free programs.

When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.

We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must

be combined with the library in order to run.

GNU LESSER GENERAL PUBLIC LICENSE  
TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License Agreement applies to any software library or other program which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Lesser General Public License (also called "this License"). Each licensee is addressed as "you".

A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

1. You may copy and distribute verbatim copies of the Library's complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and distribute a copy of this License along with the Library.

You may charge a fee for the physical act of transferring a copy,

and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

- a) The modified work must itself be a software library.
- b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.
- c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.

d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves,

then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this



License.

Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6.

Any executables

containing that work also fall under Section 6,

whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

a) Accompany the work with the complete corresponding machine-readable

source code for the Library including whatever

changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the

Library will not necessarily be able to recompile the application to use the modified definitions.)

- b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.
- c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.
- d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.
- e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:

- a) Accompany the combined library with a copy of the same work

based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.

b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

8. You may not copy, modify, sublicense, link with, or distribute the Library except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the Library is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

9. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Library or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Library (or any work based on the Library), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Library or works based on it.

10. Each time you redistribute the Library (or any work based on the Library), the recipient automatically receives a license from the original licensor to copy, distribute, link with or modify the Library subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties with this License.

11. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Library at all. For example, if a patent license would not permit royalty-free redistribution of the Library by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Library.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

12. If the distribution and/or use of the Library is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Library under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

13. The Free Software Foundation may publish revised and/or new versions of the Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Library does not specify a license version number, you may choose any version ever published by the Free Software Foundation.

14. If you wish to incorporate parts of the Library into other free programs whose distribution conditions are incompatible with these, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status

of

all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

15. BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE LIBRARY "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE LIBRARY AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL

DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE LIBRARY (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

#### END OF TERMS AND CONDITIONS

##### How to Apply These Terms to Your New Libraries

If you develop a new library, and you want it to be of the greatest possible use to the public, we recommend making it free software that everyone can redistribute and change. You can do so by permitting redistribution under these terms (or, alternatively, under the terms of the ordinary General Public License).

To apply these terms, attach the following notices to the library. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the library's name and a brief idea of what it does.>  
Copyright (C) <year> <name of author>

This library is free software; you can redistribute it and/or

modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

You should have received a copy of the GNU Lesser General Public License along with this library; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA

Also add information on how to contact you by electronic and paper mail.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the library, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the library `Frob' (a library for tweaking knobs) written by James Random Hacker.

<signature of Ty Coon>, 1 April 1990  
Ty Coon, President of Vice

That's all there is to it!  
GNU GENERAL PUBLIC LICENSE  
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 Library General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not

price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

## GNU GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law:

that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)



These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

- a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any

associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you

may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW.

EXCEPT WHEN

OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN

IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

#### END OF TERMS AND CONDITIONS

##### How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the program's name and a brief idea of what it does.>

Copyright (C) <year> <name of author>

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

```
Gnomovision version 69, Copyright (C) year name of author
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute it
under certain conditions; type `show c' for details.
```

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

```
Yoyodyne, Inc., hereby disclaims all copyright interest in the program
`Gnomovision' (which makes passes at compilers) written by James Hacker.
```

```
<signature of Ty Coon>, 1 April 1989
Ty Coon, President of Vice
```

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Library General Public License instead of this License.

# 1.78 libcap-ng 2.26-4.el8

## 1.78.1 Available under license :

### 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.

^L

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.

^L

## GNU LESSER GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License Agreement applies to any software library or other program which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Lesser General Public License (also called "this License"). Each licensee is addressed as "you".

A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under



copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

1. You may copy and distribute verbatim copies of the Library's complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and distribute a copy of this License along with the Library.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

- a) The modified work must itself be a software library.
- b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.
- c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.

d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

^L

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.

^L

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.

^L

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.

^L

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.

^L

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

^L

#### 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 a brief 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 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  
Version 2.1, February 1999

Copyright (C) 1991, 1999 Free Software Foundation, Inc.  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA  
Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

(This is the first released version of the Lesser GPL. It also counts as the successor of the GNU Library Public License, version 2, hence the version number 2.1.)

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public Licenses are intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users.

This license, the Lesser General Public License, applies to some specially designated software packages--typically libraries--of the Free Software Foundation and other authors who decide to use it. You can use it too, but we suggest you first think carefully about whether this license or the ordinary General Public License is the better strategy to use in any particular case, based on the explanations below.

When we speak of free software, we are referring to freedom of use, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish); that you receive source code or can get it if you want it; that you can change the software and use pieces of

it in new free programs; and that you are informed that you can do these things.

To protect your rights, we need to make restrictions that forbid distributors to deny you these rights or to ask you to surrender these rights. These restrictions translate to certain responsibilities for you if you distribute copies of the library or if you modify it.

For example, if you distribute copies of the library, whether gratis or for a fee, you must give the recipients all the rights that we gave you. You must make sure that they, too, receive or can get the source code. If you link other code with the library, you must provide complete object files to the recipients, so that they can relink them with the library after making changes to the library and recompiling it. And you must show them these terms so they know their rights.

We protect your rights with a two-step method: (1) we copyright the library, and (2) we offer you this license, which gives you legal permission to copy, distribute and/or modify the library.

To protect each distributor, we want to make it very clear that there is no warranty for the free library. Also, if the library is modified by someone else and passed on, the recipients should know that what they have is not the original version, so that the original author's reputation will not be affected by problems that might be introduced by others.

Finally, software patents pose a constant threat to the existence of any free program. We wish to make sure that a company cannot effectively restrict the users of a free program by obtaining a restrictive license from a patent holder. Therefore, we insist that any patent license obtained for a version of the library must be consistent with the full freedom of use specified in this license.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License. This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License. We use this license for certain libraries in order to permit linking those libraries into non-free programs.

When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits

such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.

We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

## GNU LESSER GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License Agreement applies to any software library or other program which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Lesser General Public License (also called "this License").

Each licensee is addressed as "you".

A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

1. You may copy and distribute verbatim copies of the Library's complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and distribute a copy of this License along with the Library.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

- a) The modified work must itself be a software library.

- b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.
  
- c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.
  
- d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do

this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is

interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally

distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:

a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.

b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

8. You may not copy, modify, sublicense, link with, or distribute



the Library except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the Library is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

9. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Library or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Library (or any work based on the Library), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Library or works based on it.

10. Each time you redistribute the Library (or any work based on the Library), the recipient automatically receives a license from the original licensor to copy, distribute, link with or modify the Library subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties with this License.

11. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Library at all. For example, if a patent license would not permit royalty-free redistribution of the Library by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Library.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system

which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

12. If the distribution and/or use of the Library is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Library under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

13. The Free Software Foundation may publish revised and/or new versions of the Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Library does not specify a license version number, you may choose any version ever published by the Free Software Foundation.

14. If you wish to incorporate parts of the Library into other free programs whose distribution conditions are incompatible with these, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

15. BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR

OTHER PARTIES PROVIDE THE LIBRARY "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE LIBRARY AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE LIBRARY (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

#### END OF TERMS AND CONDITIONS

#### How to Apply These Terms to Your New Libraries

If you develop a new library, and you want it to be of the greatest possible use to the public, we recommend making it free software that everyone can redistribute and change. You can do so by permitting redistribution under these terms (or, alternatively, under the terms of the ordinary General Public License).

To apply these terms, attach the following notices to the library. It is safest to attach them to the start of each source file to most effectively convey

the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

```
{description}  
Copyright (C) {year} {fullname}
```

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

You should have received a copy of the GNU Lesser General Public License along with this library; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA

Also add information on how to contact you by electronic and paper mail.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the library, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the library `Frob' (a library for tweaking knobs) written by James Random Hacker.

{signature of Ty Coon}, 1 April 1990  
Ty Coon, President of Vice

That's all there is to it!

GNU GENERAL PUBLIC LICENSE  
Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.  
59 Temple Place, Suite 330, Boston, MA 02111-1307 USA  
Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

#### Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Library General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

## GNU GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of

running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you

distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.



If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and

of promoting the sharing and reuse of software generally.

## NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW.

EXCEPT WHEN

OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN

IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

## END OF TERMS AND CONDITIONS

### How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

```
<one line to give the program's name and a brief idea of what it does.>  
Copyright (C) <year> <name of author>
```

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License,

or

(at your option) any later version.

This program is distributed in the hope that it will be useful,  
but WITHOUT ANY WARRANTY; without even the implied warranty of  
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the  
GNU General Public License for more details.

You should have received a copy of the GNU General Public License  
along with this program; if not, write to the Free Software  
Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this  
when it starts in an interactive mode:

```
Gnomovision version 69, Copyright (C) year name of author  
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.  
This is free software, and you are welcome to redistribute it  
under certain conditions; type `show c' for details.
```

The hypothetical commands `show w' and  
`show c' should show the appropriate  
parts of the General Public License. Of course, the commands you use may  
be called something other than `show w' and `show c'; they could even be  
mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your  
school, if any, to sign a "copyright disclaimer" for the program, if  
necessary. Here is a sample; alter the names:

```
Yoyodyne, Inc., hereby disclaims all copyright interest in the program  
'Gnomovision' (which makes passes at compilers) written by James Hacker.
```

```
<signature of Ty Coon>, 1 April 1989  
Ty Coon, President of Vice
```

This General Public License does not permit incorporating your program into  
proprietary programs. If your program is a subroutine library, you may  
consider it more useful to permit linking proprietary applications with the  
library. If this is what you want to do, use the GNU Library General  
Public License instead of this License.

## 1.79 yajl 2.0

## 1.79.1 Available under license :

Copyright (c) 2007-2014, Lloyd Hilaiel <me@lloyd.io>

Permission to use, copy, modify, and/or distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies.

THE SOFTWARE IS PROVIDED "AS IS" AND THE AUTHOR DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

## 1.80 libnsl 2.0.0

### 1.80.1 Available under license :

GNU LESSER GENERAL PUBLIC LICENSE

Version 2.1, February 1999

Copyright (C) 1991, 1999 Free Software Foundation, Inc.  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA  
Everyone is permitted to copy and distribute verbatim copies  
of this license document, but changing it is not allowed.

[This is the first released version of the Lesser GPL. It also counts as the successor of the GNU Library Public License, version 2, hence the version number 2.1.]

#### Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public Licenses are intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users.

This license, the Lesser General Public License, applies to some specially designated software packages--typically libraries--of the Free Software Foundation and other authors who decide to use it. You can use it too, but we suggest you first think carefully about whether this license or the ordinary General Public License is the better strategy to use in any particular case, based on the explanations below.

When we speak of free software, we are referring to freedom of use, not price. Our General Public Licenses are designed to make sure that

you have the freedom to distribute copies of free software (and charge for this service if you wish); that you receive source code or can get it if you want it; that you can change the software and use pieces of it in new free programs; and that you are informed that you can do these things.

To protect your rights, we need to make restrictions that forbid distributors to deny you these rights or to ask you to surrender these rights. These restrictions translate to certain responsibilities for you if you distribute copies of the library or if you modify it.

For example, if you distribute copies of the library, whether gratis or for a fee, you must give the recipients all the rights that we gave you. You must make sure that they, too, receive or can get the source code. If you link other code with the library, you must provide complete object files to the recipients, so that they can relink them with the library after making changes to the library and recompiling it. And you must show them these terms so they know their rights.

We protect your rights with a two-step method: (1) we copyright the library, and (2) we offer you this license, which gives you legal permission to copy, distribute and/or modify the library.

To protect each distributor, we want to make it very clear that there is no warranty for the free library. Also, if the library is modified by someone else and passed on, the recipients should know that what they have is not the original version, so that the original author's reputation will not be affected by problems that might be introduced by others.

Finally, software patents pose a constant threat to the existence of any free program. We wish to make sure that a company cannot effectively restrict the users of a free program by obtaining a restrictive license from a patent holder. Therefore, we insist that any patent license obtained for a version of the library must be consistent with the full freedom of use specified in this license.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License. This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License. We use this license for certain libraries in order to permit linking those libraries into non-free programs.

When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a

combined work, a derivative of the original library. The ordinary General Public License therefore permits such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.

We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

## GNU LESSER GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License Agreement applies to any software library or other program which contains a notice placed by the copyright holder or

other authorized party saying it may be distributed under the terms of this Lesser General Public License (also called "this License").

Each licensee is addressed as "you".

A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

1. You may copy and distribute verbatim copies of the Library's complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and distribute a copy of this License along with the Library.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

- a) The modified work must itself be a software library.
- b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.
- c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.
- d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may opt to apply the terms of the ordinary



## GNU General Public

License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The

threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the

object code for the work under the terms of Section 6.

Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

a) Accompany

the work with the complete corresponding

machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate

properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally

distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:

a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.

b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

8. You may not copy, modify, sublicense, link with, or distribute the Library except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the Library is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

9. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Library or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Library (or any work based on the Library), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Library or works based on it.

10. Each time you redistribute the Library (or any work based on the Library), the recipient automatically receives a license from the original licensor to copy, distribute, link with or modify the Library subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties with this License.

11. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Library at all. For example, if a patent license would not permit royalty-free redistribution of the Library by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Library.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the

integrity of the free software distribution system which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

12. If the distribution and/or use of the Library is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Library under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

13. The Free Software Foundation may publish revised and/or new versions of the Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Library does not specify a license version number, you may choose any version ever published by the Free Software Foundation.

14. If you wish to incorporate parts of the Library into other free programs whose distribution conditions are incompatible with these, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

15. BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW.

EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE LIBRARY "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE LIBRARY AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE LIBRARY (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

#### END OF TERMS AND CONDITIONS

#### How to Apply These Terms to Your New Libraries

If you develop a new library, and you want it to be of the greatest possible use to the public, we recommend making it free software that everyone can redistribute and change. You can do so by permitting redistribution under these terms (or, alternatively, under the terms of the ordinary General Public License).

To apply these terms, attach the following notices to the library. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

```
<one line to give the library's name and a brief 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!

## 1.81 zlib 1.2.11

### 1.81.1 Available under license :

Boost Software License - Version 1.0 - August 17th, 2003

Permission is hereby granted, free of charge, to any person or organization obtaining a copy of the software and accompanying documentation covered by this license (the "Software") to use, reproduce, display, distribute, execute, and transmit the Software, and to prepare derivative works of the Software, and to permit third-parties to whom the Software is furnished to do so, all subject to the following:

The copyright notices in the Software and this entire statement, including the above license grant, this restriction and the following disclaimer, must be included in all copies of the Software, in whole or in part, and all derivative works of the Software, unless such copies or derivative works are solely in the form of machine-executable object code generated by a source language processor.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS

FOR A PARTICULAR PURPOSE, TITLE AND NON-INFRINGEMENT. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR ANYONE DISTRIBUTING THE SOFTWARE BE LIABLE FOR ANY DAMAGES OR OTHER LIABILITY, WHETHER IN CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

/\* zlib.h -- interface of the 'zlib' general purpose compression library  
version 1.2.11, January 15th, 2017

Copyright (C) 1995-2017 Jean-loup Gailly and Mark Adler

This software is provided 'as-is', without any express or implied warranty. In no event will the authors be held liable for any damages arising from the use of this software.

Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the following restrictions:

1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required.
2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
3. This notice may not be removed or altered from any source distribution.

Jean-loup Gailly      Mark Adler  
jloup@gzip.org      madler@alumni.caltech.edu

The data format used by the zlib library is described by RFCs (Request for Comments) 1950 to 1952 in the files <http://tools.ietf.org/html/rfc1950> (zlib format), rfc1951 (deflate format) and rfc1952 (gzip format).

\*/

# 1.82 openssl 1.1.1l

## 1.82.1 Available under license :

LICENSE ISSUES

=====

The OpenSSL toolkit stays under a double license, i.e. both the conditions of the OpenSSL License and the original SSLeay license apply to the toolkit. See below for the actual license texts.

OpenSSL License

-----

/\* =====

\* Copyright (c) 1998-2019 The OpenSSL Project. All rights reserved.



\*  
 \* Redistribution and use in source and binary forms, with or without  
 \* modification, are permitted provided that the following conditions  
 \* are met:  
 \*  
 \* 1. Redistributions of source code must retain the above copyright  
 \* notice, this list of conditions and the following disclaimer.  
 \*  
 \* 2. Redistributions in binary form must reproduce the above copyright  
 \* notice, this list of conditions and the following disclaimer in  
 \* the documentation and/or other materials provided with the  
 \* distribution.  
 \*  
 \* 3. All advertising materials mentioning features or use  
 of this  
 \* software must display the following acknowledgment:  
 \* "This product includes software developed by the OpenSSL Project  
 \* for use in the OpenSSL Toolkit. (<http://www.openssl.org/>)"  
 \*  
 \* 4. The names "OpenSSL Toolkit" and "OpenSSL Project" must not be used to  
 \* endorse or promote products derived from this software without  
 \* prior written permission. For written permission, please contact  
 \* openssl-core@openssl.org.  
 \*  
 \* 5. Products derived from this software may not be called "OpenSSL"  
 \* nor may "OpenSSL" appear in their names without prior written  
 \* permission of the OpenSSL Project.  
 \*  
 \* 6. Redistributions of any form whatsoever must retain the following  
 \* acknowledgment:  
 \* "This product includes software developed by the OpenSSL Project  
 \* for use in the OpenSSL Toolkit (<http://www.openssl.org/>)"  
 \*  
 \* THIS SOFTWARE IS PROVIDED BY THE OpenSSL PROJECT ``AS IS" AND ANY  
 \* EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED  
 TO, THE  
 \* IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR  
 \* PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OpenSSL PROJECT OR  
 \* ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL,  
 \* SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT  
 \* NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES;  
 \* LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)  
 \* HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT,  
 \* STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE)  
 \* ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED  
 \* OF THE POSSIBILITY OF SUCH DAMAGE.  
 \* =====  
 \*

\* This product includes cryptographic software written by Eric Young  
\* (eay@cryptsoft.com). This product includes software written by Tim  
\* Hudson (tjh@cryptsoft.com).  
\*  
\*/

#### Original SSLeay License

-----  
  
/\* Copyright (C) 1995-1998 Eric Young (eay@cryptsoft.com)  
\* All rights reserved.  
\*  
\* This package is an SSL implementation written  
\* by Eric Young (eay@cryptsoft.com).  
\* The implementation was written so as to conform with Netscapes SSL.  
\*  
\* This library is free for commercial and non-commercial use as long as  
\* the following conditions are aheared to. The following conditions  
\* apply to all code found in this distribution, be it the RC4, RSA,  
\* lhash, DES, etc., code; not just the SSL code. The SSL documentation  
\* included with this distribution is covered by the same copyright terms  
\* except that the holder is Tim Hudson (tjh@cryptsoft.com).  
\*  
\* Copyright remains Eric Young's, and as such any Copyright notices in  
\* the code are not to be removed.  
\* If this package is used in a product, Eric Young should be given attribution  
\* as the author of the parts of the library used.  
\* This can be in the form of a textual message at program startup or  
\* in documentation (online or textual) provided with the package.  
\*  
\* Redistribution and use in source and binary forms, with or without  
\* modification, are permitted provided that the following conditions  
\* are met:  
\* 1. Redistributions of source code must retain the copyright  
\* notice, this list of conditions and the following disclaimer.  
\* 2. Redistributions in binary form must reproduce the above copyright  
\* notice, this list of conditions and the following disclaimer in the  
\* documentation and/or other materials provided with the distribution.  
\* 3. All advertising materials mentioning features or use of this software  
\* must display the following acknowledgement:  
\* "This product includes cryptographic software written by  
\* Eric Young (eay@cryptsoft.com)"  
\* The word 'cryptographic' can be left out if the rouines from the library  
\* being used are not cryptographic related :-).  
\* 4. If you include any Windows specific code (or a derivative thereof) from  
\* the apps directory (application code) you must include  
an acknowledgement:  
\* "This product includes software written by Tim Hudson (tjh@cryptsoft.com)"

\*  
\* THIS SOFTWARE IS PROVIDED BY ERIC YOUNG ``AS IS" AND  
\* ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE  
\* IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE  
\* ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE  
\* FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL  
\* DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS  
\* OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)  
\* HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT  
\* LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY  
\* OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF  
\* SUCH DAMAGE.

\*  
\* The licence and distribution terms for any publically available version or  
\* derivative of this code cannot be changed. i.e. this  
code cannot simply be  
\* copied and put under another distribution licence  
\* [including the GNU Public Licence.]  
\*/

GNU GENERAL PUBLIC LICENSE  
Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.  
59 Temple Place - Suite 330, Boston, MA  
02111-1307, USA.

Everyone is permitted to copy and distribute verbatim copies  
of this license document, but changing it is not allowed.

#### Preamble

The licenses for most software are designed to take away your  
freedom to share and change it. By contrast, the GNU General Public  
License is intended to guarantee your freedom to share and change free  
software--to make sure the software is free for all its users. This  
General Public License applies to most of the Free Software  
Foundation's software and to any other program whose authors commit to  
using it. (Some other Free Software Foundation software is covered by  
the GNU Library General Public License instead.) You can apply it to  
your programs, too.

When we speak of free software, we are referring to freedom, not  
price.

Our General Public Licenses are designed to make sure that you  
have the freedom to distribute copies of free software (and charge for  
this service if you wish), that you receive source code or can get it  
if you want it, that you can change the software or use pieces of it  
in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

## GNU GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

### 0. This

License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of

running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based

on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

### 3. You may

copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under

any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number.

If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.



## NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

## END OF TERMS AND CONDITIONS

### Appendix: How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

```
<one line to give the program's name and a brief idea of what it does.>  
Copyright (C) 19yy <name of author>
```

```
This program is free software; you can redistribute it and/or modify  
it under the terms of the GNU General Public License as published by  
the Free  
Software Foundation; either version 2 of the License, or  
(at your option) any later version.
```

This program is distributed in the hope that it will be useful,

but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 59 Temple Place - Suite 330, Boston, MA 02111-1307, USA.

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

```
Gnomovision version 69, Copyright (C) 19yy name of author
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute it
under certain conditions; type `show c'
for details.
```

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

```
Yoyodyne, Inc., hereby disclaims all copyright interest in the program
`Gnomovision' (which makes passes at compilers) written by James Hacker.
```

```
<signature of Ty Coon>, 1 April 1989
Ty Coon, President of Vice
```

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Library General Public License instead of this License.

The "Artistic License"

Preamble

The intent of this document is to state the conditions under which a Package may be copied, such that the Copyright Holder maintains some semblance of artistic control over the development of the package, while giving the users of the package the right to use and distribute the Package in a more-or-less customary fashion, plus the right to make reasonable modifications.

Definitions:

"Package" refers to the collection of files distributed by the Copyright Holder, and derivatives of that collection of files created through textual modification.

"Standard Version" refers to such a Package if it has not been modified, or has been modified in accordance with the wishes of the Copyright Holder as specified below.

"Copyright Holder" is whoever is named in the copyright or copyrights for the package.

"You" is you, if you're thinking about copying or distributing this Package.

"Reasonable copying fee" is whatever you can justify on the basis of media cost, duplication charges, time of people involved, and so on. (You will not be required to justify it to the Copyright Holder, but only to the computing community at large as a market that must bear the fee.)

"Freely Available" means that no fee is charged for the item itself, though there may be fees involved in handling the item. It also means that recipients of the item may redistribute it under the same conditions they received it.

1. You may make and give away verbatim copies of the source form of the Standard Version of this Package without restriction, provided that you duplicate all of the original copyright notices and associated disclaimers.
2. You may apply bug fixes, portability fixes and other modifications derived from the Public Domain or from the Copyright Holder. A Package modified in such a way shall still be considered the Standard Version.
3. You may otherwise modify your copy of this Package in any way, provided that you insert a prominent notice in each changed file stating how and when you changed that file, and provided that you do at least ONE of the following:

a) place your modifications in the Public Domain or otherwise make them Freely Available, such as by posting said modifications to Usenet or an equivalent medium, or placing the modifications on a major archive site such as uunet.uu.net, or by allowing the Copyright Holder to include your modifications in the Standard Version of the Package.

b) use the modified Package only within your corporation or organization.

c) rename any non-standard executables so the names do not conflict with standard executables, which must also be provided, and provide a separate manual page for each non-standard executable that clearly documents how it differs from the Standard Version.

d) make other distribution arrangements with the Copyright Holder.

4. You may distribute the programs of this Package in object code or executable

form, provided that you do at least ONE of the following:

a) distribute a Standard Version of the executables and library files, together with instructions (in the manual page or equivalent) on where to get the Standard Version.

b) accompany the distribution with the machine-readable source of the Package with your modifications.

c) give non-standard executables non-standard names, and clearly document the differences in manual pages (or equivalent), together with instructions on where to get the Standard Version.

d) make other distribution arrangements with the Copyright Holder.

5. You may charge a reasonable copying fee for any distribution of this Package. You may charge any fee you choose for support of this Package. You may not charge a fee for this Package itself. However, you may distribute this Package in aggregate with other (possibly commercial) programs as part of a larger (possibly commercial) software distribution provided

that you do not advertise this Package as a product of your own. You may embed this Package's interpreter within an executable of yours (by linking); this shall be construed as a mere form of aggregation, provided that the complete Standard Version of the interpreter is so embedded.

6. The scripts and library files supplied as input to or produced as output from the programs of this Package do not automatically fall under the copyright of this Package, but belong to whoever generated

them, and may be sold commercially, and may be aggregated with this Package. If such scripts or library files are aggregated with this Package via the so-called "undump" or "unexec" methods of producing a binary executable image, then distribution of such an image shall neither be construed as a distribution of this Package nor shall it fall under the restrictions of Paragraphs 3 and 4, provided that you do not represent such an executable image as a Standard Version of this Package.

#### 7. C subroutines

(or comparably compiled subroutines in other languages) supplied by you and linked into this Package in order to emulate subroutines and variables of the language defined by this Package shall not be considered part of this Package, but are the equivalent of input as in Paragraph 6, provided these subroutines do not change the language in any way that would cause it to fail the regression tests for the language.

8. Aggregation of this Package with a commercial distribution is always permitted provided that the use of this Package is embedded; that is, when no overt attempt is made to make this Package's interfaces visible to the end user of the commercial distribution. Such use shall not be construed as a distribution of this Package.

9. The name of the Copyright Holder may not be used to endorse or promote products derived from this software without specific prior written permission.

10. THIS PACKAGE IS PROVIDED "AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

The End

## 1.83 gmp 6.2.0

### 1.83.1 Available under license :

GNU GENERAL PUBLIC LICENSE

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.,  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA  
Everyone is permitted to copy and distribute verbatim copies  
of this license document, but changing it is not allowed.

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Lesser General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price.

Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and

modification follow.

GNU GENERAL PUBLIC LICENSE  
TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

c) Accompany it with the information you received as to the offer



to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to

this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

#### END OF TERMS AND CONDITIONS

#### How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it

free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

```
<one line to give the program's name and a brief idea of what it does.>  
Copyright (C) <year> <name of author>
```

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA.

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

```
Gnomovision version 69, Copyright (C) year name of author  
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.  
This is free software, and you are welcome to redistribute  
it  
under certain conditions; type `show c' for details.
```

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

```
Yoyodyne, Inc., hereby disclaims all copyright interest in the program  
'Gnomovision' (which makes passes at compilers) written by James Hacker.
```

<signature of Ty Coon>, 1 April 1989

Ty Coon, President of Vice

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this

is what you want to do, use the GNU Lesser General Public License instead of this License.

#### GNU 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.

#### 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:

```
<program> Copyright (C) <year> <name of author>  
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>.

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.

## 0. Additional Definitions.

As used herein, "this License" refers to version 3 of the GNU Lesser  
General Public License, and the "GNU GPL" refers to version 3 of the GNU  
General Public License.

"The Library" refers to a covered work governed by this License,  
other than an Application or a Combined Work as defined below.

An "Application" is any work that makes use of an interface provided  
by the Library, but which is not otherwise based on the Library.  
Defining a subclass of a class defined by the Library is  
deemed a mode  
of using an interface provided by the Library.

A "Combined Work" is a work produced by combining or linking an  
Application with the Library. The particular version of the Library  
with which the Combined Work was made is also called the "Linked  
Version".

The "Minimal Corresponding Source" for a Combined Work means the  
Corresponding Source for the Combined Work, excluding any source code  
for portions of the Combined Work that, considered in isolation, are  
based on the Application, and not on the Linked Version.

The "Corresponding Application Code" for a Combined Work means the  
object code and/or source code for the Application, including any data  
and utility programs needed for reproducing the Combined Work from the  
Application, but excluding the System Libraries of the Combined Work.

## 1. Exception to Section 3 of the GNU GPL.

You may convey a covered work under sections 3 and 4 of this License  
without being bound by section 3 of the GNU GPL.

## 2. Conveying Modified Versions.

If you modify a copy of the Library, and, in your modifications, a facility refers to a function or data to be supplied by an Application that uses the facility (other than as an argument passed when the facility is invoked), then you may convey a copy of the modified version:

- a) under this License, provided that you make a good faith effort to ensure that, in the event an Application does not supply the function or data, the facility still operates, and performs whatever part of its purpose remains meaningful, or
- b) under the GNU GPL, with none of the additional permissions of this License applicable to that copy.

### 3. Object Code Incorporating Material from Library Header Files.

The object code form of an Application may incorporate material from a header file that is part of the Library. You may convey such object code under terms of your choice, provided that, if the incorporated material is not limited to numerical parameters, data structure layouts and accessors, or small macros, inline functions and templates (ten or fewer lines in length), you do both of the following:

- a) Give prominent notice with each copy of the object code that the Library is used in it and that the Library and its use are covered by this License.
- b) Accompany the object code with a copy of the GNU GPL and this license document.

### 4. Combined Works.

You may convey a Combined Work under terms of your choice that, taken together, effectively do not restrict modification of the portions of the Library contained in the Combined Work and reverse engineering for debugging such modifications, if you also do each of the following:

- a) Give prominent notice with each copy of the Combined Work that the Library is used in it and that the Library and its use are covered by this License.
- b) Accompany the Combined Work with a copy of the GNU GPL and this license document.
- c) For a Combined Work that displays copyright

notices during execution, include the copyright notice for the Library among these notices, as well as a reference directing the user to the copies of the GNU GPL and this license document.

d) Do one of the following:

0) Convey the Minimal Corresponding Source under the terms of this License, and the Corresponding Application Code in a form suitable for, and under terms that permit, the user to recombine or relink the Application with a modified version of the Linked Version to produce a modified Combined Work, in the manner specified by section 6 of the GNU GPL for conveying Corresponding Source.

1) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (a) uses at run time a copy of the Library already present on the user's computer system, and (b) will operate properly with a modified version of the Library that is interface-compatible with the Linked Version.

e) Provide Installation Information, but only if you would otherwise be required to provide such information under section 6 of the GNU GPL, and only to the extent that such information is necessary to install and execute a modified version of the Combined Work produced by recombining or relinking the Application with a modified version of the Linked Version. (If you use option 4d0, the Installation Information must accompany the Minimal Corresponding Source and Corresponding Application Code. If you use option 4d1, you must provide the Installation Information in the manner specified by section 6 of the GNU GPL for conveying Corresponding Source.)

5. Combined Libraries.

You may place library facilities that are a work based on the Library side by side in a single library together with other library facilities that are not Applications and are not covered by this License, and convey such a combined library under terms of your choice, if you do both of the following:

a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities, conveyed under the terms of this License.

b) Give prominent notice with the combined library that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

## 6. Revised Versions of the GNU Lesser General Public License.

The Free Software Foundation may publish revised and/or new versions of the GNU Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library as you received it specifies that a certain numbered version of the GNU Lesser General Public License "or any later version" applies to it, you have the option of following the terms and conditions either of that published version or of any later version published by the Free Software Foundation. If the Library as you received it does not specify a version number of the GNU Lesser General Public License, you may choose any version of the GNU Lesser General Public License ever published by the Free Software Foundation.

If the Library as you received it specifies that a proxy can decide whether future versions of the GNU Lesser General Public License shall apply, that proxy's public statement of acceptance of any version is permanent authorization for you to choose that version for the Library.

### GNU GENERAL PUBLIC LICENSE

Version 3, 29 June 2007

Copyright (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.

#### Preamble

The GNU General Public License is a free, copyleft license for software and other kinds of works.

The licenses for most software and other practical works are designed to take away your freedom to share and change the works. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change all versions of a program--to make sure it remains free software for all its users. We, the Free Software Foundation, use the GNU General Public License for most of our software; it applies also to any other work released this way by its authors. You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for them if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs, and that you know you can do these things.

To protect your rights, we need to prevent others from denying you these rights or asking you to surrender the rights. Therefore, you have certain responsibilities if you distribute copies of the software, or if you modify it: responsibilities to respect the freedom of others.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must pass on to the recipients the same freedoms that you received. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

Developers that use the GNU GPL protect your rights with two steps:

(1) assert copyright on the software, and (2) offer you this License giving you legal permission to copy, distribute and/or modify it.

For the developers' and authors' protection, the GPL clearly explains that there is no warranty for this free software. For both users' and authors' sake, the GPL requires that modified versions be marked as changed, so that their problems will not be attributed erroneously to authors of previous versions.

Some devices are designed to deny users access to install or run modified versions of the software inside them, although the manufacturer can do so. This is fundamentally incompatible with the aim of protecting users' freedom to change the software. The systematic pattern of such abuse occurs in the area of products for individuals to use, which is precisely where it is most unacceptable. Therefore, we have designed this version of the GPL to prohibit the practice for those products. If such problems arise substantially in other domains, we stand ready to extend this provision to those domains in future versions of the GPL, as needed to protect the freedom of users.

Finally, every program is threatened constantly by software patents. States should not allow patents to restrict development and use of software on general-purpose computers, but in those that do, we wish to avoid the special danger that patents applied to a free program could make it effectively proprietary. To prevent this, the GPL assures that patents cannot be used to render the program non-free.



The precise terms and conditions for copying, distribution and modification follow.

## TERMS AND CONDITIONS

### 0. Definitions.

"This License" refers to version 3 of the GNU General Public License.

"Copyright" also means copyright-like laws that apply to other kinds of works, such as semiconductor masks.

"The Program" refers to any copyrightable work licensed under this License. Each licensee is addressed as "you". "Licensees" and "recipients" may be individuals or organizations.

To "modify" a work means to copy from or adapt all or part of the work in a fashion requiring copyright permission, other than the making of an exact copy. The resulting work is called a "modified version" of the earlier work or a work "based on" the earlier work.

A "covered work" means either the unmodified Program or a work based on the Program.

To "propagate" a work means to do anything with it that, without permission, would make you directly or secondarily liable for infringement under applicable copyright law, except executing it on a computer or modifying a private copy. Propagation includes copying, distribution (with or without modification), making available to the public, and in some countries other activities as well.

To "convey" a work means any kind of propagation that enables other parties to make or receive copies. Mere interaction with a user through a computer network, with no transfer of a copy, is not conveying.

An interactive user interface displays "Appropriate Legal Notices" to the extent that it includes a convenient and prominently visible feature that (1) displays an appropriate copyright notice, and (2) tells the user that there is no warranty for the work (except to the extent that warranties are provided), that licensees may convey the work under this License, and how to view a copy of this License. If the interface presents a list of user commands or options, such as a menu, a prominent item in the list meets this criterion.

### 1. Source Code.

The "source code" for a work means the preferred form of the work for making modifications to it. "Object code" means any non-source form of a work.

A "Standard Interface" means an interface that either is an official standard defined by a recognized standards body, or, in the case of interfaces specified for a particular programming language, one that is widely used among developers working in that language.

The

"System Libraries" of an executable work include anything, other than the work as a whole, that (a) is included in the normal form of packaging a Major Component, but which is not part of that Major Component, and (b) serves only to enable use of the work with that Major Component, or to implement a Standard Interface for which an implementation is available to the public in source code form. A "Major Component", in this context, means a major essential component (kernel, window system, and so on) of the specific operating system (if any) on which the executable work runs, or a compiler used to produce the work, or an object code interpreter used to run it.

The "Corresponding Source" for a work in object code form means all the source code needed to generate, install, and (for an executable work) run the object code and to modify the work, including scripts to control those activities. However, it does not include the work's System Libraries, or general-purpose tools or generally available free programs which are used unmodified in performing those activities but which are not part of the work. For example, Corresponding Source includes interface definition files associated with source files for the work, and the source code for shared libraries and dynamically linked subprograms that the work is specifically designed to require, such as by intimate data communication or control flow between those subprograms and other parts of the work.

The Corresponding Source need not include anything that users can regenerate automatically from other parts of the Corresponding Source.

The Corresponding Source for a work in source code form is that same work.

## 2. Basic Permissions.

All rights granted under this License are granted for the term of copyright on the Program, and are irrevocable provided the stated conditions are met. This License explicitly affirms your unlimited

permission to run the unmodified Program. The output from running a covered work is covered by this License only if the output, given its content, constitutes a covered work. This License acknowledges your rights of fair use or other equivalent, as provided by copyright law.

You may make, run and propagate covered works that you do not convey, without conditions so long as your license otherwise remains in force. You may convey covered works to others for the sole purpose of having them make modifications exclusively for you, or provide you with facilities for running those works, provided that you comply with the terms of this License in conveying all material for which you do not control copyright. Those thus making or running the covered works for you must do so exclusively on your behalf, under your direction and control, on terms that prohibit them from making any copies of your copyrighted material outside their relationship with you.

Conveying under any other circumstances is permitted solely under the conditions stated below. Sublicensing is not allowed; section 10 makes it unnecessary.

### 3. Protecting Users' Legal Rights From Anti-Circumvention Law.

No covered work shall be deemed part of an effective technological measure under any applicable law fulfilling obligations under article 11 of the WIPO copyright treaty adopted on 20 December 1996, or similar laws prohibiting or restricting circumvention of such measures.

When you convey a covered work, you waive any legal power to forbid circumvention of technological measures to the extent such circumvention is effected by exercising rights under this License with respect to the covered work, and you disclaim any intention to limit operation or modification of the work as a means of enforcing, against the work's users, your or third parties' legal rights to forbid circumvention of technological measures.

### 4. Conveying Verbatim Copies.

You may convey verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice; keep intact all notices stating that this License and any non-permissive terms added in accord with section 7 apply to the code; keep intact all notices of the absence of any warranty; and give all recipients a copy of this License along with the Program.

You may charge any price or no price for each copy that you convey, and you may offer support or warranty protection for a fee.

#### 5. Conveying Modified Source Versions.

You may convey a work based on the Program, or the modifications to produce it from the Program, in the form of source code under the terms of section 4, provided that you also meet all of these conditions:

- a) The work must carry prominent notices stating that you modified it, and giving a relevant date.
- b) The work must carry prominent notices stating that it is released under this License and any conditions added under section 7. This requirement modifies the requirement in section 4 to "keep intact all notices".
- c) You must license the entire work, as a whole, under this License to anyone who comes into possession of a copy. This License will therefore apply, along with any applicable section 7 additional terms, to the whole of the work, and all its parts, regardless of how they are packaged. This License gives no permission to license the work in any other way, but it does not invalidate such permission if you have separately received it.
- d) If the work has interactive user interfaces, each must display Appropriate Legal Notices; however, if the Program has interactive interfaces that do not display Appropriate Legal Notices, your work need not make them do so.

A compilation of a covered work with other separate and independent works, which are not by their nature extensions of the covered work, and which are not combined with it such as to form a larger program, in or on a volume of a storage or distribution medium, is called an "aggregate" if the compilation and its resulting copyright are not used to limit the access or legal rights of the compilation's users beyond what the individual works permit. Inclusion of a covered work in an aggregate does not cause this License to apply to the other parts of the aggregate.

#### 6. Conveying Non-Source Forms.

You may convey a covered work in object code form under the terms of sections 4 and 5, provided that you also convey the machine-readable Corresponding Source under the terms of this License,

in one of these ways:

a) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by the Corresponding Source fixed on a durable physical medium customarily used for software interchange.

b) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by a written offer, valid for at least three years and valid for as

long as you offer spare parts or customer support for that product model, to give anyone who possesses the object code either (1) a copy of the Corresponding Source for all the software in the product that is covered by this License, on a durable physical medium customarily used for software interchange, for a price no more than your reasonable cost of physically performing this conveying of source, or (2) access to copy the Corresponding Source from a network server at no charge.

c) Convey individual copies of the object code with a copy of the written offer to provide the Corresponding Source. This alternative is allowed only occasionally and noncommercially, and only if you received the object code with such an offer, in accord with subsection 6b.

d) Convey the object code by offering access from a designated place (gratis or for a charge), and offer equivalent access to the Corresponding Source in the same way through the same place at no further charge. You need not require recipients to copy the Corresponding Source along with the object code. If the place to copy the object code is a network server, the Corresponding Source may be on a different server (operated by you or a third party) that supports equivalent copying facilities, provided you maintain clear directions next to the object code saying where to find the Corresponding Source. Regardless of what server hosts the Corresponding Source, you remain obligated to ensure that it is available for as long as needed to satisfy these requirements.

e) Convey the object code using peer-to-peer transmission, provided you inform other peers where the object code and Corresponding Source of the work are being offered to the general public at no charge under subsection 6d.

A separable portion of the object code, whose source code is excluded from the Corresponding Source

as a System Library, need not be included in conveying the object code work.

A "User Product" is either (1) a "consumer product", which means any tangible personal property which is normally used for personal, family, or household purposes, or (2) anything designed or sold for incorporation into a dwelling. In determining whether a product is a consumer product, doubtful cases shall be resolved in favor of coverage. For a particular product received by a particular user, "normally used" refers to a typical or common use of that class of product, regardless of the status of the particular user or of the way in which the particular user actually uses, or expects or is expected to use, the product. A product is a consumer product regardless of whether the product has substantial commercial, industrial or non-consumer uses, unless such uses represent the only significant mode of use of the product.

"Installation Information" for a User Product means any methods, procedures, authorization keys, or other information required to install and execute modified versions of a covered work in that User Product from a modified version of its Corresponding Source. The information must suffice to ensure that the continued functioning of the modified object code is in no case prevented or interfered with solely because modification has been made.

If you convey an object code work under this section in, or with, or specifically for use in, a User Product, and the conveying occurs as part of a transaction in which the right of possession and use of the User Product is transferred to the recipient in perpetuity or for a fixed term (regardless of how the transaction is characterized), the Corresponding Source conveyed under this section must be accompanied by the Installation Information. But this requirement does not apply if neither you nor any third party retains the ability to install modified object code on the User Product (for example, the work has been installed in ROM).

The requirement to provide Installation Information does not include a requirement to continue to provide support service, warranty, or updates for a work that has been modified or installed by the recipient, or for the User Product in which it has been modified or installed. Access to a network may be denied when the modification itself materially and adversely affects the operation of the network or violates the rules and protocols for communication across the network.

Corresponding Source conveyed, and Installation Information provided, in accord with this section must be in a format that is publicly documented (and with an implementation available to the public in

source code form), and must require no special password or key for unpacking, reading or copying.

## 7. Additional Terms.

"Additional permissions" are terms that supplement the terms of this License by making exceptions from one or more of its conditions. Additional permissions that are applicable to the entire Program shall be treated as though they were included in this License, to the extent that they are valid under applicable law. If additional permissions apply only to part of the Program, that part may be used separately under those permissions, but the entire Program remains governed by this License without regard to the additional permissions.

When you convey a copy of a covered work, you may at your option remove any additional permissions from that copy, or from any part of it. (Additional permissions may be written to require their own removal in certain cases when you modify the work.) You may place additional permissions on material, added by you to a covered work, for which you have or can give appropriate copyright permission.

Notwithstanding any other provision of this License, for material you add to a covered work, you may (if authorized by the copyright holders of that material) supplement the terms of this License with terms:

- a) Disclaiming warranty or limiting liability differently from the terms of sections 15 and 16 of this License; or
- b) Requiring preservation of specified reasonable legal notices or author attributions in that material or in the Appropriate Legal Notices displayed by works containing it; or
- c) Prohibiting misrepresentation of the origin of that material, or requiring that modified versions of such material be marked in reasonable ways as different from the original version; or
- d) Limiting the use for publicity purposes of names of licensors or authors of the material; or
- e) Declining to grant rights under trademark law for use of some trade names, trademarks, or service marks; or
- f) Requiring indemnification of licensors and authors of that material by anyone who conveys the material (or modified versions of it) with contractual assumptions of liability to the recipient, for any liability that these contractual assumptions directly impose on

those licensors and authors.

All other non-permissive additional terms are considered "further restrictions" within the meaning of section 10. If the Program as you received it, or any part of it, contains a notice stating that it is governed by this License along with a term that is a further restriction, you may remove that term. If a license document contains a further restriction but permits relicensing or conveying under this License, you may add to a covered work material governed by the terms of that license document, provided that the further restriction does not survive such relicensing or conveying.

If you add terms to a covered work in accord with this section, you must place, in the relevant source files, a statement of the additional terms that apply to those files, or a notice indicating where to find the applicable terms.

Additional terms, permissive or non-permissive, may be stated in the form of a separately written license, or stated as exceptions; the above requirements apply either way.

## 8. Termination.

You may not propagate or modify a covered work except as expressly provided under this License. Any attempt otherwise to propagate or modify it is void, and will automatically terminate your rights under this License (including any patent licenses granted under the third paragraph of section 11).

However, if you cease all violation of this License, then your license from a particular copyright holder is reinstated (a) provisionally, unless and until the copyright holder explicitly and finally terminates your license, and (b) permanently, if the copyright holder fails to notify you of the violation by some reasonable means prior to 60 days after the cessation.

Moreover, your license from a particular copyright holder is reinstated permanently if the copyright holder notifies you of the violation by some reasonable means, this is the first time you have received notice of violation of this License (for any work) from that copyright holder, and you cure the violation prior to 30 days after your receipt of the notice.

Termination of your rights under this section does not terminate the licenses of parties who have received copies or rights from you under



this License. If your rights have been terminated and not permanently reinstated, you do not qualify to receive new licenses for the same material under section 10.

#### 9. Acceptance Not Required for Having Copies.

You are not required to accept this License in order to receive or run a copy of the Program. Ancillary propagation of a covered work occurring solely as a consequence of using peer-to-peer transmission to receive a copy likewise does not require acceptance. However, nothing other than this License grants you permission to propagate or modify any covered work. These actions infringe copyright if you do not accept this License. Therefore, by modifying or propagating a covered work, you indicate your acceptance of this License to do so.

#### 10. Automatic Licensing of Downstream Recipients.

Each time you convey a covered work, the recipient automatically receives a license from the original licensors, to run, modify and propagate that work, subject to this License. You are not responsible for enforcing compliance by third parties with this License.

An "entity transaction" is a transaction transferring control of an organization, or substantially all assets of one, or subdividing an organization, or merging organizations. If propagation of a covered work results from an entity transaction, each party to that transaction who receives a copy of the work also receives whatever licenses to the work the party's predecessor in interest had or could give under the previous paragraph, plus a right to possession of the Corresponding Source of the work from the predecessor in interest, if the predecessor has it or can get it with reasonable efforts.

You may not impose any further restrictions on the exercise of the rights granted or affirmed under this License. For example, you may not impose a license fee, royalty, or other charge for exercise of rights granted under this License, and you may not initiate litigation (including a cross-claim or counterclaim in a lawsuit) alleging that any patent claim is infringed by making, using, selling, offering for sale, or importing the Program or any portion of it.

#### 11. Patents.

A "contributor" is a copyright holder who authorizes use under this License of the Program or a work on which the Program is based. The work thus licensed is called the contributor's "contributor version".

A contributor's "essential patent claims" are all patent claims owned or controlled by the contributor, whether already acquired or hereafter acquired, that would be infringed by some manner, permitted by this License, of making, using, or selling its contributor version, but do not include claims that would be infringed only as a consequence of further modification of the contributor version. For purposes of this definition, "control" includes the right to grant patent sublicenses in a manner consistent with the requirements of this License.

Each contributor grants you a non-exclusive, worldwide, royalty-free patent license under the contributor's essential patent claims, to make, use, sell, offer for sale, import and otherwise run, modify and propagate the contents of its contributor version.

In the following three paragraphs, a "patent license" is any express agreement or commitment, however denominated, not to enforce a patent (such as an express permission to practice a patent or covenant not to sue for patent infringement). To "grant" such a patent license to a party means to make such an agreement or commitment not to enforce a patent against the party.

If you convey a covered work, knowingly relying on a patent license, and the Corresponding Source of the work is not available for anyone to copy, free of charge and under the terms of this License, through a publicly available network server or other readily accessible means, then you must either (1) cause the Corresponding Source to be so available, or (2) arrange to deprive yourself of the benefit of the patent license for this particular work, or (3) arrange, in a manner consistent with the requirements of this License, to extend the patent license to downstream recipients. "Knowingly relying" means you have actual knowledge that, but for the patent license, your conveying the covered work in a country, or your recipient's use of the covered work in a country, would infringe one or more identifiable patents in that country that you have reason to believe are valid.

If, pursuant to or in connection with a single transaction or arrangement, you convey, or propagate by procuring conveyance of, a covered work, and grant a patent license to some of the parties receiving the covered work authorizing them to use, propagate, modify or convey a specific copy of the covered work, then the patent license you grant is automatically extended to all recipients of the covered work and works based on it.

A patent license is "discriminatory" if it does not include within

the scope of its coverage, prohibits the exercise of, or is conditioned on the non-exercise of one or more of the rights that are specifically granted under this License. You may not convey a covered work if you are a party to an arrangement with a third party that is in the business of distributing software, under which you make payment to the third party based on the extent of your activity of conveying the work, and under which the third party grants, to any of the parties who would receive the covered work from you, a discriminatory patent license (a) in connection with copies of the covered work conveyed by you (or copies made from those copies), or (b) primarily for and in connection with specific products or compilations that contain the covered work, unless you entered into that arrangement, or that patent license was granted, prior to 28 March 2007.

Nothing in this License shall be construed as excluding or limiting any implied license or other defenses to infringement that may otherwise be available to you under applicable patent law.

#### 12. No Surrender of Others' Freedom.

If conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot convey a covered work so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not convey it at all. For example, if you agree to terms that obligate you to collect a royalty for further conveying from those to whom you convey the Program, the only way you could satisfy both those terms and this License would be to refrain entirely from conveying the Program.

#### 13. Use with the GNU Affero General Public License.

Notwithstanding any other provision of this License, you have permission to link or combine any covered work with a work licensed under version 3 of the GNU Affero General Public License into a single combined work, and to convey the resulting work. The terms of this License will continue to apply to the part which is the covered work, but the special requirements of the GNU Affero General Public License, section 13, concerning interaction through a network will apply to the combination as such.

#### 14. Revised Versions of this License.

The Free Software Foundation may publish revised and/or new versions of the GNU General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies that a certain numbered version of the GNU General Public License "or any later version" applies to it, you have the option of following the terms and conditions either of that numbered version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of the GNU General Public License, you may choose any version ever published by the Free Software Foundation.

If the Program specifies that a proxy can decide which future versions of the GNU General Public License can be used, that proxy's public statement of acceptance of a version permanently authorizes you to choose that version for the Program.

Later license versions may give you additional or different permissions. However, no additional obligations are imposed on any author or copyright holder as a result of your choosing to follow a later version.

#### 15. Disclaimer of Warranty.

THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

#### 16. Limitation of Liability.

IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MODIFIES AND/OR CONVEYS THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

#### 17.

Interpretation of Sections 15 and 16.

If the disclaimer of warranty and limitation of liability provided above cannot be given local legal effect according to their terms, reviewing courts shall apply local law that most closely approximates an absolute waiver of all civil liability in connection with the Program, unless a warranty or assumption of liability accompanies a copy of the Program in return for a fee.

## END OF TERMS AND CONDITIONS

### How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively state the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

```
<one line to give the program's name and a brief idea of what it does.>  
Copyright (C) <year> <name of author>
```

This program is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program. If not, see <https://www.gnu.org/licenses/>.

Also add information on how to contact you by electronic and paper mail.

If the program does terminal interaction, make it output a short notice like this when it starts in an interactive mode:

```
<program> Copyright (C) <year> <name of author>  
This program comes with ABSOLUTELY NO WARRANTY; for details type `show w'.  
This is free software, and you are welcome to redistribute it  
under certain conditions; type `show c' for details.
```

The hypothetical commands `show w' and `show c' should show the appropriate

parts of the General Public License. Of course, your program's commands might be different; for a GUI interface, you would use an "about box".

You should also get your employer (if you work as a programmer) or school, if any, to sign a "copyright disclaimer" for the program, if necessary. For more information on this, and how to apply and follow the GNU GPL, see <https://www.gnu.org/licenses/>.

The GNU General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Lesser General Public License instead of this License. But first, please read <https://www.gnu.org/philosophy/why-not-lgpl.html>.

## 1.84 linux-kernel 5.4.212

### 1.84.1 Available under license :

GNU GENERAL PUBLIC LICENSE

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.

51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

#### Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Library General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

## GNU GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of

running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

- a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.
- b) You must cause any work that you distribute or publish, that in

whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

- c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you



distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6.

Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and

of promoting the sharing and reuse of software generally.

## NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

## END OF TERMS AND CONDITIONS

### How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

```
<one line to give the program's name and a brief idea of what it does.>  
Copyright (C) <year> <name of author>
```

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or  
(at your option) any later version.

This program is distributed in the hope that it will be useful,  
but WITHOUT ANY WARRANTY; without even the implied warranty of  
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the  
GNU General Public License for more details.

You should have received a copy of the GNU General Public License  
along with this program; if not, write to the Free Software  
Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this  
when it starts in an interactive mode:

```
Gnomovision version 69, Copyright (C) year name of author  
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.  
This is free software, and you are welcome to redistribute it  
under certain conditions; type `show c' for details.
```

The hypothetical commands

```
`show w' and `show c' should show the appropriate  
parts of the General Public License. Of course, the commands you use may  
be called something other than `show w' and `show c'; they could even be  
mouse-clicks or menu items--whatever suits your program.
```

You should also get your employer (if you work as a programmer) or your  
school, if any, to sign a "copyright disclaimer" for the program, if  
necessary. Here is a sample; alter the names:

```
Yoyodyne, Inc., hereby disclaims all copyright interest in the program  
'Gnomovision' (which makes passes at compilers) written by James Hacker.
```

```
<signature of Ty Coon>, 1 April 1989  
Ty Coon, President of Vice
```

This General Public License does not permit incorporating your program into  
proprietary programs. If your program is a subroutine library, you may  
consider it more useful to permit linking proprietary applications with the  
library. If this is what you want to do, use the GNU Library General  
Public License instead of this License.

Copyright (c) 2009-2013 QLogic Corporation  
QLogic Linux qlcnic NIC Driver

You may modify and redistribute the device driver code under the  
GNU General Public License (a copy of which is attached hereto as  
Exhibit A) published by the Free Software Foundation (version 2).

## EXHIBIT A

### GNU GENERAL PUBLIC LICENSE

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA  
Everyone is permitted to copy and distribute verbatim copies  
of this license document, but changing it is not allowed.

#### Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Lesser General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have.

You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain

that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

## GNU GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1

above, provided that you also meet all of these conditions:

- a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.
- b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.
- c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of



Sections 1 and 2 above provided that you also do one of the following:

a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or

distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to

be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES,

INCLUDING ANY GENERAL, SPECIAL,  
INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING  
OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED  
TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY  
YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER  
PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE  
POSSIBILITY OF SUCH DAMAGES.

Valid-License-Identifier: BSD-3-Clause

SPDX-URL: <https://spdx.org/licenses/BSD-3-Clause.html>

Usage-Guide:

To use the BSD 3-clause "New" or "Revised" License put the following SPDX  
tag/value pair into a comment according to the placement guidelines in  
the licensing rules documentation:

SPDX-License-Identifier: BSD-3-Clause

License-Text:

Copyright (c) <year> <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. Neither the name of the copyright holder nor the names of its  
contributors may be used to endorse or promote  
products derived from this  
software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS"  
AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE  
IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE  
ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE  
LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR  
CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF  
SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS  
INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN  
CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE)  
ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE  
POSSIBILITY OF SUCH DAMAGE.

Valid-License-Identifier: ISC

SPDX-URL: <https://spdx.org/licenses/ISC.html>

Usage-Guide:

To use the ISC License put the following SPDX tag/value pair into a

comment according to the placement guidelines in the licensing rules documentation:

SPDX-License-Identifier: ISC

License-Text:

ISC License

Copyright (c) <year> <copyright holders>

Permission to use, copy, modify, and/or distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies.

THE SOFTWARE IS PROVIDED "AS IS" AND THE AUTHOR DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

Valid-License-Identifier: X11

SPDX-URL: <https://spdx.org/licenses/X11.html>

Usage-Guide:

To use the X11 put the following SPDX tag/value pair into a comment according to the placement guidelines in the licensing rules documentation:

SPDX-License-Identifier: X11

License-Text:

X11 License

Copyright (C) 1996 X Consortium

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  
X CONSORTIUM BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER  
IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN  
CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Except as contained in this notice, the name of the X Consortium shall not  
be used in advertising or otherwise to promote the sale, use or other  
dealings in this Software without prior written authorization from the X  
Consortium.

X Window System is a trademark of X Consortium, Inc.

/\* nicstar.c v0.22 Jawaid Bazyar (bazyar@hypermall.com)

\* nicstar.c, M. Welsh (matt.welsh@cl.cam.ac.uk)

\*

\* Hacked October, 1997 by Jawaid Bazyar, Interlink Advertising Services Inc.

\* <http://www.hypermall.com/>

\* 10/1/97 - commented out CFG\_PHYIE bit - we don't care when the PHY

\* interrupts us (except possibly for removal/insertion of the cable?)

\* 10/4/97 - began heavy inline documentation of the code. Corrected typos

\* and spelling mistakes.

\* 10/5/97 - added code to handle PHY interrupts, disable PHY on

\* loss of link, and correctly re-enable PHY when link is

\* re-established. (put back CFG\_PHYIE)

\*

\* Modified to work with the IDT7721 nicstar -- AAL5 (tested) only.

\*

\* R. D. Rechenmacher <ron@fnal.gov>, Aug. 6, 1997

\*

\* Linux driver for the IDT77201 NICStAR PCI ATM controller.

\* PHY component is expected to be 155 Mbps S/UNI-Lite or IDT 77155;

\* see init\_nicstar() for PHY initialization to change this. This driver

\* expects the Linux ATM stack to support scatter-gather

lists

\* (skb->atm.iovcnt != 0) for Rx skb's passed to vcc->push.

\*

\* Implementing minimal-copy of received data:

\* IDT always receives data into a small buffer, then large buffers

\* as needed. This means that data must always be copied to create

\* the linear buffer needed by most non-ATM protocol stacks (e.g. IP)

\* Fix is simple: make large buffers large enough to hold entire

\* SDU, and leave <small\_buffer\_data> bytes empty at the start. Then

\* copy small buffer contents to head of large buffer.

\* Trick is to avoid fragmenting Linux, due to need for a lot of large

\* buffers. This is done by 2 things:

\* 1) skb->destructor / skb->atm.recycle\_buffer

\* combined, allow nicstar\_free\_rx\_skb to be called to

\* recycle large data buffers

\* 2) skb\_clone of received buffers  
\* See nicstar\_free\_rx\_skb and linearize\_buffer for implementation  
\* details.  
\*  
\*  
\*  
\* Copyright (c) 1996 University of Cambridge  
Computer Laboratory  
\*  
\* 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., 675 Mass Ave, Cambridge, MA 02139, USA.  
\*  
\* M. Welsh, 6 July 1996  
\*  
\*  
\*/

GNU GENERAL PUBLIC LICENSE  
Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.  
59 Temple Place, Suite 330, Boston, MA 02111-1307 USA  
Everyone is permitted to copy and distribute verbatim copies  
of this license document, but changing it is not allowed.

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Library General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not

price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

## GNU GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law:



that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

- a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any

associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you

may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW.

EXCEPT WHEN

OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN

IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

#### END OF TERMS AND CONDITIONS

##### How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the program's name and a brief idea of what it does.>

Copyright (C) <year> <name of author>

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or  
(at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

```
Gnomovision version 69, Copyright (C) year name of author
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute it
under certain conditions; type `show c' for details.
```

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

```
Yoyodyne, Inc., hereby disclaims all copyright interest in the program
`Gnomovision' (which makes passes at compilers) written by James Hacker.
```

```
<signature of Ty Coon>, 1 April 1989
Ty Coon, President of Vice
```

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Library General Public License instead of this License.

Copyright (c) 2003-2013 QLogic Corporation  
QLogic Linux iSCSI Driver

This program includes a device driver for Linux 3.x.  
You may modify and redistribute the device driver code under the  
GNU General Public License (a copy of which is attached hereto as  
Exhibit A) published by the Free Software Foundation (version 2).

## EXHIBIT A

### GNU GENERAL PUBLIC LICENSE Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA  
Everyone is permitted to copy and distribute verbatim copies  
of this license document, but changing it is not allowed.

#### Preamble

The licenses for most software are designed to take away your  
freedom to share and change it. By contrast, the GNU General Public  
License is intended to guarantee your freedom to share and change free  
software--to make sure the software is free for all its users. This  
General Public License applies to most of the Free Software  
Foundation's  
software and to any other program whose authors commit to  
using it. (Some other Free Software Foundation software is covered by  
the GNU Lesser General Public License instead.) You can apply it to  
your programs, too.

When we speak of free software, we are referring to freedom, not  
price. Our General Public Licenses are designed to make sure that you  
have the freedom to distribute copies of free software (and charge for  
this service if you wish), that you receive source code or can get it  
if you want it, that you can change the software or use pieces of it  
in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid  
anyone to deny you these rights or to ask you to surrender the rights.  
These restrictions translate to certain responsibilities for you if you  
distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether  
gratis or for a fee, you must give  
the recipients all the rights that  
you have. You must make sure that they, too, receive or can get the

source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

#### GNU GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate



copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute

such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

- a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.
  
- b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.
  
- c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective

works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

- a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program

except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works.

These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this

License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software

distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

#### 9. The Free Software

Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this.

Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED

OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Code in this directory written at the IDA Supercomputing Research Center carries the following copyright and license.

Copyright 1993 United States Government as represented by the Director, National Security Agency. This software may be used and distributed according to the terms of the GNU General Public License, incorporated herein by reference.

In addition to the disclaimers in the GPL, SRC expressly disclaims any and all warranties, expressed or implied, concerning the enclosed software. This software was developed at SRC for use in internal research, and the intent in sharing this software is to promote the productive interchange of ideas throughout the research community. All software is furnished on an "as-is" basis. No further updates to this software should be expected. Although updates may occur, no commitment exists. Copyright (c) 2003-2006, Marvell International Ltd. All Rights Reserved

This program is free software; you can redistribute it and/or modify it under the terms of version 2 of the GNU General Public License as published by the Free Software Foundation.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 59 Temple Place - Suite 330, Boston, MA 02111-1307, USA.

The files in this directory and elsewhere which refer to this LICENCE file are part of JFFS2, the Journalling Flash File System v2.

Copyright 2001-2007 Red Hat, Inc. and others

JFFS2 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 or (at your option) any later version.

JFFS2 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 JFFS2; if not, write to the Free Software Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA.

As a special exception, if other files instantiate templates or use macros or inline functions from these files, or you compile these files and link them with other works to produce a work based on these files, these files do not by themselves cause the resulting work to be covered by the GNU General Public License. However the source code for these files must still be made available in accordance with section (3) of the GNU General Public License.

This exception does not invalidate any other reasons why a work based on this file might be covered by the GNU General Public License.

The Linux Kernel is provided under:

SPDX-License-Identifier: GPL-2.0 WITH Linux-syscall-note

Being under the terms of the GNU General Public License version 2 only, according with:

LICENSES/preferred/GPL-2.0

With an explicit syscall exception, as stated at:

LICENSES/exceptions/Linux-syscall-note

In addition, other licenses may also apply. Please see:

Documentation/process/license-rules.rst

for more details.

Copyright (c) 2003-2006 QLogic Corporation

QLogic Linux Networking HBA Driver

This program includes a device driver for Linux 2.6 that may be distributed with QLogic hardware specific firmware binary file. You may modify and redistribute the device driver code under the GNU General Public License as published by the Free Software Foundation (version 2 or a later version).

You may redistribute the hardware specific firmware binary file under the following terms:

1. Redistribution of source code (only if applicable), must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistribution 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 QLogic Corporation may not be used to endorse or promote products derived from this software without specific prior written permission

#### REGARDLESS

OF WHAT LICENSING MECHANISM IS USED OR APPLICABLE, THIS PROGRAM IS PROVIDED BY QLOGIC CORPORATION "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.

USER ACKNOWLEDGES AND AGREES THAT USE OF THIS PROGRAM WILL NOT CREATE OR GIVE GROUNDS FOR A LICENSE BY IMPLICATION, ESTOPPEL, OR OTHERWISE IN ANY INTELLECTUAL PROPERTY RIGHTS (PATENT, COPYRIGHT, TRADE SECRET, MASK WORK, OR OTHER PROPRIETARY RIGHT) EMBODIED IN ANY OTHER QLOGIC HARDWARE OR SOFTWARE EITHER SOLELY OR IN COMBINATION WITH THIS PROGRAM.

Valid-License-Identifier: MIT

SPDX-URL: <https://spdx.org/licenses/MIT.html>

Usage-Guide:

To use the MIT License put the following SPDX tag/value pair into a comment according to the placement guidelines in the licensing rules documentation:

SPDX-License-Identifier: MIT

License-Text:

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.

Valid-License-Identifier: BSD-2-Clause

SPDX-URL: <https://spdx.org/licenses/BSD-2-Clause.html>

Usage-Guide:

To use the BSD 2-clause "Simplified" License put the following SPDX tag/value pair into a comment according to the placement guidelines in the licensing rules documentation:

SPDX-License-Identifier: BSD-2-Clause

License-Text:

Copyright (c) <year> <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.



THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

SPDX-Exception-Identifier: Linux-syscall-note

SPDX-URL: <https://spdx.org/licenses/Linux-syscall-note.html>

SPDX-Licenses: GPL-2.0, GPL-2.0+, GPL-1.0+, LGPL-2.0, LGPL-2.0+, LGPL-2.1, LGPL-2.1+, GPL-2.0-only, GPL-2.0-or-later

Usage-Guide:

This exception is used together with one of the above SPDX-Licenses to mark user space API (uapi) header files so they can be included into non GPL compliant user space application code.

To use this exception add it with the keyword WITH to one of the identifiers in the SPDX-Licenses tag:

SPDX-License-Identifier: <SPDX-License> WITH Linux-syscall-note

License-Text:

NOTE! This copyright does *\*not\** cover user programs that use kernel services by normal system calls - this is merely considered normal use of the kernel, and does *\*not\** fall under the heading of "derived work". Also note that the GPL below is copyrighted by the Free Software Foundation, but the instance of code that it refers to (the Linux kernel) is copyrighted by me and others who actually wrote it.

Also note that the only valid version of the GPL as far as the kernel is concerned is `_this_` particular version of the license (ie v2, not v2.2 or v3.x or whatever), unless explicitly otherwise stated.

Linus Torvalds

Valid-License-Identifier: BSD-3-Clause-Clear

SPDX-URL: <https://spdx.org/licenses/BSD-3-Clause-Clear.html>

Usage-Guide:

To use the BSD 3-clause "Clear" License put the following SPDX tag/value pair into a comment according to the placement guidelines in the licensing rules documentation:

SPDX-License-Identifier: BSD-3-Clause-Clear

License-Text:

## The Clear BSD License

Copyright (c) [xxxx]-[xxxx] [Owner Organization]  
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted (subject to the limitations in the disclaimer below) provided that the following conditions are met:

- \* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- \* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- \* Neither the name of [Owner Organization] nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

NO EXPRESS OR IMPLIED LICENSES TO ANY PARTY'S PATENT RIGHTS ARE GRANTED BY THIS LICENSE. THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

This is the full-colour version of the currently unofficial Linux logo ("currently unofficial" just means that there has been no paperwork and that I have not really announced it yet). It was created by Larry Ewing, and is freely usable as long as you acknowledge Larry as the original artist.

Note that there are black-and-white versions of this available that scale down to smaller sizes and are better for letterheads or whatever you want to use it for: for the full range of logos take a look at Larry's web-page:

<http://www.isc.tamu.edu/~lewing/linux/>  
Copyright (c) 2003-2014 QLogic Corporation  
QLogic Linux FC-FCoE Driver

This program includes a device driver for Linux 3.x.  
You may modify and redistribute the device driver code under the GNU General Public License (a copy of which is attached hereto as Exhibit A) published by the Free Software Foundation (version 2).

## EXHIBIT A

### GNU GENERAL PUBLIC LICENSE

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA  
Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

#### Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Lesser General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their

rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

#### GNU GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the

notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute

such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective

works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

- a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program

except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works.

These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free

software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

#### 9. The Free Software

Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this.

Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED



OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Valid-License-Identifier: Linux-OpenIB

SPDX-URL: <https://spdx.org/licenses/Linux-OpenIB.html>

Usage-Guide:

To use the Linux Kernel Variant of OpenIB.org license put the following SPDX tag/value pair into a comment according to the placement guidelines in the licensing rules documentation:

SPDX-License-Identifier: Linux-OpenIB

License-Text:

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
  
- Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS

FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Copyright (c) 2003-2011 QLogic Corporation

QLogic Linux qlge NIC Driver

You may modify and redistribute the device driver code under the GNU General Public License (a copy of which is attached hereto as

Exhibit A) published by the Free Software Foundation (version 2).

## EXHIBIT A

### GNU GENERAL PUBLIC LICENSE

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA  
Everyone is permitted to copy and distribute verbatim copies  
of this license document, but changing it is not allowed.

#### Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Lesser General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

## GNU GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and

you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1

above, provided that you also meet all of these conditions:

- a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.
- b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.
- c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If

distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot

impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

FlashPoint Driver Developer's Kit  
Version 1.0

Copyright 1995-1996 by Mylex Corporation  
All Rights Reserved

This program is free software; you may redistribute and/or modify it under the terms of either:

a) the GNU General Public License as published by the Free Software Foundation; either version 2, or (at your option) any later version,

or

b) the "BSD-style License" included below.

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 either the GNU General Public License or the BSD-style License below 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., 675 Mass Ave, Cambridge, MA 02139, USA.

The BSD-style License is as follows:

#### 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 this LICENSE.FlashPoint file, without modification, this list of conditions, and the following disclaimer. The following copyright notice must appear immediately at the beginning of all source files:

Copyright 1995-1996 by Mylex Corporation. All Rights Reserved



This file is available under both the GNU General Public License and a BSD-style copyright; see LICENSE.FlashPoint for details.

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 Mylex Corporation may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY MYLEX CORP. ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

## 1.85 nfs-utils 2.6.2

### 1.85.1 Available under license :

GNU GENERAL PUBLIC LICENSE

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.

59 Temple Place, Suite 330, Boston, MA 02111-1307 USA

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

#### Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Library General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

## GNU GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below,

refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but

does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can

be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for

making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot

distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of

this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

#### END OF TERMS AND CONDITIONS

##### How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the program's name and a brief idea of what it does.>

Copyright (C) 19yy <name of author>

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

```
Gnomovision version 69, Copyright (C) 19yy name of author
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute it
under certain conditions; type `show c' for details.
```

The hypothetical commands

`show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

```
Yoyodyne, Inc., hereby disclaims all copyright interest in the program
`Gnomovision' (which makes passes at compilers) written by James Hacker.
```

<signature of Ty Coon>, 1 April 1989

Ty Coon, President of Vice

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the



library. If this is what you want to do, use the GNU Library General Public License instead of this License.

GNU GENERAL PUBLIC LICENSE  
Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.,  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA  
Everyone is permitted to copy and distribute verbatim copies  
of this license document, but changing it is not allowed.

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Lesser General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price.

Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free

software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

## GNU GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and

distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

- a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.
  
- b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.
  
- c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3.

You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are

prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING

OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

## END OF TERMS AND CONDITIONS

### How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the program's name and a brief idea of what it does.>  
Copyright (C) <year> <name of author>

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA.

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

Gnomovision version 69, Copyright (C) year name of author  
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.  
This is free software, and you are welcome to redistribute it

under certain conditions; type `show c' for details.

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the program  
`Gnomovision' (which makes passes at compilers) written by James Hacker.

<signature of Ty Coon>, 1 April 1989

Ty Coon, President of Vice

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Lesser General Public License instead of this License.

Copyright (c) 2004 The Regents of the University of Michigan.

All rights reserved.

Marius Aamodt Eriksen <marius@umich.edu>

J. Bruce Fields <bfields@umich.edu>

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 ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR



CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

## 1.86 systemd 246

### 1.86.1 Available under license :

```
// Copyright 2014 The Chromium OS Authors. All rights reserved.
//
// Redistribution and use in source and binary forms, with or without
// modification, are permitted provided that the following conditions are
// met:
//
// * Redistributions of source code must retain the above copyright
// notice, this list of conditions and the following disclaimer.
// * Redistributions in binary form must reproduce the above
// copyright notice, this list of conditions and the following disclaimer
// in the documentation and/or other materials provided with the
// distribution.
// * Neither the name of Google Inc. nor the names of its
// contributors may be used to endorse or promote products derived from
// this software without specific prior written permission.
//
// THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS
// "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT
// LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR
// A PARTICULAR
// PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT
// OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL,
// SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT
// LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE,
// DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY
// THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT
// (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE
// OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
```

GNU GENERAL PUBLIC LICENSE

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.,  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA  
Everyone is permitted to copy and distribute verbatim copies  
of this license document, but changing it is not allowed.

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Lesser General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

GNU GENERAL PUBLIC LICENSE  
TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

- a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.
- b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third

parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium

customarily used for software interchange; or,

c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to

these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions

of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW.

EXCEPT WHEN

OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN

IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the program's name and a brief idea of what it does.>

Copyright (C) <year> <name of author>

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or  
(at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA.

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

```
Gnomovision version 69, Copyright (C) year name of author
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute it
under certain conditions; type `show c' for details.
```

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:



Yoyodyne, Inc., hereby disclaims all copyright interest in the program  
'Gnomovision' (which makes passes at compilers) written by James Hacker.

<signature of Ty Coon>, 1 April 1989  
Ty Coon, President of Vice

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Lesser General Public License instead of this License.

## 1.87 pciutils 3.9.0

### 1.87.1 Available under license :

GNU GENERAL PUBLIC LICENSE  
Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.,  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA  
Everyone is permitted to copy and distribute verbatim copies  
of this license document, but changing it is not allowed.

#### Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Lesser General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

#### GNU GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as

distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW.

EXCEPT WHEN

OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN

IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the program's name and a brief idea of what it does.>

Copyright (C) <year> <name of author>

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License,

or

(at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA.

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

```
Gnomovision version 69, Copyright (C) year name of author
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute it
under certain conditions; type `show c' for details.
```

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

```
Yoyodyne, Inc., hereby disclaims all copyright interest in the program
`Gnomovision' (which makes passes at compilers) written by James Hacker.
```

```
<signature of Ty Coon>, 1 April 1989
Ty Coon, President of Vice
```

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Lesser General Public License instead of this License.

## 1.88 less 4.1.3

### 1.88.1 Available under license :

No license file was found, but licenses were detected in source scan.

```
/**
 * Less - Leaner CSS v4.1.3
 * http://lesscss.org
 *
 * Copyright (c) 2009-2022, Alexis Sellier <self@cloudhead.net>
```



\* Licensed under the Apache-2.0 License.

\*

\* @license Apache-2.0

\*/

/\*! \*\*\*\*\*

Copyright (c) Microsoft Corporation. All rights reserved.

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>

THIS CODE IS PROVIDED ON AN \*AS IS\* BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OR CONDITIONS OF TITLE, FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY OR NON-INFRINGEMENT.

See the Apache Version 2.0 License for specific language governing permissions and

limitations under the License.

\*\*\*\*\* \*/

/\*! \*\*\*\*\*

Copyright (c) Microsoft Corporation.

Permission to use, copy, modify, and/or distribute this software for any purpose with or without fee is hereby granted.

THE SOFTWARE IS PROVIDED "AS IS" AND THE AUTHOR DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

\*\*\*\*\* \*/

Found in path(s):

\* /opt/cola/permits/1550489314\_1675273249.1374285/0/less-4-1-3-2-tgz/package/dist/less.js

No license file was found, but licenses were detected in source scan.

```
{ "version":3,"file":"less.min.js","sources":["../src/less-browser/utils.js","../src/less-browser/browser.js","../src/less/logger.js","../src/less/environment/environment.js","../src/less/data/colors.js","../src/less/data/unit-conversions.js","../src/less/data/index.js","../src/less/tree/node.js","../src/less/tree/color.js","../src/less/tree/paren.js","../src/less/tree/combinator.js","../src/less/tree/element.js","../src/less/constants.js","../node_modules/is-what/dist/index.esm.js","../node_modules/copy-anything/dist/index.esm.js","../src/less/utils.js","../src/less/less-error.js","../src/less/tree/selector.js","../src/less/tree/value.js","../src/less/tree/keyword.js","../src/less/tree/anonymous.js","../src/less/tree/declaration.js","../src/less/tree/debug-info.js","../src/less/tree/comment.js","../src/less/contexts.js","../src/less/functions/function-registry.js","../src/less/functions/default.js","../src/less/tree/ruleset.js","../src/less/tree/atrule.js","../src/less/tree/detach
```

ed-

```
ruleset.js", "../src/less/tree/unit.js", "../src/less/tree/dimension.js", "../src/less/tree/operation.js", "../src/less/tree/expressi
on.js", "../src/less/functions/function-
caller.js", "../node_modules/tslib/tslib.es6.js", "../src/less/tree/call.js", "../src/less/tree/variable.js", "../src/less/tree/propert
y.js", "../src/less/tree/attribute.js", "../src/less/tree/quoted.js", "../src/less/tree/url.js", "../src/less/tree/media.js", "../src/le
ss/tree/import.js", "../src/less/tree/js-eval-
node.js", "../src/less/tree/javascript.js", "../src/less/tree/assignment.js", "../src/less/tree/condition.js", "../src/less/tree/uni
code-descriptor.js", "../src/less/tree/negative.js", "../src/less/tree/extend.js", "../src/less/tree/variable-
call.js", "../src/less/tree/namespace-value.js", "../src/less/tree/mixin-definition.js", "../src/less/tree/mixin-
call.js", "../src/less/tree/index.js", "../src/less/environment/abstract-file-manager.js", "../src/less/environment/abstract-
plugin-loader.js", "../src/less/visitors/visitor.js", "../src/less/visitors/import-sequencer.js", "../src/less/visitors/import-
visitor.js", "../src/less/visitors/set-tree-visibility-visitor.js", "../src/less/visitors/extend-
visitor.js", "../src/less/visitors/join-selector-visitor.js", "../src/less/visitors/to-css-
visitor.js", "../src/less/visitors/index.js", "../src/less/parser/parser-
input.js", "../src/less/parser/chunker.js", "../src/less/parser/parser.js", "../src/less/functions/boolean.js", "../src/less/functi
ons/color.js", "../src/less/functions/color-blending.js", "../src/less/functions/list.js", "../src/less/functions/math-
helper.js", "../src/less/functions/math.js", "../src/less/functions/number.js", "../src/less/functions/string.js", "../src/less/fu
nctions/types.js", "../src/less/functions/index.js", "../src/less/functions/data-
uri.js", "../src/less/functions/svg.js", "../src/less/transform-tree.js", "../src/less/plugin-
manager.js", "../node_modules/parse-node-version/index.js", "../src/less-browser/file-
manager.js", "../src/less/index.js", "../src/less/parse-tree.js", "../src/less/source-map-builder.js", "../src/less/source-map-
output.js", "../src/less/import-manager.js", "../src/less/render.js", "../src/less/parse.js", "../src/less-browser/plugin-
loader.js", "../src/less-browser/error-reporting.js", "../src/less-browser/bootstrap.js", "../src/less/default-
options.js", "../src/less-browser/add-default-options.js", "../src/less-browser/index.js", "../src/less-browser/log-
listener.js", "../src/less-browser/cache.js", "../src/less-browser/image-size.js", "sourcesContent":["\nexport
function extractId(href) {\n  return href.replace(/^([a-z]+:)?(?:[^\s]+\/)?/, "") // Remove protocol & domain\n
.replace(/[\?&]livereload=\\w+/, "") // Remove LiveReload cachebuster\n  .replace(/^\\|/, "") //
Remove root\n  .replace(/\\.[a-zA-Z]+$/, "") // Remove simple extension\n  .replace(/^[^\\|\\w-]+/g, '-
') // Replace
illegal characters\n  .replace(/\\./g, ':'); // Replace dots with colons(for valid id)\n}\n\nexport
function addDataAttr(options, tag) {\n  if (!tag) {return;} // in case of tag is null or undefined\n  for (const opt in
tag.dataset) {\n    if (tag.dataset.hasOwnProperty(opt)) {\n      if (opt === 'env' || opt === 'dumpLineNumbers'
|| opt === 'rootpath' || opt === 'errorReporting') {\n        options[opt] = tag.dataset[opt];\n      } else {\n
try {\n        options[opt] = JSON.parse(tag.dataset[opt]);\n      } catch (_) {} \n    }\n  }\n}\n\n", "import * as utils from './utils';\n\nexport default {\n  createCSS: function (document, styles, sheet)
{\n    // Strip the query-string\n    const href = sheet.href || ""; \n    // If there is no title set, use the filename,
minus the extension\n    const id = `less:${sheet.title || utils.extractId(href)}`;\n\n    // If this has already been inserted into the DOM, we may need to replace it\n    const oldStyleNode =
document.getElementById(id);\n    let keepOldStyleNode = false;\n\n    // Create a new stylesheet node for
insertion or (if necessary) replacement\n    const styleNode = document.createElement('style');\n
styleNode.setAttribute('type', 'text/css');\n    if (sheet.media) {\n      styleNode.setAttribute('media',
sheet.media);\n    }\n    styleNode.id = id;\n\n    if (!styleNode.styleSheet) {\n
styleNode.appendChild(document.createTextNode(styles));\n    // If new contents match contents of
oldStyleNode, don't replace oldStyleNode\n    keepOldStyleNode = (oldStyleNode !== null &&
oldStyleNode.childNodes.length > 0 && styleNode.childNodes.length > 0 &&\n
oldStyleNode.firstChild.nodeValue === styleNode.firstChild.nodeValue);\n    }\n\n    const head =
document.getElementsByTagName('head')[0];\n\n
```

```

    // If there is no oldStyleNode, just append; otherwise, only append if we need // to replace oldStyleNode
with an updated stylesheet\n    if (oldStyleNode === null || keepOldStyleNode === false) {\n        const nextEl
= sheet && sheet.nextSibling || null;\n        if (nextEl) {\n            nextEl.parentNode.insertBefore(styleNode,
nextEl);\n        } else {\n            head.appendChild(styleNode);\n        }\n    }\n    if (oldStyleNode &&
keepOldStyleNode === false) {\n        oldStyleNode.parentNode.removeChild(oldStyleNode);\n    }\n\n    //
For IE.\n    // This needs to happen *after* the style element is added to the DOM, otherwise IE 7 and 8 may
crash.\n    // See http://social.msdn.microsoft.com/Forums/en-US/7e081b65-878a-4c22-8e68-
c10d39c2ed32/internet-explorer-crashes-appending-style-element-to-head\n    if (styleNode.styleSheet) {\n
try {\n        styleNode.styleSheet.cssText
= styles;\n    } catch (e) {\n        throw new Error('Couldn\\t reassign styleSheet.cssText.);\n    }\n
}\n },\n currentScript: function(window) {\n    const document = window.document;\n    return
document.currentScript || (( => {\n        const scripts = document.getElementsByTagName('script');\n
return scripts[scripts.length - 1];\n    })());\n    }\n};\n\n", "export default {\n    error: function(msg) {\n
this._fireEvent('error', msg);\n    },\n    warn: function(msg) {\n        this._fireEvent('warn', msg);\n    },\n    info:
function(msg) {\n        this._fireEvent('info', msg);\n    },\n    debug: function(msg) {\n        this._fireEvent('debug',
msg);\n    },\n    addListener: function(listener) {\n        this._listeners.push(listener);\n    },\n    removeListener:
function(listener) {\n        for (let i = 0; i < this._listeners.length; i++) {\n            if (this._listeners[i] === listener)
{\n                this._listeners.splice(i, 1);\n                return;\n            }\n        }\n    },\n    _fireEvent: function(type,
msg) {\n        for (let i = 0; i < this._listeners.length; i++) {\n            const logFunction = this._listeners[i][type];\n
if (logFunction) {\n                logFunction(msg);\n            }\n        }\n    },\n    _listeners: []\n};\n\n", "/*\n * @todo
Document why this abstraction exists, and the relationship between\n * environment, file managers, and plugin
manager\n */\n\nimport logger from './logger';\n\nclass Environment {\n    constructor(externalEnvironment,
fileManagers) {\n        this.fileManagers = fileManagers || [];\n        externalEnvironment = externalEnvironment ||
{};\n\n        const optionalFunctions = ['encodeBase64', 'mimeLookup', 'charsetLookup',
'getSourceMapGenerator'];\n        const requiredFunctions = [];\n        const functions =
requiredFunctions.concat(optionalFunctions);\n\n        for (let
i = 0; i < functions.length; i++) {\n            const propName = functions[i];\n            const environmentFunc =
externalEnvironment[propName];\n            if (environmentFunc) {\n                this[propName] =
environmentFunc.bind(externalEnvironment);\n            } else if (i < requiredFunctions.length) {\n
this.warn(`missing required function in environment - ${propName}`);\n            }\n        }\n\n        getFileManager(filename, currentDirectory, options, environment, isSync) {\n\n            if (!filename) {\n
logger.warn('getFileManager called with no filename.. Please report this issue. continuing.);\n            }\n            if
(currentDirectory == null) {\n                logger.warn('getFileManager called with null directory.. Please report this
issue. continuing.);\n            }\n\n            let fileManagers = this.fileManagers;\n            if (options.pluginManager) {\n
fileManagers = [].concat(fileManagers).concat(options.pluginManager.getFileManagers());\n
\n            }\n            for (let i = fileManagers.length - 1; i >= 0; i--) {\n                const fileManager = fileManagers[i];\n
\n                if (fileManager[isSync ? 'supportsSync' : 'supports'](filename, currentDirectory, options, environment)) {\n
\n                    return fileManager;\n                }\n            }\n\n            return null;\n        }\n\n        addFileManager(fileManager) {\n
this.fileManagers.push(fileManager);\n        }\n\n        clearFileManagers() {\n            this.fileManagers = [];\n        }\n\n}\n\nexport default Environment;\n\n", "export default {\n    'aliceblue': '#f0f8ff',\n    'antiquewhite': '#faebd7',\n
'aqua': '#00ffff',\n    'aquamarine': '#7fffd4',\n    'azure': '#f0ffff',\n    'beige': '#f5f5dc',\n    'bisque': '#ffe4c4',\n
'black': '#000000',\n    'blanchedalmond': '#ffebcd',\n    'blue': '#0000ff',\n    'blueviolet': '#8a2be2',\n
'brown': '#a52a2a',\n    'burlywood': '#deb887',\n    'cadetblue': '#5f9ea0',\n    'chartreuse': '#7fff00',\n
'chocolate': '#d2691e',\n
'coral': '#ff7f50',\n    'cornflowerblue': '#6495ed',\n    'cornsilk': '#fff8dc',\n    'crimson': '#dc143c',\n
'cyan': '#00ffff',\n    'darkblue': '#00008b',\n    'darkcyan': '#008b8b',\n    'darkgoldenrod': '#8b860b',\n
'darkgray': '#a9a9a9',\n    'darkgrey': '#a9a9a9',\n    'darkgreen': '#006400',\n    'darkkhaki': '#bdb76b',\n
'darkmagenta': '#8b008b',\n    'darkolivegreen': '#556b2f',\n    'darkorange': '#ff8c00',\n    'darkorchid': '#9932cc',\n

```

```

'darkred':#8b0000',\n 'darksalmon':#e9967a',\n 'darkseagreen':#8fbc8f',\n 'darkslateblue':#483d8b',\n
'darkslategray':#2f4f4f',\n 'darkslategray':#2f4f4f',\n 'darkturquoise':#00ced1',\n 'darkviolet':#9400d3',\n
'deepink':#ff1493',\n 'deepskyblue':#00bfff',\n 'dimgray':#696969',\n 'dimgray':#696969',\n
'dodgerblue':#1e90ff',\n 'firebrick':#b22222',\n 'floralwhite':#fffaf0',\n 'forestgreen':#228b22',\n
'fuchsia':#ff00ff',\n 'gainsboro':#dcdcdc',\n 'ghostwhite':#f8f8ff',\n
'gold':#ffd700',\n 'goldenrod':#daa520',\n 'gray':#808080',\n 'grey':#808080',\n 'green':#008000',\n
'greenyellow':#adff2f',\n 'honeydew':#f0ffff',\n 'hotpink':#ff69b4',\n 'indianred':#cd5c5c',\n
'indigo':#4b0082',\n 'ivory':#fffff0',\n 'khaki':#f0e68c',\n 'lavender':#e6e6fa',\n 'lavenderblush':#fff0f5',\n
'lawngreen':#7cfc00',\n 'lemonchiffon':#ffffac',\n 'lightblue':#add8e6',\n 'lightcoral':#f08080',\n
'lightcyan':#e0ffff',\n 'lightgoldenrodyellow':#fafad2',\n 'lightgray':#d3d3d3',\n 'lightgrey':#d3d3d3',\n
'lightgreen':#90ee90',\n 'lightpink':#ffb6c1',\n 'lightsalmon':#ffa07a',\n 'lightseagreen':#20b2aa',\n
'lightskyblue':#87cefa',\n 'lightslategray':#778899',\n 'lightslategray':#778899',\n 'lightsteelblue':#b0c4de',\n
'lightyellow':#ffffe0',\n 'lime':#00ff00',\n 'limegreen':#32cd32',\n 'linen':#faf0e6',\n 'magenta':#ff00ff',\n
'maroon':#800000',\n
'mediumaquamarine':#66cdaa',\n 'mediumblue':#0000cd',\n 'mediumorchid':#ba55d3',\n
'mediumpurple':#9370d8',\n 'mediumseagreen':#3cb371',\n 'mediumslateblue':#7b68ee',\n
'mediumspringgreen':#00fa9a',\n 'mediumturquoise':#48d1cc',\n 'mediumvioletred':#c71585',\n
'midnightblue':#191970',\n 'mintcream':#f5ffff',\n 'mistyrose':#ffe4e1',\n 'moccasin':#ffe4b5',\n
'navajowhite':#ffdead',\n 'navy':#000080',\n 'oldlace':#fdf5e6',\n 'olive':#808000',\n 'olivedrab':#6b8e23',\n
'orange':#ffa500',\n 'orangered':#ff4500',\n 'orchid':#da70d6',\n 'palegoldenrod':#eee8aa',\n
'palegreen':#98fb98',\n 'paleturquoise':#afeeee',\n 'palevioletred':#d87093',\n 'papayawhip':#ffefd5',\n
'peachpuff':#ffdab9',\n 'peru':#cd853f',\n 'pink':#ffc0cb',\n 'plum':#dda0dd',\n 'powderblue':#b0e0e6',\n
'purple':#800080',\n 'rebeccapurple':#663399',\n 'red':#ff0000',\n 'rosybrown':#bc8f8f',\n
'royalblue':#4169e1',\n 'saddlebrown':#8b4513',\n 'salmon':#fa8072',\n 'sandybrown':#f4a460',\n
'seagreen':#2e8b57',\n 'seashell':#fff5ee',\n 'sienna':#a0522d',\n 'silver':#c0c0c0',\n 'skyblue':#87ceeb',\n
'slateblue':#6a5acd',\n 'slategray':#708090',\n 'slategray':#708090',\n 'snow':#fffafa',\n
'springgreen':#00ff7f',\n 'steelblue':#4682b4',\n 'tan':#d2b48c',\n 'teal':#008080',\n 'thistle':#d8bfd8',\n
'tomato':#ff6347',\n 'turquoise':#40e0d0',\n 'violet':#ee82ee',\n 'wheat':#f5deb3',\n 'white':#ffffff',\n
'whitesmoke':#f5f5f5',\n 'yellow':#ffff00',\n 'yellowgreen':#9acd32'\n};","export default {\n  length: {\n
'm': 1,\n  'cm': 0.01,\n  'mm': 0.001,\n  'in': 0.0254,\n  'px': 0.0254 / 96,\n  'pt': 0.0254 / 72,\n
'pc': 0.0254 / 72 * 12\n },\n  duration: {\n  's': 1,\n  'ms': 0.001\n },\n  angle: {\n
'rad': 1 / (2 * Math.PI),\n  'deg': 1 / 360,\n  'grad': 1 / 400,\n  'turn': 1\n  }\n};","import colors from
'./colors';\nimport unitConversions from './unit-conversions';\n\nexport default { colors, unitConversions };\n"},"/*\n
* The reason why Node is a class and other nodes simply do not extend\n * from Node (since we're transpiling) is
due to this issue:\n * * https://github.com/less/less.js/issues/3434\n */\nclass Node {\n  constructor() {\n
this.parent = null;\n  this.visibilityBlocks = undefined;\n  this.nodeVisible = undefined;\n  this.rootNode
= null;\n  this.parsed = null;\n  }\n\n  get currentFileInfo() {\n  return this.fileInfo();\n  }\n\n  get index()
{\n  return this.getIndex();\n  }\n\n  setParent(nodes, parent) {\n  function set(node) {\n  if (node &&
node instanceof Node) {\n  node.parent = parent;\n  }\n  }\n  if (Array.isArray(nodes))
{\n  nodes.forEach(set);\n  }\n  else {\n  set(nodes);\n  }\n  }\n\n  getIndex() {\n
return this._index || (this.parent && this.parent.getIndex()) || 0;\n  }\n\n  fileInfo() {\n  return this._fileInfo ||
(this.parent && this.parent.fileInfo()) || {};\n  }\n\n  isRulesetLike() { return false; }\n\n  toCSS(context) {\n
const str = [];\n  this.genCSS(context, {\n  add: function(chunk, fileInfo, index) {\n
str.push(chunk);\n  },\n  isEmpty: function () {\n  return str.length === 0;\n  }\n
});\n  return str.join("");\n  }\n\n  genCSS(context, output) {\n  output.add(this.value);\n  }\n\n
accept(visitor) {\n  this.value = visitor.visit(this.value);\n  }\n\n  eval() { return this; }\n\n  _operate(context,
op, a, b) {\n  switch (op) {\n  case '+': return a + b;\n  case '-': return

```

```

a - b;\n      case '*': return a * b;\n      case '/': return a / b;\n    }\n  }\n  fround(context, value) {\n
const precision = context && context.numPrecision;\n    // add `epsilon` to ensure numbers like 1.000000005
(represented as 1.000000004999...) are properly rounded;\n    return (precision) ? Number((value + 2e-
16).toFixed(precision)) : value;\n  }\n  static compare(a, b) {\n    /* returns:\n    -1: a < b\n    0: a = b\n    1: a > b\n    and *any* other value for a != b (e.g. undefined, NaN, -2 etc.) */\n    if ((a.compare) &&\n    // for `symmetric results` force to CSS-based comparison\n    // of Quoted or Anonymous if either value is
one of those\n    !(b.type === 'Quoted' || b.type === 'Anonymous')) {\n      return a.compare(b);\n    } else
if (b.compare) {\n      return -b.compare(a);\n    } else if (a.type !== b.type) {\n      return undefined;\n
    }\n    a = a.value;\n    b = b.value;\n    if (!Array.isArray(a)) {\n      return a === b ? 0 :
undefined;\n    }\n    if (a.length !== b.length) {\n      return undefined;\n    }\n    for (let i = 0; i <
a.length; i++) {\n      if (Node.compare(a[i], b[i]) !== 0) {\n        return undefined;\n      }\n    }\n
return 0;\n  }\n  static numericCompare(a, b) {\n    return a < b ? -1\n      : a === b ? 0\n      : a >
b ? 1 : undefined;\n  }\n  // Returns true if this node represents root of ast imported by reference\n
blocksVisibility() {\n    if (this.visibilityBlocks === null) {\n      this.visibilityBlocks = 0;\n    }\n    return
this.visibilityBlocks !== 0;\n  }\n  addVisibilityBlock() {\n    if (this.visibilityBlocks === null) {\n
this.visibilityBlocks = 0;\n    }\n    this.visibilityBlocks = this.visibilityBlocks + 1;\n
  }\n  removeVisibilityBlock() {\n    if (this.visibilityBlocks === null) {\n      this.visibilityBlocks = 0;\n
    }\n    this.visibilityBlocks = this.visibilityBlocks - 1;\n  }\n  // Turns on node visibility - if called node will be
shown in output regardless\n  // of whether it comes from import by reference or not\n  ensureVisibility() {\n
this.nodeVisible = true;\n  }\n  // Turns off node visibility - if called node will NOT be shown in output
regardless\n  // of whether it comes from import by reference or not\n  ensureInvisibility() {\n
this.nodeVisible = false;\n  }\n  // return values:\n  // false - the node must not be visible\n  // true - the node
must be visible\n  // undefined or null - the node has the same visibility as its parent\n  isVisible() {\n    return
this.nodeVisible;\n  }\n  visibilityInfo() {\n    return {\n      visibilityBlocks: this.visibilityBlocks,\n
nodeVisible:
this.nodeVisible\n    };\n  }\n  copyVisibilityInfo(info) {\n    if (!info) {\n      return;\n    }\n
this.visibilityBlocks = info.visibilityBlocks;\n    this.nodeVisible = info.nodeVisible;\n  }\n}\n\nexport default
Node;\n", "import Node from './node';\nimport colors from './data/colors';\n\n// RGB Colors - #ff0014,
#eee\n\nconst Color = function(rgb, a, originalForm) {\n  const self = this;\n  // The end goal here, is to
parse the arguments\n  // into an integer triplet, such as `128, 255, 0`\n  // This facilitates operations and
conversions.\n  // if (Array.isArray(rgb)) {\n    this.rgb = rgb;\n  } else if (rgb.length >= 6) {\n    this.rgb
= [];\n    rgb.match(/.{2}/g).map(function (c, i) {\n      if (i < 3) {\n        self.rgb.push(parseInt(c, 16));\n
      } else {\n        self.alpha = (parseInt(c, 16)) / 255;\n      }\n    });\n  } else {\n    this.rgb = [];\n
    rgb.split("").map(function (c, i) {\n      if (i < 3) {\n        self.rgb.push(parseInt(c + c,
16));\n      } else {\n        self.alpha = (parseInt(c + c, 16)) / 255;\n      }\n    });\n  }\n  this.alpha =
this.alpha || (typeof a === 'number' ? a : 1);\n  if (typeof originalForm !== 'undefined') {\n    this.value =
originalForm;\n  }\n}\n\nColor.prototype = Object.assign(new Node(), {\n  type: 'Color',\n  luma() {\n    let r
= this.rgb[0] / 255, g = this.rgb[1] / 255, b = this.rgb[2] / 255;\n    r = (r <= 0.03928) ? r / 12.92 : Math.pow(((r +
0.055) / 1.055), 2.4);\n    g = (g <= 0.03928) ? g / 12.92 : Math.pow(((g + 0.055) / 1.055), 2.4);\n    b = (b <=
0.03928) ? b / 12.92 : Math.pow(((b + 0.055) / 1.055), 2.4);\n    return 0.2126 * r + 0.7152 * g + 0.0722 * b;\n
  },\n  genCSS(context, output) {\n    output.add(this.toCSS(context));\n  },\n  toCSS(context,
doNotCompress)
{\n    const compress = context && context.compress && !doNotCompress;\n    let color;\n    let alpha;\n
let colorFunction;\n    let args = [];\n    // `value` is set if this color was originally\n    // converted from a
named color string so we need\n    // to respect this and try to output named color too.\n    alpha =
this.fround(context, this.alpha);\n    if (this.value) {\n      if (this.value.indexOf('rgb') === 0) {\n        if
(alpha < 1) {\n          colorFunction = 'rgba';\n        } else if (this.value.indexOf('hsl') === 0) {\n
          if (alpha < 1) {\n            colorFunction = 'hsla';\n          } else {\n            colorFunction =

```

```

'hsl';\n      }\n      } else {\n          return this.value;\n      }\n      } else {\n          if (alpha < 1) {\n              colorFunction = 'rgba';\n          }\n      }\n      switch (colorFunction) {\n          case 'rgba':\n              args = this.rgb.map(function (c) {\n                  return clamp(Math.round(c), 255);\n              }).concat(clamp(alpha, 1));\n              break;\n          case 'hsla':\n              args.push(clamp(alpha, 1));\n          case 'hsl':\n              color = this.toHSL();\n              args = [\n                  this.fround(context, color.h),\n                  `${this.fround(context, color.s * 100)}%`,\n                  `${this.fround(context, color.l * 100)}%`\n              ].concat(args);\n          }\n          if (colorFunction) {\n              // Values are capped between `0` and `255`, rounded and zero-padded.\n              return\n              `${colorFunction}(${args.join(`,${compress ? " : " : ""}`)});`\n          }\n          color = this.toRGB();\n          if\n          (compress) {\n              const splitcolor = color.split("");\n              // Convert color to short format\n              if (splitcolor[1] === splitcolor[2] && splitcolor[3] === splitcolor[4] && splitcolor[5] === splitcolor[6]) {\n                  color = `#${splitcolor[1]}${splitcolor[3]}${splitcolor[5]}`;\n              }\n              return color;\n          },\n          }\n      }\n      // Operations have to be done per-channel, if not, // channels will spill onto each other. Once we have //\n      // our result, in the form of an integer triplet, // we create a new Color node to hold the result. //\n      operate(context, op, other) {\n          const rgb = new Array(3);\n          const alpha = this.alpha * (1 - other.alpha) +\n          other.alpha;\n          for (let c = 0; c < 3; c++) {\n              rgb[c] = this._operate(context, op, this.rgb[c], other.rgb[c]);\n          }\n          return new Color(rgb, alpha);\n      },\n      toRGB() {\n          return toHex(this.rgb);\n      },\n      toHSL()\n      {\n          const r = this.rgb[0] / 255, g = this.rgb[1] / 255, b = this.rgb[2] / 255, a = this.alpha;\n          const max =\n          Math.max(r, g, b), min = Math.min(r, g, b);\n          let h;\n          let s;\n          const l = (max + min) / 2;\n          const d =\n          max - min;\n          if (max === min) {\n              h = s = 0;\n          } else {\n              s = l > 0.5 ? d / (2 - max - min) : d\n              / (max + min);\n          }\n          switch (max) {\n              case r: h = (g - b) / d + (g < b ? 6 : 0); break;\n              case g:\n              h = (b - r) / d + 2;\n              break;\n              case b: h = (r - g) / d + 4;\n              break;\n          }\n          h /= 6;\n          return { h: h * 360, s, l, a }; \n      },\n      // Adapted from http://mjjackson.com/2008/02/rgb-to-hsl-and-rgb-\n      to-hsv-color-model-conversion-algorithms-in-javascript\n      toHSV() {\n          const r = this.rgb[0] / 255, g =\n          this.rgb[1] / 255, b = this.rgb[2] / 255, a = this.alpha;\n          const max = Math.max(r, g, b), min = Math.min(r, g,\n          b);\n          let h;\n          let s;\n          const v = max;\n          const d = max - min;\n          if (max === 0) {\n              s = 0;\n          } else {\n              s = d / max;\n          }\n          if (max === min) {\n              h = 0;\n          } else {\n              switch (max) {\n                  case r: h = (g - b) / d + (g < b ? 6 : 0); break;\n                  case g: h = (b - r) / d + 2; break;\n                  case b: h = (r - g) / d + 4; break;\n              }\n              h /= 6;\n          }\n          return { h: h * 360, s, v, a }; \n      },\n      toARGB() {\n          return toHex([this.alpha * 255].concat(this.rgb));\n      },\n      compare(x) {\n          return (x.rgb &&\n          x.rgb[0] === this.rgb[0] &&\n          x.rgb[1] ===\n          this.rgb[1] &&\n          x.rgb[2] === this.rgb[2] &&\n          x.alpha === this.alpha) ? 0 : undefined;\n      }\n      });\n      Color.fromKeyword = function(keyword) {\n          let c;\n          const key = keyword.toLowerCase();\n          if\n          (colors.hasOwnProperty(key)) {\n              c = new Color(colors[key].slice(1));\n          } else if (key ===\n          'transparent') {\n              c = new Color([0, 0, 0], 0);\n          }\n          if (c) {\n              c.value = keyword;\n              return c;\n          }\n      };\n      function clamp(v, max) {\n          return Math.min(Math.max(v, 0), max);\n      }\n      function toHex(v) {\n          return\n          `${v.map(function (c) {\n              c = clamp(Math.round(c), 255);\n              return (c < 16 ? '0' : "") + c.toString(16);\n          }).join("")}`;\n      }\n      export default Color;\n      , "import Node from './node';\n      const Paren = function(node) {\n          this.value = node;\n      };\n      Paren.prototype = Object.assign(new Node(), {\n          type: 'Paren',\n          genCSS(context,\n          output) {\n              output.add('(');\n              this.value.genCSS(context, output);\n              output.add(')');\n          },\n          eval(context) {\n              return new Paren(this.value.eval(context));\n          }\n      });\n      export default Paren;\n      , "import\n      Node from './node';\n      const _noSpaceCombinators = {\n          "": true,\n          "'": true,\n          '|': true\n      };\n      const Combinator =\n      function(value) {\n          if (value === '')\n          {\n              this.value = '';\n              this.emptyOrWhitespace = true;\n          } else {\n              this.value = value ? value.trim() :\n              '';\n              this.emptyOrWhitespace = this.value === '';\n          }\n      }\n      Combinator.prototype = Object.assign(new\n      Node(), {\n          type: 'Combinator',\n          genCSS(context, output) {\n              const spaceOrEmpty = (context.compress ||\n              _noSpaceCombinators[this.value]) ? " : " : '';\n              output.add(spaceOrEmpty + this.value + spaceOrEmpty);\n          }\n      });\n      export default Combinator;\n      , "import Node from './node';\n      import Paren from './paren';\n      import

```

```

Combinator from './combinator';\n\nconst Element = function(combinator, value, isVariable, index, currentFileInfo,
visibilityInfo) {\n  this.combinator = combinator instanceof Combinator ?\n    combinator : new
Combinator(combinator);\n\n  if (typeof value === 'string') {\n    this.value = value.trim();\n  } else if (value)
{\n    this.value = value;\n  } else {\n    this.value = '';\n  }\n\n  this.isVariable = isVariable;\n  this._index = index;\n  this._fileInfo = currentFileInfo;\n\n  this.copyVisibilityInfo(visibilityInfo);\n  this.setParent(this.combinator, this);\n}\n\nElement.prototype =
Object.assign(new Node(), {\n  type: 'Element',\n\n  accept(visitor) {\n    const value = this.value;\n\n    this.combinator = visitor.visit(this.combinator);\n\n    if (typeof value === 'object') {\n      this.value =
visitor.visit(value);\n    }\n  },\n\n  eval(context) {\n    return new Element(this.combinator,\n    this.value.eval ? this.value.eval(context) : this.value,\n    this.isVariable,\n    this.getIndex(),\n    this.fileInfo(), this.visibilityInfo());\n  },\n\n  clone() {\n    return new Element(this.combinator,\n    this.value,\n    this.isVariable,\n    this.getIndex(),\n    this.fileInfo(), this.visibilityInfo());\n  },\n\n  genCSS(context, output) {\n\n    output.add(this.toCSS(context), this.fileInfo(), this.getIndex());\n  },\n\n  toCSS(context) {\n    context =
context || {};\n\n    let value = this.value;\n\n    const firstSelector = context.firstSelector;\n\n    if (value instanceof
Paren) {\n      // selector in parens should not be affected by outer selector\n      // flags (breaks only
interpolated selectors - see #1973)\n      context.firstSelector = true;\n    }\n\n    value = value.toCSS ?
value.toCSS(context) : value;\n\n    context.firstSelector = firstSelector;\n\n    if (value === '&&'
|| this.combinator.value.charAt(0) === '&') {\n      return '';\n    } else {\n      return
this.combinator.toCSS(context) + value;\n    }\n  }\n});\n\nexport default Element;\n"}\n\nexport const Math = {\n  ALWAYS: 0,\n  PARENS_DIVISION: 1,\n  PARENS: 2\n  // removed - STRICT_LEGACY: 3\n};\n\nexport
const RewriteUrls = {\n  OFF: 0,\n  LOCAL: 1,\n  ALL: 2\n};\n"}\n\n/**\r\n
* Returns the object type of the given payload\r\n
* @param {*} payload\r\n
* @returns {string}\r\n
*/\r\nfunction getType(payload) {\r\n  return Object.prototype.toString.call(payload).slice(8, -1);\r\n}\r\n\r\n/**\r\n
* Returns whether the payload is undefined\r\n
* @param {*} payload\r\n
* @returns {payload is undefined}\r\n
*/\r\nfunction isUndefined(payload) {\r\n  return getType(payload) === 'Undefined';\r\n}\r\n\r\n/**\r\n
* Returns whether the payload is null\r\n
* @param {*} payload\r\n
* @returns {payload is null}\r\n
*/\r\nfunction isNull(payload) {\r\n  return getType(payload) === 'Null';\r\n}\r\n\r\n/**\r\n
* Returns whether the payload is a plain JavaScript object (excluding special classes or objects with other prototypes)\r\n
* @param {*} payload\r\n
* @returns {payload is Record<string, any>}\r\n
*/\r\nfunction isPlainObject(payload) {\r\n  if (getType(payload) !== 'Object')\r\n    return false;\r\n  return payload.constructor === Object &&
Object.getPrototypeOf(payload) === Object.prototype;\r\n}\r\n\r\n/**\r\n
* Returns whether the payload is a plain JavaScript object (excluding special classes or objects with other prototypes)\r\n
* @param {*} payload\r\n
* @returns {payload is Record<string, any>}\r\n
*/\r\nfunction isObject(payload) {\r\n  return
isPlainObject(payload);\r\n}\r\n\r\n/**\r\n
* Returns whether the payload is a an empty object (excluding special classes or objects with other prototypes)\r\n
* @param {*} payload\r\n
* @returns {payload is { [K in any]: never }}\r\n
*/\r\nfunction isEmptyObject(payload) {\r\n  return isPlainObject(payload) && Object.keys(payload).length
=== 0;\r\n}\r\n\r\n/**\r\n
* Returns whether the payload is an any kind of object (including special classes or objects with different prototypes)\r\n
* @param {*} payload\r\n
* @returns {payload is Record<string, any>}\r\n
*/\r\nfunction isAnyObject(payload) {\r\n  return getType(payload) === 'Object';\r\n}\r\n\r\n/**\r\n
* Returns whether the payload is an object like a type passed in <>\r\n
* Usage: isObjectLike<{ id: any }>(payload) //
will make sure it's an object and has an `id` prop.\r\n
* @template T this must be passed in <>\r\n
* @param
{*} payload\r\n
* @returns {payload is T}\r\n
*/\r\nfunction isObjectLike(payload) {\r\n  return
isAnyObject(payload);\r\n}\r\n\r\n/**\r\n
* Returns whether the payload is a function (regular or async)\r\n
* @param {*} payload\r\n
* @returns {payload is AnyFunction}\r\n
*/\r\nfunction isFunction(payload) {\r\n  return
typeof payload === 'function';\r\n}\r\n\r\n/**\r\n
* Returns whether the payload is an array\r\n
* @param {any}
payload\r\n
* @returns {payload is any[]}\r\n
*/\r\nfunction isArray(payload) {\r\n  return getType(payload) ===
'Array';\r\n}\r\n\r\n/**\r\n
* Returns whether the payload is a an array with at least 1 item\r\n
* @param {*}

```

```

payload\r\n * @returns {payload is any[]}\r\n *\r\nfunction isArray(payload) {\r\n  return
isArray(payload) && payload.length > 0;\r\n}\r\n**\r\n * Returns whether the payload is a an empty array\r\n *\r\n * @param {*} payload\r\n * @returns {payload is []}\r\n *\r\nfunction isEmptyArray(payload) {\r\n  return
isArray(payload) && payload.length === 0;\r\n}\r\n**\r\n * Returns whether the payload is a string\r\n *\r\n * @param {*} payload\r\n * @returns {payload is string}\r\n *\r\nfunction isString(payload) {\r\n  return
getType(payload) === 'String';\r\n}\r\n**\r\n * Returns whether the payload is a string, BUT returns false for "\r\n
*\r\n * @param {*} payload\r\n * @returns {payload is string}\r\n *\r\nfunction isFullString(payload) {\r\n  return
isString(payload) && payload !== ""; \r\n}\r\n**\r\n * Returns whether the payload is "\r\n
*\r\n * @param {*}
payload\r\n * @returns {payload is string}\r\n *\r\nfunction isEmptyString(payload) {\r\n  return payload ===
";\r\n}\r\n**\r\n * Returns whether the payload is a number (but not NaN)\r\n *\r\n * This
will return `false` for `NaN`!\r\n *\r\n * @param {*} payload\r\n * @returns {payload is number}\r\n
*\r\nfunction isNumber(payload) {\r\n  return getType(payload) === 'Number' &&
!isNaN(payload);\r\n}\r\n**\r\n * Returns whether the payload is a boolean\r\n *\r\n * @param {*} payload\r\n *
@returns {payload is boolean}\r\n *\r\nfunction isBoolean(payload) {\r\n  return getType(payload) ===
'Boolean';\r\n}\r\n**\r\n * Returns whether the payload is a regular expression (RegExp)\r\n *\r\n * @param {*}
payload\r\n * @returns {payload is RegExp}\r\n *\r\nfunction isRegExp(payload) {\r\n  return getType(payload)
=== 'RegExp';\r\n}\r\n**\r\n * Returns whether the payload is a Map\r\n *\r\n * @param {*} payload\r\n *
@returns {payload is Map<any, any>}\r\n *\r\nfunction isMap(payload) {\r\n  return getType(payload) ===
'Map';\r\n}\r\n**\r\n * Returns whether the payload is a WeakMap\r\n *\r\n * @param {*} payload\r\n * @returns
{payload is WeakMap<any, any>}\r\n *\r\nfunction
isWeakMap(payload) {\r\n  return getType(payload) === 'WeakMap';\r\n}\r\n**\r\n * Returns whether the
payload is a Set\r\n *\r\n * @param {*} payload\r\n * @returns {payload is Set<any>}\r\n *\r\nfunction
isSet(payload) {\r\n  return getType(payload) === 'Set';\r\n}\r\n**\r\n * Returns whether the payload is a
WeakSet\r\n *\r\n * @param {*} payload\r\n * @returns {payload is WeakSet<any>}\r\n *\r\nfunction
isWeakSet(payload) {\r\n  return getType(payload) === 'WeakSet';\r\n}\r\n**\r\n * Returns whether the payload is
a Symbol\r\n *\r\n * @param {*} payload\r\n * @returns {payload is symbol}\r\n *\r\nfunction isSymbol(payload)
{\r\n  return getType(payload) === 'Symbol';\r\n}\r\n**\r\n * Returns whether the payload is a Date, and that the
date is valid\r\n *\r\n * @param {*} payload\r\n * @returns {payload is Date}\r\n *\r\nfunction isDate(payload)
{\r\n  return getType(payload) === 'Date' && !isNaN(payload);\r\n}\r\n**\r\n * Returns whether the payload is a
Blob\r\n
*\r\n * @param {*} payload\r\n * @returns {payload is Blob}\r\n *\r\nfunction isBlob(payload) {\r\n  return
getType(payload) === 'Blob';\r\n}\r\n**\r\n * Returns whether the payload is a File\r\n *\r\n * @param {*}
payload\r\n * @returns {payload is File}\r\n *\r\nfunction isFile(payload) {\r\n  return getType(payload) ===
'File';\r\n}\r\n**\r\n * Returns whether the payload is a Promise\r\n *\r\n * @param {*} payload\r\n * @returns
{payload is Promise<any>}\r\n *\r\nfunction isPromise(payload) {\r\n  return getType(payload) ===
'Promise';\r\n}\r\n**\r\n * Returns whether the payload is an Error\r\n *\r\n * @param {*} payload\r\n * @returns
{payload is Error}\r\n *\r\nfunction isError(payload) {\r\n  return getType(payload) === 'Error';\r\n}\r\n**\r\n *
Returns whether the payload is literally the value `NaN` (it's `NaN` and also a `number`)\r\n *\r\n * @param {*}
payload\r\n * @returns {payload is typeof NaN}\r\n *\r\nfunction isNaNValue(payload) {\r\n  return
getType(payload)
=== 'Number' && isNaN(payload);\r\n}\r\n**\r\n * Returns whether the payload is a primitive type (eg. Boolean |
Null | Undefined | Number | String | Symbol)\r\n *\r\n * @param {*} payload\r\n * @returns {(payload is boolean |
null | undefined | number | string | symbol)}\r\n *\r\nfunction isPrimitive(payload) {\r\n  return
(isBoolean(payload) ||\r\n  isNaN(payload) ||\r\n  isUndefined(payload) ||\r\n  isNumber(payload) ||\r\n
isString(payload) ||\r\n  isSymbol(payload));\r\n}\r\n**\r\n * Returns true whether the payload is null or
undefined\r\n *\r\n * @param {*} payload\r\n * @returns {(payload is null | undefined)}\r\n *\r\nfunction
isNullOrUndefined(payload) {\r\n  return isNaN(payload) || isUndefined(payload);\r\n}\r\n**\r\n * Does a generic
check to check that the given payload is of a given type.\r\n * In cases like Number, it will return true for NaN as

```



```

NaN is a Number (thanks javascript!);\r\n * It will, however, differentiate
between object and null\r\n * @template T\r\n * @param {*} payload\r\n * @param {T} type\r\n * @throws
{TypeError} Will throw type error if type is an invalid type\r\n * @returns {payload is T}\r\n */\r\nfunction
isType(payload, type) {\r\n  if (!(type instanceof Function)) {\r\n    throw new TypeError('Type must be a
function');\r\n  }\r\n  if (!Object.prototype.hasOwnProperty.call(type, 'prototype')) {\r\n    throw new
TypeError('Type is not a class');\r\n  }\r\n  // Classes usually have names (as functions usually have names)\r\n
var name = type.name;\r\n  return getType(payload) === name || Boolean(payload && payload.constructor ===
type);\r\n}\r\n\nexport { getType, isAnyObject, isArray, isBlob, isBoolean, isDate, isEmptyArray, isEmptyObject,
isEmptyString, isError, isFile, isFullArray, isFullString, isFunction, isMap, isNaNValue, isNull, isNullOrUndefined,
isNumber, isObject, isObjectLike, isPlainObject, isPrimitive, isPromise, isRegExp, isSet, isString,
isSymbol, isType, isUndefined, isWeakMap, isWeakSet };;\n", "import { isArray, isPlainObject } from 'is-
what';\n\n/*!

```

```

*****\r\nCopyright (c)
Microsoft Corporation. All rights reserved.\r\nLicensed under the Apache License, Version 2.0 (the "License");
you may not use\r\nthis file except in compliance with the License. You may obtain a copy of the\r\nLicense at
http://www.apache.org/licenses/LICENSE-2.0\r\n\r\nTHIS CODE IS PROVIDED ON AN *AS IS* BASIS,
WITHOUT WARRANTIES OR CONDITIONS OF ANY\r\nKIND, EITHER EXPRESS OR IMPLIED,
INCLUDING WITHOUT LIMITATION ANY IMPLIED\r\nWARRANTIES OR CONDITIONS OF TITLE,
FITNESS FOR A PARTICULAR PURPOSE,\r\nMERCHANTABILITY OR NON-INFRINGEMENT.\r\n\r\nSee
the Apache Version 2.0 License for specific language governing permissions\r\nand limitations under the
License.\r\n*****

```

```

*/\r\n\r\nfunction __spreadArrays()
{\r\n  for (var s = 0, i = 0, il = arguments.length; i < il; i++) s += arguments[i].length;\r\n  for (var r = Array(s), k
= 0, i = 0; i < il; i++)\r\n    for (var a = arguments[i], j = 0, jl = a.length; j < jl; j++, k++)\r\n      r[k] = a[j];\r\n
return r;\r\n}\r\n\nfunction assignProp(carry, key, newVal, originalObject, includeNonenumerable) {\r\n  var
propType = {}.propertyIsEnumerable.call(originalObject, key)\r\n    ? 'enumerable'\r\n    : 'nonenumerable';\r\n  if (propType === 'enumerable')\r\n    carry[key] = newVal;\r\n  if (includeNonenumerable && propType ===
'nonenumerable') {\r\n    Object.defineProperty(carry, key, {\r\n      value: newVal,\r\n      enumerable:
false,\r\n      writable: true,\r\n      configurable: true,\r\n    });\r\n  }\r\n}\r\n\r\n/**\r\n * Copy (clone) an
object and all its props recursively to get rid of any prop referenced of the original object. Arrays are also cloned,
however objects
inside arrays are still linked.\r\n * @export\r\n * @template T\r\n * @param {T} target Target can be
anything\r\n * @param {Options} [options={}] Options can be `props` or `nonenumerable`\r\n * @returns {T} the
target with replaced values\r\n * @export\r\n */\r\nfunction copy(target, options) {\r\n  if (options === void 0) {
options = {};} \r\n  if (isArray(target))\r\n    return target.map(function (i) { return copy(i, options); });\r\n  if
(!isPlainObject(target))\r\n    return target;\r\n  var props = Object.getOwnPropertyNames(target);\r\n  var
symbols = Object.getOwnPropertySymbols(target);\r\n  return __spreadArrays(props, symbols).reduce(function
(carry, key) {\r\n    if (isArray(options.props) && !options.props.includes(key)) {\r\n      return carry;\r\n
}\r\n    var val = target[key];\r\n    var newVal = copy(val, options);\r\n    assignProp(carry, key, newVal,
target, options.nonenumerable);\r\n    return carry;\r\n  }, {});\r\n}\r\n\nexport { copy };;\n", /* jshint proto: true */\r\nimport * as Constants from './constants';\r\nimport {
copy } from 'copy-anything';\r\n\nexport function getLocation(index, inputStream) {\r\n  let n = index + 1;\r\n  let line
= null;\r\n  let column = -1;\r\n  while (--n >= 0 && inputStream.charAt(n) !== '\n') {\r\n    column++;\r\n  }\r\n  if (typeof index === 'number') {\r\n    line = (inputStream.slice(0, index).match(/\\n/g) || []).length;\r\n  }\r\n  return
{\r\n    line,\r\n    column\r\n  };\r\n}\r\n\nexport function copyArray(arr) {\r\n  let i;\r\n  const length = arr.length;\r\n
const copy = new Array(length);\r\n  for (i = 0; i < length; i++) {\r\n    copy[i] = arr[i];\r\n  }\r\n  return
copy;\r\n}\r\n\nexport function clone(obj) {\r\n  const cloned = {};\r\n  for (const prop in obj) {\r\n    if
(obj.hasOwnProperty(prop)) {\r\n      cloned[prop] = obj[prop];\r\n    }\r\n  }\r\n  return cloned;\r\n}\r\n\nexport

```

```

function defaults(obj1, obj2) {\n
  let newObj = obj2 || {};\n  if (!obj2._defaults) {\n    newObj = {};\n    const defaults = copy(obj1);\n    newObj._defaults = defaults;\n    const cloned = obj2 ? copy(obj2) : {};\n    Object.assign(newObj, defaults,\n    cloned);\n  }\n  return newObj;\n}\n\nexport function copyOptions(obj1, obj2) {\n  if (obj2 && obj2._defaults)\n  {\n    return obj2;\n  }\n  const opts = defaults(obj1, obj2);\n  if (opts.strictMath) {\n    opts.math =\n    Constants.Math.PARENS;\n  }\n  // Back compat with changed relativeUrls option\n  if (opts.relativeUrls) {\n    opts.rewriteUrls = Constants.RewriteUrls.ALL;\n  }\n  if (typeof opts.math === 'string') {\n    switch\n    (opts.math.toLowerCase()) {\n      case 'always':\n        opts.math = Constants.Math.ALWAYS;\n        break;\n      case 'parens-division':\n        opts.math = Constants.Math.PARENS_DIVISION;\n        break;\n      case 'strict':\n        case 'parens':\n          opts.math = Constants.Math.PARENS;\n          break;\n        default:\n          opts.math = Constants.Math.PARENS;\n        }\n  }\n  if (typeof opts.rewriteUrls === 'string') {\n    switch\n    (opts.rewriteUrls.toLowerCase()) {\n      case 'off':\n        opts.rewriteUrls = Constants.RewriteUrls.OFF;\n        break;\n      case 'local':\n        opts.rewriteUrls = Constants.RewriteUrls.LOCAL;\n        break;\n      case 'all':\n        opts.rewriteUrls = Constants.RewriteUrls.ALL;\n        break;\n    }\n  }\n  return opts;\n}\n\nexport function merge(obj1, obj2) {\n  for (const prop in obj2) {\n    if\n    (obj2.hasOwnProperty(prop)) {\n      obj1[prop] = obj2[prop];\n    }\n  }\n  return obj1;\n}\n\nexport\nfunction flattenArray(arr, result = []) {\n  for (let i = 0, length = arr.length; i < length; i++) {\n    const value =\n    arr[i];\n\n    if (Array.isArray(value)) {\n      flattenArray(value, result);\n    } else {\n      if (value !== undefined)\n      {\n        result.push(value);\n      }\n    }\n  }\n  return result;\n}"}\n\nimport * as utils from\n'./utils';\n\nconst anonymousFunc = /(<anonymous>|Function):(\\d+):(\\d+)/;\n\n/**\n * This is a centralized class of\n any error that could be thrown internally (mostly by the parser).\n * Besides standard .message it keeps some\n additional data like a path to the file where the error\n * occurred along with line and column numbers.\n * @class\n * @extends Error\n * @type {module.LessError}\n * @prop {string} type\n * @prop {string}\n filename\n * @prop {number} index\n * @prop {number} line\n * @prop {number} column\n * @prop {number}\n callLine\n * @prop {number} callExtract\n * @prop {string[]} extract\n * @param {Object} e - An\n error object to wrap around or just a descriptive object\n * @param {Object} fileContentMap\n - An object with file contents in 'contents' property (like importManager)\n @todo - move to fileManager?\n * @param {string} [currentFilename]\n */\n\nconst LessError = function(e, fileContentMap, currentFilename) {\n  Error.call(this);\n\n  const filename = e.filename || currentFilename;\n\n  this.message = e.message;\n  this.stack\n  = e.stack;\n\n  if (fileContentMap && filename) {\n    const input = fileContentMap.contents[filename];\n    const loc = utils.getLocation(e.index, input);\n    var line = loc.line;\n    const col = loc.column;\n    const\n    callLine = e.call && utils.getLocation(e.call, input).line;\n    const lines = input ? input.split("\\n") : "";\n    this.type = e.type || 'Syntax';\n    this.filename = filename;\n    this.index = e.index;\n    this.line = typeof line\n    === 'number' ? line + 1 : null;\n    this.column = col;\n\n    if (!this.line && this.stack) {\n      const found =\n      this.stack.match(anonymousFunc);\n\n      /**\n       * We have to figure out how this environment stringifies anonymous functions\n       * so\n we can correctly map plugin errors.\n       *\n       * Note, in Node 8, the output of anonymous funcs varied\n based on parameters\n       * being present or not, so we inject dummy params.\n       */\n      const func =\n      new Function('a', 'throw new Error()');\n      let lineAdjust = 0;\n      try {\n        func();\n      } catch\n      (e) {\n        const match = e.stack.match(anonymousFunc);\n        var line = parseInt(match[2]);\n        lineAdjust = 1 - line;\n      }\n\n      if (found) {\n        if (found[2]) {\n          this.line =\n          parseInt(found[2]) + lineAdjust;\n        }\n        if (found[3]) {\n          this.column =\n          parseInt(found[3]);\n        }\n      }\n\n      this.callLine\n      = callLine + 1;\n      this.callExtract = lines[callLine];\n      this.extract = [\n        lines[this.line - 2],\n        lines[this.line - 1],\n        lines[this.line]\n      ];\n    }\n\n    if (typeof Object.create === 'undefined') {\n      const F = function () {};\n      F.prototype = Error.prototype;\n      LessError.prototype = new F();\n    } else {\n
```

```

LessError.prototype = Object.create(Error.prototype);\n\n\nLessError.prototype.constructor = LessError;\n\n\n *
An overridden version of the default Object.prototype.toString\n * which uses additional information to create a
helpful message.\n\n * @param {Object} options\n * @returns {string}\n */\nLessError.prototype.toString =
function(options) {\n  options = options || {};\n\n  let message = "";\n  const extract = this.extract || [];\n  let error
= [];\n  let stylize = function (str) { return str; }; \n  if (options.stylize) {\n    const type = typeof
options.stylize;\n    if (type
!== 'function') {\n      throw Error(`options.stylize should be a function, got a ${type}`);\n    }\n    stylize =
options.stylize;\n  }\n\n  if (this.line !== null) {\n    if (typeof extract[0] === 'string') {\n
error.push(stylize(`${this.line - 1} ${extract[0]}`, 'grey'));\n    }\n\n    if (typeof extract[1] === 'string') {\n
let errorTxt = `${this.line}`;\n    if (extract[1]) {\n      errorTxt += extract[1].slice(0, this.column) +\n
stylize(stylize(stylize(extract[1].substr(this.column, 1), 'bold') +\n      extract[1].slice(this.column
+ 1, 'red'), 'inverse'));\n    }\n    error.push(errorTxt);\n  }\n\n  if (typeof extract[2] === 'string') {\n
error.push(stylize(`${this.line + 1} ${extract[2]}`, 'grey'));\n  }\n  error = `${error.join("\n") + stylize(",
'reset')}\n`;\n  }\n\n  message += stylize(`${this.type}Error:
${this.message}`, 'red');\n  if (this.filename) {\n    message += stylize(' in ', 'red') + this.filename;\n  }\n  if
(this.line) {\n    message += stylize(` on line ${this.line}, column ${this.column + 1}:`, 'grey');\n  }\n\n  message +=
`\n\n${error}`;\n  if (this.callLine) {\n    message += `${stylize('from ', 'red') + (this.filename ||
"")}`;\n  }\n  message += `${stylize(this.callLine, 'grey')} ${this.callExtract}`;\n  }\n\n  return
message;\n};\n\n\nexport default LessError;"\n\nimport Node from './node';\nimport Element from './element';\nimport
LessError from './less-error';\n\nconst Selector = function(elements, extendList, condition, index, currentFileInfo,
visibilityInfo) {\n  this.extendList = extendList;\n  this.condition = condition;\n  this.evaldCondition =
!condition;\n  this._index = index;\n  this._fileInfo = currentFileInfo;\n  this.elements =
this.getElements(elements);\n  this.mixinElements_ = undefined;\n  this.copyVisibilityInfo(visibilityInfo);\n
  this.setParent(this.elements, this);\n};\n\nSelector.prototype = Object.assign(new Node(), {\n  type:
'Selector',\n\n  accept(visitor) {\n    if (this.elements) {\n      this.elements =
visitor.visitArray(this.elements);\n    }\n    if (this.extendList) {\n      this.extendList =
visitor.visitArray(this.extendList);\n    }\n    if (this.condition) {\n      this.condition =
visitor.visit(this.condition);\n    }\n  },\n\n  createDerived(elements, extendList, evaldCondition) {\n
elements = this.getElements(elements);\n    const newSelector = new Selector(elements, extendList ||
this.extendList,\n    null, this.getIndex(), this.fileInfo(), this.visibilityInfo());\n    newSelector.evaldCondition
= (evaldCondition !== null) ? evaldCondition : this.evaldCondition;\n    newSelector.mediaEmpty =
this.mediaEmpty;\n    return newSelector;\n  },\n\n  getElements(els) {\n    if
(!els) {\n      return [new Element('&', false, this._index, this._fileInfo)];\n    }\n    if (typeof els ===
'string') {\n      this.parse.parseNode(\n        els, \n        ['selector'],\n        this._index, \n
this._fileInfo, \n        function(err, result) {\n          if (err) {\n            throw new LessError({\n
              index: err.index,\n              message: err.message\n            }, this.parse.imports,
this._fileInfo.filename);\n          }\n          els = result[0].elements;\n        });\n    }\n    return
els;\n  },\n\n  createEmptySelectors() {\n    const el = new Element('&', false, this._index, this._fileInfo), sels
= [new Selector([el], null, null, this._index, this._fileInfo)];\n    sels[0].mediaEmpty = true;\n    return sels;\n
  },\n\n  match(other) {\n    const elements
= this.elements;\n    const len = elements.length;\n    let olen;\n    let i;\n\n    other =
other.mixinElements();\n    olen = other.length;\n    if (olen === 0 || len < olen) {\n      return 0;\n    } else
{\n      for (i = 0; i < olen; i++) {\n        if (elements[i].value !== other[i]) {\n          return 0;\n        }\n      }\n    }\n    return olen; // return number of matched elements\n  },\n\n  mixinElements() {\n
if (this.mixinElements_) {\n    return this.mixinElements_;\n  }\n\n  let elements = this.elements.map(\n
function(v) {\n    return v.combinator.value + (v.value.value || v.value);\n  }).join("").match(/(, &#|\\*|\\.|\\w-
|([\\w-]|(\\|\\.))*/g);\n  }\n  if (elements) {\n    if (elements[0] === '&') {\n      elements.shift();\n    }\n  } else {\n
elements = [];\n  }\n\n  return (this.mixinElements_

```

```

= elements);\n  },\n\n  isJustParentSelector() {\n    return !this.mediaEmpty &&\n      this.elements.length\n      === 1 &&\n        this.elements[0].value === '&' &&\n          (this.elements[0].combinator.value === ' ' ||\n            this.elements[0].combinator.value === '');\n  },\n\n  eval(context) {\n    const evaldCondition = this.condition\n      && this.condition.eval(context);\n    let elements = this.elements;\n    let extendList = this.extendList;\n\n    elements = elements && elements.map(function (e) { return e.eval(context); });\n    extendList = extendList &&\n      extendList.map(function(extend) { return extend.eval(context); });\n\n    return this.createDerived(elements,\n      extendList, evaldCondition);\n  },\n\n  genCSS(context, output) {\n    let i, element;\n    if (!!context ||\n      !context.firstSelector) && this.elements[0].combinator.value === '' {\n      output.add(' ', this.fileInfo(),\n        this.getIndex());\n    }\n\n    for (i = 0; i < this.elements.length; i++) {\n      element = this.elements[i];\n      element.genCSS(context,\n        output);\n    }\n  },\n\n  getIsOutput() {\n    return this.evaldCondition;\n  }\n});\n\nexport default\nSelector;\n\n", "import Node from './node';\n\nconst Value = function(value) {\n  if (!value) {\n    throw new\n      Error('Value requires an array argument');\n  }\n  if (!Array.isArray(value)) {\n    this.value = [ value ];\n  }\n  else {\n    this.value = value;\n  }\n};\n\nValue.prototype = Object.assign(new Node(), {\n  type: 'Value',\n\n  accept(visitor) {\n    if (this.value) {\n      this.value = visitor.visitArray(this.value);\n    }\n  },\n\n  eval(context) {\n    if (this.value.length === 1) {\n      return this.value[0].eval(context);\n    } else {\n      return new Value(this.value.map(function (v) {\n        return v.eval(context);\n      }));\n    }\n  },\n\n  genCSS(context, output) {\n    let i;\n    for (i = 0; i < this.value.length; i++) {\n      this.value[i].genCSS(context, output);\n      if (i + 1 < this.value.length) {\n        output.add((context &&\n          context.compress) ? ' : ' : ',');\n      }\n    }\n  }\n});\n\nexport default Value;\n\n", "import Node from\n './node';\n\nconst Keyword = function(value) {\n  this.value = value;\n};\n\nKeyword.prototype =\n  Object.assign(new Node(), {\n    type: 'Keyword',\n\n    genCSS(context, output) {\n      if (this.value === '%') {\n        throw { type: 'Syntax', message: 'Invalid % without number' }; \n      }\n      output.add(this.value);\n    }\n  });\n\nKeyword.True = new Keyword('true');\nKeyword.False = new Keyword('false');\n\nexport default\nKeyword;\n\n", "import Node from './node';\n\nconst Anonymous = function(value, index, currentFileInfo, mapLines,\n  rulesetLike, visibilityInfo) {\n  this.value = value;\n  this._index = index;\n  this._fileInfo = currentFileInfo;\n\n  this.mapLines = mapLines;\n  this.rulesetLike = (typeof rulesetLike === 'undefined') ? false : rulesetLike;\n  this.allowRoot = true;\n  this.copyVisibilityInfo(visibilityInfo);\n}\n\nAnonymous.prototype = Object.assign(new\n  Node(), {\n    type: 'Anonymous',\n\n    eval() {\n      return new Anonymous(this.value, this._index, this._fileInfo,\n        this.mapLines, this.rulesetLike, this.visibilityInfo);\n    },\n\n    compare(other) {\n      return other.toCSS() &&\n        this.toCSS() === other.toCSS() ? 0 : undefined;\n    },\n\n    isRulesetLike() {\n      return this.rulesetLike;\n    },\n\n    genCSS(context, output) {\n      this.nodeVisible = Boolean(this.value);\n      if (this.nodeVisible) {\n        output.add(this.value, this._fileInfo, this._index, this.mapLines);\n      }\n    }\n  });\n\nexport default\nAnonymous;\n\n", "import Node from './node';\n\nimport Value from './value';\n\nimport Keyword from\n './keyword';\n\nimport Anonymous from './anonymous';\n\nimport * as Constants\n  from './constants';\n\nconst MATH = Constants.Math;\n\nfunction evalName(context, name) {\n  let value = "";\n  let i;\n  const n = name.length;\n  const output = { add: function (s) { value += s; };\n\n  for (i = 0; i < n; i++) {\n    name[i].eval(context).genCSS(context, output);\n  }\n  return value;\n}\n\nconst Declaration = function(name,\n  value, important, merge, index, currentFileInfo, inline, variable) {\n  this.name = name;\n  this.value = (value\n    instanceof Node) ? value : new Value([value ? new Anonymous(value) : null]);\n  this.important = important ? ` ${important.trim()} ` : "";\n  this.merge = merge;\n  this._index = index;\n  this._fileInfo = currentFileInfo;\n  this.inline = inline || false;\n  this.variable = (variable !== undefined) ? variable\n    : (name.charAt(0) === '@') ? (name.charAt(0) === '@') : "";\n  this.allowRoot = true;\n  this.setParent(this.value,\n    this);\n}\n\nDeclaration.prototype = Object.assign(new Node(), {\n  type: 'Declaration',\n\n  genCSS(context, output) {\n    output.add(this.name + (context.compress ? ' : ' : ': '), this.fileInfo(),\n      this.getIndex());\n    try {\n      this.value.genCSS(context, output);\n    } catch (e) {\n      e.index\n        = this._index;\n      e.filename = this._fileInfo.filename;\n      throw e;\n    }\n    output.add(this.important + ((this.inline || (context.lastRule && context.compress)) ? " : ':' : ','), this._fileInfo,\n
```

```

this._index);\n  },\n\n  eval(context) {\n    let mathBypass = false, prevMath, name = this.name, evaldValue,\n    variable = this.variable;\n    if (typeof name !== 'string') {\n      // expand 'primitive' name directly to get\n      // things faster (~10% for benchmark.les);\n      name = (name.length === 1) && (name[0] instanceof\n    Keyword) ?\n      name[0].value : evalName(context, name);\n      variable = false; // never treat expanded\n    interpolation as new variable name\n\n    }\n\n    // @todo remove when parens-division is default\n    if (name === 'font' && context.math ===\n    MATH.ALWAYS) {\n      mathBypass = true;\n      prevMath = context.math;\n      context.math =\n    MATH.PARENS_DIVISION;\n    }\n    try {\n      context.importantScope.push({});\n      evaldValue =\n    this.value.eval(context);\n      if (!this.variable && evaldValue.type === 'DetachedRuleset') {\n        throw\n      { message: 'Rulesets cannot be evaluated on a property.',\n        index: this.getIndex(), filename:\n      this.fileInfo().filename };\n      }\n      let important = this.important;\n      const importantResult =\n    context.importantScope.pop();\n      if (!important && importantResult.important) {\n        important =\n      importantResult.important;\n      }\n      return new Declaration(name,\n        evaldValue,\n      important,\n        this.merge,\n      this.getIndex(), this.fileInfo(), this.inline,\n        variable);\n    } catch (e) {\n      if\n    (typeof e.index !== 'number') {\n        e.index = this.getIndex();\n        e.filename =\n      this.fileInfo().filename;\n      }\n      throw e;\n    } finally {\n      if (mathBypass) {\n        context.math = prevMath;\n      }\n    }\n  },\n\n  makeImportant() {\n    return new\n    Declaration(this.name,\n      this.value,\n      '!important',\n      this.merge,\n      this.getIndex(),\n    this.fileInfo(), this.inline);\n  }\n});\n\nexport default Declaration;","function asComment(ctx) {\n  return `/* line\n    ${ctx.debugInfo.lineNumber}, ${ctx.debugInfo.fileName} *\n  `;\n}\n\nfunction asMediaQuery(ctx) {\n  let\n    filenameWithProtocol = ctx.debugInfo.fileName;\n  if (!/^([a-z]+:\\/\\/i.test(filenameWithProtocol)) {\n    filenameWithProtocol = `file://${filenameWithProtocol}`;\n  }\n\n  return `@media -sass-debug-info{filename{font-family:${filenameWithProtocol.replace(/([:\/\\\\\\])/g,\n    function(a) {\n      if (a === '\\\\') {\n        a = '\\\\';\n      }\n      return `\\\\\\\\${a}`;\n    }}}line{font-\n    family:\\\\00003${ctx.debugInfo.lineNumber}}`\n  `;\n}\n\nfunction debugInfo(context, ctx, lineSeparator) {\n  let\n    result = `;\n  if (context.dumpLineNumbers && !context.compress) {\n    switch (context.dumpLineNumbers)\n  {\n    case 'comments':\n      result = asComment(ctx);\n      break;\n    case 'mediaquery':\n      result = asMediaQuery(ctx);\n      break;\n    case 'all':\n      result = asComment(ctx) +\n    (lineSeparator || ` `) + asMediaQuery(ctx);\n      break;\n    }\n  }\n  return result;\n}\n\nexport default\n    debugInfo;\n\n",\n  "import Node from './node';\n  import getDebugInfo from './debug-info';\n  const Comment =\n    function(value,\n      isLineComment, index, currentFileInfo) {\n      this.value = value;\n      this.isLineComment = isLineComment;\n      this._index = index;\n      this._fileInfo = currentFileInfo;\n      this.allowRoot = true;\n    }\n\n  Comment.prototype =\n    Object.assign(new Node(), {\n      type: 'Comment',\n      genCSS(context, output) {\n        if (this.debugInfo) {\n          output.add(getDebugInfo(context, this), this.fileInfo(), this.getIndex());\n        }\n        output.add(this.value);\n      },\n      isSilent(context) {\n        const isCompressed = context.compress && this.value[2] !== '!';\n        return\n      this.isLineComment || isCompressed;\n      }\n    });\n\n  export default Comment;\n  ",\n  "const contexts = {};\n  export\n    default contexts;\n  import * as Constants from './constants';\n  const copyFromOriginal = function\n    copyFromOriginal(original, destination, propertiesToCopy) {\n      if (!original) { return; }\n      for (let i = 0; i <\n    propertiesToCopy.length; i++) {\n        if (original.hasOwnProperty(propertiesToCopy[i]))\n      {\n          destination[propertiesToCopy[i]] = original[propertiesToCopy[i]];\n        }\n      }\n    }\n\n  parse is used\n  whilst parsing\n  *\n  const parseCopyProperties = [\n    // options\n    'paths', // option - unmodified - paths to\n    search for imports on\n    'rewriteUrls', // option - whether to adjust URL's to be relative\n    'rootpath', //\n    option - rootpath to append to URL's\n    'strictImports', // option -\n    'insecure', // option - whether to allow\n    imports from insecure ssl hosts\n    'dumpLineNumbers', // option - whether to dump line numbers\n    'compress',\n    // option - whether to compress\n    'syncImport', // option - whether to import synchronously\n    'chunkInput',\n    // option - whether to chunk input. more performant but causes parse issues.\n    'mime', // browser only -

```

```

mime type for sheet import\n  'useFileCache', // browser only - whether to use the per file session
cache\n // context\n  'processImports', // option & context - whether to process imports. if false then imports
will not be imported.\n // Used by the import manager to stop multiple import visitors being created.\n
'pluginManager' // Used as the plugin manager for the session\n\n\ncontexts.Parse = function(options) {\n
copyFromOriginal(options, this, parseCopyProperties);\n\n  if (typeof this.paths === 'string') { this.paths =
[this.paths]; }\n\n\nconst evalCopyProperties = [\n  'paths', // additional include paths\n  'compress',
// whether to compress\n  'math', // whether math has to be within parenthesis\n  'strictUnits', //
whether units need to evaluate correctly\n  'sourceMap', // whether to output a source map\n
'importMultiple', // whether we are currently importing multiple copies\n  'urlArgs', // whether to add args
into url tokens\n  'javascriptEnabled', // option - whether
  Inline JavaScript is enabled. if undefined, defaults to false\n  'pluginManager', // Used as the plugin manager for
the session\n  'importantScope', // used to bubble up !important statements\n  'rewriteUrls' // option -
whether to adjust URL's to be relative\n\n\ncontexts.Eval = function(options, frames) {\n
copyFromOriginal(options, this, evalCopyProperties);\n\n  if (typeof this.paths === 'string') { this.paths =
[this.paths]; }\n\n  this.frames = frames || [];\n  this.importantScope = this.importantScope ||
[];\n\n\ncontexts.Eval.prototype.enterCalc = function () {\n  if (!this.calcStack) {\n    this.calcStack = [];\n
}\n  this.calcStack.push(true);\n  this.inCalc = true;\n\n\ncontexts.Eval.prototype.exitCalc = function () {\n
this.calcStack.pop();\n  if (!this.calcStack.length) {\n    this.inCalc = false;\n
}\n\n\ncontexts.Eval.prototype.inParenthesis = function () {\n  if (!this.parensStack) {\n    this.parensStack
= [];\n  }\n  this.parensStack.push(true);\n\n\ncontexts.Eval.prototype.outOfParenthesis = function () {\n
this.parensStack.pop();\n\n\ncontexts.Eval.prototype.inCalc = false;\n\ncontexts.Eval.prototype.mathOn =
true;\n\ncontexts.Eval.prototype.isMathOn = function (op) {\n  if (!this.mathOn) {\n    return false;\n  }\n  if (op
=== '/' && this.math !== Constants.Math.ALWAYS && (!this.parensStack || !this.parensStack.length)) {\n
return false;\n  }\n  if (this.math > Constants.Math.PARENS_DIVISION) {\n    return this.parensStack &&
this.parensStack.length;\n  }\n  return true;\n\n\ncontexts.Eval.prototype.pathRequiresRewrite = function (path)
{\n  const isRelative = this.rewriteUrls === Constants.RewriteUrls.LOCAL ? isPathLocalRelative :
isPathRelative;\n\n  return isRelative(path);\n\n\ncontexts.Eval.prototype.rewritePath = function (path, rootpath)
{\n  let newPath;\n\n  rootpath = rootpath || '';\n  newPath = this.normalizePath(rootpath
+ path);\n\n  // If a path was explicit relative and the rootpath was not an absolute path\n  // we must ensure that
the new path is also explicit relative.\n  if (isPathLocalRelative(path) &&\n    isPathRelative(rootpath) &&\n
isPathLocalRelative(newPath) === false) {\n    newPath = `.${newPath}`;\n  }\n\n  return
newPath;\n\n\ncontexts.Eval.prototype.normalizePath = function (path) {\n  const segments =
path.split('/').reverse();\n  let segment;\n\n  path = [];\n  while (segments.length !== 0) {\n    segment =
segments.pop();\n    switch ( segment ) {\n      case '.':\n        break;\n      case '..':\n        if
((path.length === 0) || (path[path.length - 1] === '..')) {\n          path.push( segment );\n        } else {\n
          path.pop();\n        }\n        break;\n      default:\n        path.push(segment);\n
    }\n  }\n\n  return path.join('/');\n\n\nfunction isPathRelative(path) {\n  return !/^(?:[a-z-
]+:|\\|#)/i.test(path);\n\n\nfunction isPathLocalRelative(path) {\n  return path.charAt(0) === '.';\n\n\n// todo - do
the same for the toCSS ?\n", "function makeRegistry( base ) {\n  return {\n    _data: {},\n    add:
function(name, func) {\n      // precautionary case conversion, as later querying of\n      // the registry by
function-caller uses lower case as well.\n      name = name.toLowerCase();\n      if
(this._data.hasOwnProperty(name)) {\n        // TODO warn\n      }\n      this._data[name] = func;\n
    },\n    addMultiple: function(functions) {\n      Object.keys(functions).forEach(\n        name => {\n
          this.add(name, functions[name]);\n        });\n      },\n    get: function(name) {\n      return
this._data[name] || ( base && base.get( name ));\n    },\n    getLocalFunctions: function() {\n      return
this._data;\n    },\n    inherit: function() {\n      return makeRegistry( this );\n    },\n    create: function(base) {\n      return makeRegistry(base);\n    }\n  }\n}

```

```

};\n\nexport default makeRegistry( null );", "import Keyword from './tree/keyword';\n\nconst defaultFunc = {\n  eval: function () {\n    const v = this.value_;\n    const e = this.error_;\n    if (e) {\n      throw e;\n    }\n    if (v !== null) {\n      return v ? Keyword.True : Keyword.False;\n    }\n  },\n  value: function (v) {\n    this.value_ = v;\n  },\n  error: function (e) {\n    this.error_ = e;\n  },\n  reset: function () {\n    this.value_ =\n    this.error_ = null;\n  }\n};\n\nexport default defaultFunc;\n", "import Node from './node';\n\nimport Declaration from './declaration';\n\nimport Keyword from './keyword';\n\nimport Comment from './comment';\n\nimport Paren from './paren';\n\nimport Selector from './selector';\n\nimport Element from './element';\n\nimport Anonymous from './anonymous';\n\nimport contexts from './contexts';\n\nimport globalFunctionRegistry from './functions/function-registry';\n\nimport defaultFunc from './functions/default';\n\nimport getDebugInfo from './debug-info';\n\nimport * as utils from './utils';\n\nconst Ruleset = function(selectors, rules, strictImports, visibilityInfo) {\n  this.selectors = selectors;\n  this.rules = rules;\n  this._lookups = {};\n  this._variables = null;\n  this._properties = null;\n  this.strictImports = strictImports;\n  this.copyVisibilityInfo(visibilityInfo);\n  this.allowRoot = true;\n  this.setParent(this.selectors, this);\n  this.setParent(this.rules, this);\n\n  Ruleset.prototype = Object.assign(new Node(), {\n    type: 'Ruleset',\n    isRuleset: true,\n\n    isRulesetLike() { return true; },\n\n    accept(visitor) {\n      if (this.paths) {\n        this.paths = visitor.visitArray(this.paths,\n          true);\n      } else if (this.selectors) {\n        this.selectors = visitor.visitArray(this.selectors);\n      }\n      if (this.rules && this.rules.length) {\n        this.rules = visitor.visitArray(this.rules);\n      }\n    },\n\n    eval(context) {\n      const that = this;\n      let selectors;\n      let selCnt;\n      let selector;\n      let i;\n      let hasVariable;\n      let hasOnePassingSelector = false;\n\n      if (this.selectors && (selCnt = this.selectors.length)) {\n        selectors = new Array(selCnt);\n        defaultFunc.error({\n          type: 'Syntax',\n          message: 'it is currently only allowed in parametric mixin guards,'\n        });\n        for (i = 0; i < selCnt; i++) {\n          selector = this.selectors[i].eval(context);\n          for (var j = 0; j < selector.elements.length; j++) {\n            if (selector.elements[j].isVariable) {\n              hasVariable = true;\n              break;\n            }\n          }\n          selectors[i] = selector;\n          if (selector.evaldCondition) {\n            hasOnePassingSelector = true;\n          }\n        }\n\n        if (hasVariable) {\n          const toParseSelectors = new Array(selCnt);\n          for (i = 0; i < selCnt; i++) {\n            selector = selectors[i];\n            toParseSelectors[i] = selector.toCSS(context);\n          }\n          this.parse.parseNode(\n            toParseSelectors.join(','),\n            ["selectors"],\n            selectors[0].getIndex(),\n            selectors[0].fileInfo(),\n            function(err, result) {\n              if (result) {\n                selectors = utils.flattenArray(result);\n              }\n            });\n          defaultFunc.reset();\n        } else {\n          hasOnePassingSelector = true;\n        }\n\n        let rules = this.rules ? utils.copyArray(this.rules) : null;\n        const ruleset = new Ruleset(selectors, rules,\n          this.strictImports, this.visibilityInfo());\n        let rule;\n        let subRule;\n\n        ruleset.originalRuleset = this;\n        ruleset.root = this.root;\n        ruleset.firstRoot = this.firstRoot;\n        ruleset.allowImports = this.allowImports;\n\n        if (this.debugInfo) {\n          ruleset.debugInfo = this.debugInfo;\n        }\n\n        if (!hasOnePassingSelector) {\n          rules.length = 0;\n        }\n\n        // inherit a function registry from the frames stack when possible;\n        // otherwise from the global registry\n        ruleset.functionRegistry = (function (frames) {\n          let i = 0;\n          const n = frames.length;\n          let found;\n          for (; i !== n; ++i) {\n            found = frames[i].functionRegistry;\n            if (found) { return found; }\n          }\n          return globalFunctionRegistry;\n        })(context.frames)).inherit();\n\n        // push the current ruleset to the frames stack\n        const ctxFrames = context.frames;\n        ctxFrames.unshift(ruleset);\n\n        // current selectors\n        let ctxSelectors = context.selectors;\n        if (!ctxSelectors) {\n          context.selectors = ctxSelectors = [];\n        }\n        ctxSelectors.unshift(this.selectors);\n\n        // Evaluate imports\n        if (ruleset.root || ruleset.allowImports ||\n          !ruleset.strictImports) {\n          ruleset.evalImports(context);\n        }\n\n        // Store the frames around mixin definitions,\n        // so they can be evaluated like closures when the time comes.\n        const rsRules = ruleset.rules;\n        for (i = 0; (rule = rsRules[i]); i++) {\n          if (rule.evalFirst) {\n            rsRules[i] = rule.eval(context);\n          }\n        }\n      }\n    }\n  });\n};

```

```

    }\n    }\n    const mediaBlockCount = (context.mediaBlocks && context.mediaBlocks.length) || 0;\n    // Evaluate mixin calls.\n    for (i = 0; (rule = rsRules[i]); i++) {\n        if (rule.type === 'MixinCall') {\n            /* jshint loopfunc:true */\n            rules = rule.eval(context).filter(function(r) {\n                if ((r instanceof Declaration) && r.variable) {\n                    // do not pollute the scope if the variable is\n                    // already there. consider returning false here\n                    // but we need a way to \"return\" variable from mixins\n                    return !(ruleset.variable(r.name));\n                }\n                return true;\n            });\n            rsRules.splice.apply(rsRules, [i, 1].concat(rules));\n            i += rules.length - 1;\n            ruleset.resetCache();\n        } else if (rule.type === 'VariableCall')\n        {\n            /* jshint loopfunc:true */\n            rules = rule.eval(context).rules.filter(function(r) {\n                if ((r instanceof Declaration) && r.variable) {\n                    // do not pollute the scope at all\n                    return false;\n                }\n                return true;\n            });\n            rsRules.splice.apply(rsRules, [i, 1].concat(rules));\n            i += rules.length - 1;\n            ruleset.resetCache();\n        }\n    }\n    // Evaluate everything else\n    for (i = 0; (rule = rsRules[i]); i++) {\n        if (!rule.evalFirst) {\n            rsRules[i] = rule = rule.eval ? rule.eval(context) : rule;\n        }\n    }\n    // Evaluate everything else\n    for (i = 0; (rule = rsRules[i]); i++) {\n        // for rulesets, check if it is a css guard and can be removed\n        if (rule instanceof Ruleset && rule.selectors\n            && rule.selectors.length === 1) {\n            // check if it can be folded in (e.g. & where)\n            if (rule.selectors[0] && rule.selectors[0].isJustParentSelector()) {\n                rsRules.splice(i--, 1);\n            }\n        }\n        for (var j = 0; (subRule = rule.rules[j]); j++) {\n            if (subRule instanceof Node) {\n                subRule.copyVisibilityInfo(rule.visibilityInfo());\n                if (!(subRule instanceof Declaration) ||\n                    !subRule.variable) {\n                    rsRules.splice(++i, 0, subRule);\n                }\n            }\n        }\n    }\n    // Pop the stack\n    ctxFrames.shift();\n    ctxSelectors.shift();\n    if (context.mediaBlocks) {\n        for (i = mediaBlockCount; i < context.mediaBlocks.length; i++) {\n            context.mediaBlocks[i].bubbleSelectors(selectors);\n        }\n    }\n    return ruleset;\n},\n    evalImports(context) {\n        const rules = this.rules;\n        let i;\n        let importRules;\n        if (!rules) { return; }\n        for (i = 0; i < rules.length; i++) {\n            if (rules[i].type === 'Import') {\n                importRules = rules[i].eval(context);\n                if (importRules && (importRules.length ||\n                    importRules.length === 0)) {\n                    rules.splice.apply(rules, [i, 1].concat(importRules));\n                    i += importRules.length - 1;\n                } else {\n                    rules.splice(i, 1, importRules);\n                }\n            }\n        }\n        this.resetCache();\n    },\n    makeImportant() {\n        const result = new Ruleset(this.selectors,\n            this.rules.map(function (r) {\n                if (r.makeImportant) {\n                    return r.makeImportant();\n                } else {\n                    return r;\n                }\n            }), this.strictImports,\n            this.visibilityInfo());\n        return result;\n    },\n    matchArgs(args) {\n        return !args || args.length === 0;\n    },\n    // lets you call a css selector with a guard\n    matchCondition(args, context) {\n        const lastSelector = this.selectors[this.selectors.length - 1];\n        if (!lastSelector.evaldCondition) {\n            return false;\n        }\n        if (lastSelector.condition &&\n            !lastSelector.condition.eval(\n                new contexts.Eval(context,\n                    context.frames))) {\n            return false;\n        }\n        return true;\n    },\n    resetCache() {\n        this._rulesets = null;\n        this._variables = null;\n        this._properties = null;\n        this._lookups = {};\n    },\n    variables()\n    {\n        if (!this._variables) {\n            this._variables = !this.rules ? {} : this.rules.reduce(function (hash, r) {\n                if (r instanceof Declaration && r.variable === true) {\n                    hash[r.name] = r;\n                }\n            }, {});\n            // when evaluating variables in an import statement, imports\n            // have not been eval'd\n            // so we need to go inside import statements.\n            // guard against root being a\n            string (in the case of inlined less)\n            if (r.type === 'Import' && r.root && r.root.variables) {\n                const vars = r.root.variables();\n                for (const name in vars) {\n                    if (vars.hasOwnProperty(name)) {\n                        hash[name] = r.root.variable(name);\n                    }\n                }\n            }\n        }\n        return hash;\n    },\n    properties()\n    {\n        if (!this._properties) {\n            this._properties = !this.rules ? {} : this.rules.reduce(function\n            (hash, r) {\n                if (r instanceof Declaration && r.variable !== true) {\n                    return hash;\n                }\n            }, {});\n        }\n    }\n};

```



```

const name = (r.name.length === 1) && (r.name[0] instanceof Keyword) ?\n      r.name[0].value :
r.name;\n      // Properties don't overwrite as they can merge\n      if (!hash[`${name}`]) {\n        hash[`${name}`] = [ r ];\n      }\n      else {\n        hash[`${name}`].push(r);\n      }\n      }\n      return hash;\n    }, {});\n  }\n  return this._properties;\n  },\n  \n  variable(name) {\n    const decl = this.variables()[name];\n    if (decl) {\n      return this.parseValue(decl);\n    }\n  },\n  \n  property(name) {\n    const decl = this.properties()[name];\n    if (decl) {\n      return\n      this.parseValue(decl);\n    }\n  },\n  \n  lastDeclaration() {\n    for (let i = this.rules.length; i > 0; i--) {\n      const decl = this.rules[i - 1];\n      if (decl\n        instanceof Declaration) {\n          return this.parseValue(decl);\n        }\n      }\n    }\n  },\n  \n  parseValue(toParse) {\n    const self = this;\n    function transformDeclaration(decl) {\n      if (decl.value\n        instanceof Anonymous && !decl.parsed) {\n          if (typeof decl.value.value === 'string') {\n            this.parse.parseNode(\n              decl.value.value,\n              ['value', 'important'],\n              decl.value.getIndex(),\n              decl.fileInfo(),\n              function(err, result) {\n                if\n                  (err) {\n                    decl.parsed = true;\n                  }\n                  if (result) {\n                    decl.value = result[0];\n                    decl.important = result[1] || '';\n                    decl.parsed =\n                    true;\n                  }\n                }\n              }\n            );\n          } else {\n            decl.parsed = true;\n          }\n          return decl;\n        }\n      }\n    }\n    if (!Array.isArray(toParse)) {\n      return\n      transformDeclaration.call(self, toParse);\n    }\n    else {\n      const nodes = [];\n      toParse.forEach(function(n) {\n        nodes.push(transformDeclaration.call(self, n));\n      });\n      return\n      nodes;\n    }\n  },\n  \n  rulesets() {\n    if (!this.rules) {\n      return [];\n    }\n    const filtRules = [];\n    const\n      rules = this.rules;\n    let i;\n    let rule;\n    for (i = 0; (rule = rules[i]); i++) {\n      if (rule.isRuleset) {\n        filtRules.push(rule);\n      }\n    }\n    return filtRules;\n  },\n  \n  prependRule(rule) {\n    const\n      rules = this.rules;\n    if (rules) {\n      rules.unshift(rule);\n    } else {\n      this.rules = [ rule ];\n    }\n    this.setParent(rule, this);\n  },\n  \n  find(selector, self, filter) {\n    self = self || this;\n    const rules = [];\n    let match;\n    let\n      foundMixins;\n    const key = selector.toCSS();\n    if (key in this._lookups) {\n      return this._lookups[key];\n    }\n    this.rulesets().forEach(function (rule) {\n      if (rule !== self) {\n        for (let j = 0; j <\n          rule.selectors.length; j++) {\n            match = selector.match(rule.selectors[j]);\n            if (match) {\n              if (selector.elements.length > match) {\n                if (!filter || filter(rule)) {\n                  foundMixins = rule.find(new Selector(selector.elements.slice(match)), self, filter);\n                  for (let i =\n                    0; i < foundMixins.length; ++i) {\n                      foundMixins[i].path.push(rule);\n                    }\n                  }\n                }\n              } else {\n                rules.push({ rule, path: [] });\n              }\n            }\n          }\n          break;\n        }\n      }\n    });\n    this._lookups[key] = rules;\n    return rules;\n  },\n  \n  genCSS(context, output) {\n    let i;\n    let j;\n    const charsetRuleNodes = [];\n    let ruleNodes = [];\n    let // Line number debugging\n        debugInfo;\n    let rule;\n    let path;\n    context.tabLevel = (context.tabLevel || 0);\n    if (!this.root) {\n      context.tabLevel++;\n    }\n    const tabRuleStr = context.compress ? " : Array(context.tabLevel + 1).join(' ');\n    const tabSetStr =\n    context.compress ? " : Array(context.tabLevel).join(' ');\n    let sep;\n    let charsetNodeIndex = 0;\n    let importNodeIndex = 0;\n    for (i = 0; (rule =\n      this.rules[i]); i++) {\n      if (rule instanceof Comment) {\n        if (importNodeIndex === i) {\n          importNodeIndex++;\n        }\n        ruleNodes.push(rule);\n      } else if (rule.isCharset &&\n        rule.isCharset()) {\n          ruleNodes.splice(charsetNodeIndex, 0, rule);\n          charsetNodeIndex++;\n        }\n        importNodeIndex++;\n      } else if (rule.type === 'Import') {\n        ruleNodes.splice(importNodeIndex,\n          0, rule);\n        importNodeIndex++;\n      } else {\n        ruleNodes.push(rule);\n      }\n    }\n    ruleNodes = charsetRuleNodes.concat(ruleNodes);\n    // If this is the root node, we don't render\n    // a\n    selector, or {\n    if (!this.root) {\n      debugInfo = getDebugInfo(context, this,\n
```

```

tabSetStr);\n\n        if (debugInfo) {\n            output.add(debugInfo);\n            output.add(tabSetStr);\n        }\n\n        const paths = this.paths;\n        const pathCnt = paths.length;\n        let pathSubCnt;\n        sep\n        = context.compress ? ':' : '\\n${tabSetStr}';\n        for (i = 0; i < pathCnt; i++) {\n            path = paths[i];\n            if (!(pathSubCnt = path.length)) { continue; }\n            if (i > 0) { output.add(sep); }\n\n        context.firstSelector = true;\n        path[0].genCSS(context, output);\n        context.firstSelector = false;\n\n        for (j = 1; j < pathSubCnt; j++) {\n            path[j].genCSS(context, output);\n        }\n\n        output.add((context.compress ? ':' : '\\n') + tabRuleStr);\n    }\n\n    // Compile rules and rulesets\n    for (i = 0; (rule = ruleNodes[i]); i++) {\n        if\n        (i + 1 === ruleNodes.length) {\n            context.lastRule = true;\n        }\n        const currentLastRule =\n        context.lastRule;\n        if (rule.isRulesetLike(rule)) {\n            context.lastRule = false;\n        }\n        if\n        (rule.genCSS) {\n            rule.genCSS(context, output);\n        } else if (rule.value) {\n            output.add(rule.value.toString());\n        }\n        context.lastRule = currentLastRule;\n        if\n        (!context.lastRule && rule.isVisible()) {\n            output.add(context.compress ? ':' : '\\n${tabRuleStr}');\n        } else {\n            context.lastRule = false;\n        }\n        if (!this.root) {\n            output.add((context.compress ? ':' : '\\n${tabSetStr}'));\n            context.tabLevel--;\n        }\n        if\n        (!output.isEmpty() && !context.compress && this.firstRoot) {\n            output.add('\\n');\n        }\n    }\n\n    joinSelectors(paths,\n    context, selectors) {\n        for (let s = 0; s < selectors.length; s++) {\n            this.joinSelector(paths, context,\n            selectors[s]);\n        }\n    },\n    joinSelector(paths, context, selector) {\n        function\n        createParenthesis(elementsToPak, originalElement) {\n            let replacementParen, j;\n            if\n            (elementsToPak.length === 0) {\n                replacementParen = new Paren(elementsToPak[0]);\n            } else {\n                const insideParen = new Array(elementsToPak.length);\n                for (j = 0; j < elementsToPak.length; j++)\n                {\n                    insideParen[j] = new Element(\n                    null,\n                    elementsToPak[j],\n                    originalElement.isVariable,\n                    originalElement._index,\n                    originalElement._fileInfo\n                    );\n                }\n                replacementParen = new Paren(new Selector(insideParen));\n            }\n            return replacementParen;\n        }\n        function createSelector(containedElement, originalElement)\n        {\n            let element, selector;\n            element = new Element(null, containedElement,\n            originalElement.isVariable, originalElement._index, originalElement._fileInfo);\n            selector = new\n            Selector([element]);\n            return selector;\n        }\n        // joins selector path from `beginningPath` with\n        selector path in `addPath`\n        // `replacedElement` contains element that is being replaced by `addPath`\n        //\n        // returns concatenated path\n        function addReplacementIntoPath(beginningPath, addPath, replacedElement,\n        originalSelector) {\n            let newSelectorPath, lastSelector, newJoinedSelector;\n            // our new selector path\n            newSelectorPath = [];\n            // construct the joined selector - if & is the first thing this will be empty,\n            // if not newJoinedSelector will be the last set of\n            elements in the selector\n            if (beginningPath.length > 0) {\n                newSelectorPath =\n                utils.copyArray(beginningPath);\n                lastSelector = newSelectorPath.pop();\n                newJoinedSelector =\n                originalSelector.createDerived(utils.copyArray(lastSelector.elements));\n            } else {\n                newJoinedSelector = originalSelector.createDerived([]);\n            }\n            if (addPath.length > 0) {\n                //\n                // /deep/ is a CSS4 selector - (removed, so should deprecate)\n                // that is valid without anything in front of it\n                // so if the & does not have a combinator that is \"\" or \" \" then\n                // and there is a combinator on\n                the parent, then grab that.\n                // this also allows + a { & .b { .a & { ... though not sure why you would want\n                to do that\n                let combinator = replacedElement.combinator;\n                const parentEl =\n                addPath[0].elements[0];\n\n                if (combinator.emptyOrWhitespace && !parentEl.combinator.emptyOrWhitespace) {\n                    combinator = parentEl.combinator;\n                }\n                // join the elements so far with the first part of the\n                parent\n                newJoinedSelector.elements.push(new Element(\n                combinator,\n                parentEl.value,\n                replacedElement.isVariable,\n                replacedElement._index,\n                replacedElement._fileInfo\n                ));\n                newJoinedSelector.elements =

```

```

newJoinedSelector.elements.concat(addPath[0].elements.slice(1));\n        }\n        // now add the joined
selector - but only if it is not empty\n        if (newJoinedSelector.elements.length !== 0) {\n
newSelectorPath.push(newJoinedSelector);\n        }\n        // put together the parent selectors after the join
(e.g. the rest of the parent)\n        if (addPath.length
> 1) {\n            let restOfPath = addPath.slice(1);\n            restOfPath = restOfPath.map(function (selector) {\n
                return selector.createDerived(selector.elements, []);\n            });\n            newSelectorPath =
newSelectorPath.concat(restOfPath);\n        }\n        return newSelectorPath;\n    }\n    // joins selector
path from `beginningPath` with every selector path in `addPaths` array\n    // `replacedElement` contains element
that is being replaced by `addPath`\n    // returns array with all concatenated paths\n    function
addAllReplacementsIntoPath(beginningPath, addPaths, replacedElement, originalSelector, result) {\n        let j;\n
        for (j = 0; j < beginningPath.length; j++) {\n            const newSelectorPath =
addReplacementIntoPath(beginningPath[j], addPaths, replacedElement, originalSelector);\n
result.push(newSelectorPath);\n        }\n        return
result;\n    }\n    function mergeElementsOnToSelectors(elements, selectors) {\n        let i, sel;\n\n        if
(elements.length === 0) {\n            return ;\n        }\n        if (selectors.length === 0) {\n
selectors.push([ new Selector(elements) ]);\n            return;\n        }\n\n        for (i = 0; (sel = selectors[i]);
i++) {\n            // if the previous thing in sel is a parent this needs to join on to it\n            if (sel.length > 0) {\n
                sel[sel.length - 1] = sel[sel.length - 1].createDerived(sel[sel.length - 1].elements.concat(elements));\n
            }\n            else {\n                sel.push(new Selector(elements));\n            }\n        }\n    }\n    //
replace all parent selectors inside `inSelector` by content of `context` array\n    // resulting selectors are returned
inside `paths` array\n    // returns true if `inSelector`
contained at least one parent selector\n    function replaceParentSelector(paths, context, inSelector) {\n        //
The paths are [[Selector]]\n        // The first list is a list of comma separated selectors\n        // The inner list is a
list of inheritance separated selectors\n        // e.g.\n        // .a, .b {\n        // .c {\n        // }\n        // }\n
        // == [[.a] [.c]] [[.b] [.c]]\n        //\n        let i, j, k, currentElements, newSelectors, selectorsMultiplied, sel,
el, hadParentSelector = false, length, lastSelector;\n        function findNestedSelector(element) {\n            let
maybeSelector;\n            if (!(element.value instanceof Paren)) {\n                return null;\n            }\n
            maybeSelector = element.value.value;\n            if (!(maybeSelector instanceof Selector)) {\n                return
null;\n            }\n            return maybeSelector;\n        }\n\n        // the elements from the current selector so far\n        currentElements = [];\n        // the
current list of new selectors to add to the path.\n        // We will build it up. We initiate it with one empty selector
as we \"multiply\" the new selectors\n        // by the parents\n        newSelectors = [\n            []\n        ];\n\n        for (i = 0; (el = inSelector.elements[i]); i++) {\n            // non parent reference elements just get added\n
            if (el.value !== '&') {\n                const nestedSelector = findNestedSelector(el);\n                if
(nestedSelector !== null) {\n                    // merge the current list of non parent selector elements\n                    //
on to the current list of selectors to add\n                    mergeElementsOnToSelectors(currentElements,
newSelectors);\n\n                    const nestedPaths = [];\n\n                    let replaced;\n                    const replacedNewSelectors = [];\n                    replaced =
replaceParentSelector(nestedPaths, context, nestedSelector);\n                    hadParentSelector = hadParentSelector
|| replaced;\n                    // the nestedPaths array should have only one member - replaceParentSelector does not
multiply selectors\n                    for (k = 0; k < nestedPaths.length; k++) {\n                        const
replacementSelector = createSelector(createParenthesis(nestedPaths[k], el), el);\n
addAllReplacementsIntoPath(newSelectors, [replacementSelector], el, inSelector, replacedNewSelectors);\n
                    }\n                    newSelectors = replacedNewSelectors;\n                    currentElements = [];\n                }\n
            } else {\n                currentElements.push(el);\n            }\n        }\n\n        hadParentSelector
= true;\n        // the new list of selectors to add\n        selectorsMultiplied = [];\n\n        //
merge the current list of non parent selector elements\n        // on to the current list of selectors to add\n

```



```

value = this.value, rules = this.rules;\n\n    // media stored inside
    other atrule should not bubble over it\n    // backup media bubbling information\n    mediaPathBackup =
context.mediaPath;\n    mediaBlocksBackup = context.mediaBlocks;\n    // deleted media bubbling
information\n    context.mediaPath = [];\n    context.mediaBlocks = [];\n\n    if (value) {\n        value =
value.eval(context);\n    }\n    if (rules) {\n        // assuming that there is only one rule at this point - that is
how parser constructs the rule\n        rules = [rules[0].eval(context)];\n        rules[0].root = true;\n    }\n    //
restore media bubbling information\n    context.mediaPath = mediaPathBackup;\n    context.mediaBlocks =
mediaBlocksBackup;\n\n    return new AtRule(this.name, value, rules,\n        this.getIndex(), this.fileInfo(),
this.debugInfo, this.isRooted, this.visibilityInfo());\n    },\n\n    variable(name) {\n        if (this.rules) {\n            //
assuming that there is only
            one rule at this point - that is how parser constructs the rule\n            return
Ruleset.prototype.variable.call(this.rules[0], name);\n        }\n    },\n\n    find() {\n        if (this.rules) {\n            //
assuming that there is only one rule at this point - that is how parser constructs the rule\n            return
Ruleset.prototype.find.apply(this.rules[0], arguments);\n        }\n    },\n\n    rulesets() {\n        if (this.rules) {\n
// assuming that there is only one rule at this point - that is how parser constructs the rule\n            return
Ruleset.prototype.rulesets.apply(this.rules[0]);\n        }\n    },\n\n    outputRuleset(context, output, rules) {\n
const ruleCnt = rules.length;\n    let i;\n    context.tabLevel = (context.tabLevel | 0) + 1;\n\n    //
Compressed\n    if (context.compress) {\n        output.add('{});\n        for (i = 0; i < ruleCnt; i++) {\n
rules[i].genCSS(context, output);\n
        }\n        output.add('{});\n        context.tabLevel--;\n        return;\n    }\n\n    // Non-compressed\n
const tabSetStr = `\\n${Array(context.tabLevel).join(' ')}`, tabRuleStr = `${tabSetStr} `;\n    if (!ruleCnt) {\n
output.add(` ${tabSetStr} `);\n    } else {\n        output.add(` ${tabRuleStr} `);\n
rules[0].genCSS(context, output);\n        for (i = 1; i < ruleCnt; i++) {\n            output.add(tabRuleStr);\n
rules[i].genCSS(context, output);\n        }\n        output.add(` ${tabSetStr} `);\n    }\n\n
context.tabLevel--;\n    }\n});\n\nexport default AtRule;\n", "import Node from './node';\nimport contexts from
'./contexts';\nimport * as utils from './utils';\n\nconst DetachedRuleset = function(ruleset, frames) {\n    this.ruleset
= ruleset;\n    this.frames = frames;\n    this.setParent(this.ruleset, this);\n};\n\nDetachedRuleset.prototype =
Object.assign(new Node(),
    {\n        type: 'DetachedRuleset',\n        evalFirst: true,\n\n        accept(visitor) {\n            this.ruleset =
visitor.visit(this.ruleset);\n        },\n\n        eval(context) {\n            const frames = this.frames ||
utils.copyArray(context.frames);\n            return new DetachedRuleset(this.ruleset, frames);\n        },\n\n       
callEval(context) {\n            return this.ruleset.eval(this.frames ? new contexts.Eval(context,
this.frames.concat(context.frames)) : context);\n        }\n    });\n\nexport default DetachedRuleset;\n", "import Node from
'./node';\nimport unitConversions from './data/unit-conversions';\nimport * as utils from './utils';\n\nconst Unit =
function(numerator, denominator, backupUnit) {\n    this.numerator = numerator ? utils.copyArray(numerator).sort()
: [];\n    this.denominator = denominator ? utils.copyArray(denominator).sort() : [];\n    if (backupUnit) {\n
this.backupUnit = backupUnit;\n    } else if (numerator && numerator.length) {\n        this.backupUnit =
numerator[0];\n    }\n};\n\nUnit.prototype
= Object.assign(new Node(), {\n    type: 'Unit',\n\n    clone() {\n        return new
Unit(utils.copyArray(this.numerator), utils.copyArray(this.denominator), this.backupUnit);\n    },\n\n    genCSS(context, output) {\n        // Dimension checks the unit is singular and throws an error if in strict math
mode.\n        const strictUnits = context && context.strictUnits;\n        if (this.numerator.length === 1) {\n
output.add(this.numerator[0]); // the ideal situation\n        } else if (!strictUnits && this.backupUnit) {\n
output.add(this.backupUnit);\n        } else if (!strictUnits && this.denominator.length) {\n
output.add(this.denominator[0]);\n        }\n    },\n\n    toString() {\n        let i, returnStr = this.numerator.join('*);\n
        for (i = 0; i < this.denominator.length; i++) {\n            returnStr += `/${this.denominator[i]} `;\n        }\n        return
returnStr;\n    },\n\n    compare(other) {\n        return

```

```

this.is(other.toString()) ? 0 : undefined;\n  },\n\n  is(unitString) {\n    return this.toString().toUpperCase() ===\n    unitString.toUpperCase();\n  },\n\n  isLength() {\n    return\n    RegExp('^([px|em|ex|ch|rem|in|cm|mm|pc|pt|ex|vw|vh|vmin|vmax])$', 'gi').test(this.toCSS());\n  },\n\n  isEmpty() {\n    return this.numerator.length === 0 && this.denominator.length === 0;\n  },\n\n  isSingular() {\n    return\n    this.numerator.length <= 1 && this.denominator.length === 0;\n  },\n\n  map(callback) {\n    let i;\n\n    for\n    (i = 0; i < this.numerator.length; i++) {\n      this.numerator[i] = callback(this.numerator[i], false);\n    }\n\n    for\n    (i = 0; i < this.denominator.length; i++) {\n      this.denominator[i] = callback(this.denominator[i], true);\n    }\n  },\n\n  usedUnits() {\n    let group;\n    const result = {};\n    let mapUnit;\n    let groupName;\n\n    mapUnit = function (atomicUnit) {\n      /* jshint loopfunc:true */\n      if (group.hasOwnProperty(atomicUnit) && !result[groupName]) {\n        result[groupName] = atomicUnit;\n      }\n      return atomicUnit;\n    };\n\n    for (groupName in\n    unitConversions) {\n      if (unitConversions.hasOwnProperty(groupName)) {\n        group =\n        unitConversions[groupName];\n\n        this.map(mapUnit);\n      }\n    }\n\n    return result;\n  },\n\n  cancel() {\n    const counter = {};\n    let atomicUnit;\n    let i;\n\n    for (i = 0; i < this.numerator.length;\n    i++) {\n      atomicUnit = this.numerator[i];\n      counter[atomicUnit] = (counter[atomicUnit] || 0) + 1;\n    }\n\n    for (i = 0; i < this.denominator.length; i++) {\n      atomicUnit = this.denominator[i];\n      counter[atomicUnit] = (counter[atomicUnit] || 0) - 1;\n    }\n\n    this.numerator = [];\n    this.denominator =\n    [];\n\n    for (atomicUnit in counter) {\n      if (counter.hasOwnProperty(atomicUnit)) {\n        const count =\n        counter[atomicUnit];\n\n        if (count > 0) {\n          for (i = 0; i < count; i++) {\n            this.numerator.push(atomicUnit);\n          }\n        } else if (count < 0) {\n          for (i = 0; i < -\n          count; i++) {\n            this.denominator.push(atomicUnit);\n          }\n        }\n      }\n\n      this.numerator.sort();\n      this.denominator.sort();\n    }\n  });\n\nexport default Unit;\n\n", "import Node\nfrom './node';\n\nimport unitConversions from './data/unit-conversions';\n\nimport Unit from './unit';\n\nimport Color\nfrom './color';\n\n\n// A number with a unit\n\nconst Dimension = function(value, unit) {\n  this.value =\n  parseFloat(value);\n  if (isNaN(this.value)) {\n    throw new Error('Dimension is not a number.');

```

```

unit.toString()) {\n          throw new Error(`Incompatible units. Change the units or use the unit function. `)\n
      + `Bad units: '${unit.toString()}' and '${other.unit.toString()}'`);\n          }\n          value =
this._operate(context, op, this.value, other.value);\n          } else if (op === '*') {\n          unit.numerator =
unit.numerator.concat(other.unit.numerator).sort();\n          unit.denominator =
unit.denominator.concat(other.unit.denominator).sort();\n          unit.cancel();\n          } else if (op === '/') {\n
unit.numerator = unit.numerator.concat(other.unit.denominator).sort();\n
      unit.denominator = unit.denominator.concat(other.unit.numerator).sort();\n          unit.cancel();\n          }\n
return new Dimension(value, unit);\n    },\n\n    compare(other) {\n      let a, b;\n      if (!(other instanceof
Dimension)) {\n        return undefined;\n      }\n      if (this.unit.isEmpty() || other.unit.isEmpty()) {\n        a
= this;\n        b = other;\n      } else {\n        a = this.unify();\n        b = other.unify();\n        if
(a.unit.compare(b.unit) !== 0) {\n          return undefined;\n        }\n      }\n      return
Node.numericCompare(a.value, b.value);\n    },\n\n    unify() {\n      return this.convertTo({ length: 'px', duration:
's', angle: 'rad' });\n    },\n\n    convertTo(conversions) {\n      let value = this.value;\n      const unit =
this.unit.clone();\n      let i;\n      let groupName;\n      let group;\n
      let targetUnit;\n      let derivedConversions = {};\n      let applyUnit;\n      if (typeof conversions ===
'string') {\n        for (i in unitConversions) {\n          if (unitConversions[i].hasOwnProperty(conversions)) {\n
            derivedConversions = {};\n            derivedConversions[i] = conversions;\n          }\n        }\n
        conversions = derivedConversions;\n      }\n      applyUnit = function (atomicUnit, denominator) {\n        /*
jshint loopfunc:true *\n        if (group.hasOwnProperty(atomicUnit)) {\n          if (denominator) {\n
            value = value / (group[atomicUnit] / group[targetUnit]);\n          } else {\n            value = value *
(group[atomicUnit] / group[targetUnit]);\n          }\n          return targetUnit;\n        }\n        return
atomicUnit;\n      };\n      for (groupName in conversions) {\n        if
(conversions.hasOwnProperty(groupName))\n        {\n          targetUnit = conversions[groupName];\n          group = unitConversions[groupName];\n          unit.map(applyUnit);\n        }\n      }\n      unit.cancel();\n      return new Dimension(value, unit);\n
    }]);\n\nexport default Dimension;\n", "import Node from './node';\nimport Color from './color';\nimport Dimension
from './dimension';\nimport * as Constants from './constants';\nconst MATH = Constants.Math;\n\nconst
Operation = function(op, operands, isSpaced) {\n  this.op = op.trim();\n  this.operands = operands;\n
  this.isSpaced = isSpaced;\n};\n\nOperation.prototype = Object.assign(new Node(), {\n  type: 'Operation',\n\n  accept(visitor) {\n    this.operands = visitor.visitArray(this.operands);\n  },\n\n  eval(context) {\n    let a =
this.operands[0].eval(context), b = this.operands[1].eval(context), op;\n    if (context.isMathOn(this.op)) {\n
      op = this.op === '/'\n      ? '/' : this.op;\n      if (a instanceof Dimension && b instanceof Color) {\n        a = a.toColor();\n      }\n      if
(b instanceof Dimension && a instanceof Color) {\n        b = b.toColor();\n      }\n      if
(!a.operate || !b.operate) {\n        if (\n          (a instanceof Operation || b instanceof Operation)\n          && a.op === '/' && context.math === MATH.PARENS_DIVISION\n          ) {\n          return new
Operation(this.op, [a, b], this.isSpaced);\n        }\n        throw { type: 'Operation',\n          message:
'Operation on an invalid type' };\n      }\n      return a.operate(context, op, b);\n    } else {\n      return
new Operation(this.op, [a, b], this.isSpaced);\n    }\n  },\n\n  genCSS(context, output) {\n    this.operands[0].genCSS(context, output);\n    if (this.isSpaced) {\n      output.add(' '); \n    }\n    output.add(this.op);\n    if (this.isSpaced) {\n      output.add(' '); \n    }\n    this.operands[1].genCSS(context, output);\n  });\n\nexport default Operation;\n", "import Node from
'./node';\nimport Paren from './paren';\nimport Comment from './comment';\nimport Dimension from
'./dimension';\n\nconst Expression = function(value, noSpacing) {\n  this.value = value;\n  this.noSpacing =
noSpacing;\n  if (!value) {\n    throw new Error('Expression requires an array parameter');\n  }\n};\n\nExpression.prototype = Object.assign(new Node(), {\n  type: 'Expression',\n\n  accept(visitor) {\n    this.value = visitor.visitArray(this.value);\n  },\n\n  eval(context) {\n    let returnValue;\n    const mathOn =
context.isMathOn();\n    const inParenthesis = this.parens;\n    let doubleParen = false;\n    if

```

```

(inParenthesis) {\n      context.inParenthesis();\n    }\n    if (this.value.length > 1) {\n      return Value = new Expression(this.value.map(function (e) {\n        if (!e.eval) {\n          return e;\n        }\n        return e.eval(context);\n      }), this.noSpacing);\n    } else if (this.value.length === 1)\n    {\n      if (this.value[0].parens && !this.value[0].parensInOp && !context.inCalc) {\n        doubleParen =\n        true;\n      }\n      return Value = this.value[0].eval(context);\n    } else {\n      return Value = this;\n    }\n    if (inParenthesis) {\n      context.outOfParenthesis();\n    }\n    if (this.parens && this.parensInOp\n    && !mathOn && !doubleParen\n    && !(return Value instanceof Dimension)) {\n      return Value = new\n      Paren(return Value);\n    }\n    return return Value;\n  },\n  genCSS(context, output) {\n    for (let i = 0; i <\n    this.value.length; i++) {\n      this.value[i].genCSS(context, output);\n      if\n      (!this.noSpacing && i + 1 < this.value.length) {\n        output.add(' ');\n      }\n    }\n    throw AwayComments() {\n      this.value = this.value.filter(function(v) {\n        return !(v instanceof\n        Comment);\n      });\n    }\n  }\n}\n\nexport default Expression;\n", "import Expression from\n'../tree/expression';\n\nclass function Caller {\n  constructor(name, context, index, currentFileInfo) {\n    this.name = name.toLowerCase();\n    this.index = index;\n    this.context = context;\n    this.currentFileInfo\n    = currentFileInfo;\n\n    this.func = context.frames[0].functionRegistry.get(this.name);\n  }\n  isValid() {\n    return Boolean(this.func);\n  }\n  call(args) {\n    if (!(Array.isArray(args))) {\n      args = [args];\n    }\n    const evalArgs = this.func.evalArgs;\n    if (evalArgs !== false) {\n      args = args.map(a =>\n      a.eval(this.context));\n    }\n    const commentFilter\n    = item => !(item.type === 'Comment');\n    // This code is terrible and should be replaced as per this issue...\n    // https://github.com/less/less.js/issues/2477\n    args = args\n    .filter(commentFilter)\n    .map(item\n    => {\n      if (item.type === 'Expression') {\n        const subNodes = item.value.filter(commentFilter);\n        if (subNodes.length === 1) {\n          // https://github.com/less/less.js/issues/3616\n          if (item.parens && subNodes[0].op === '/') {\n            return item;\n          }\n          return subNodes[0];\n        } else {\n          return new Expression(subNodes);\n        }\n      }\n      return item;\n    });\n    if (evalArgs === false) {\n      return this.func(this.context,\n      ...args);\n    }\n    return this.func(...args);\n  }\n}\n\nexport default function Caller;\n", "/*!

```

\*\*\*\*\*\r\nCopyright (c)  
 Microsoft Corporation.\r\n\r\nPermission to use, copy, modify, and/or distribute this software for any\r\n\r\npurpose  
 with or without fee is hereby granted.\r\n\r\n\r\nTHE SOFTWARE IS PROVIDED \"AS IS\" AND THE AUTHOR  
 DISCLAIMS ALL WARRANTIES WITH\r\n\r\nREGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED  
 WARRANTIES OF MERCHANTABILITY\r\n\r\nAND FITNESS. IN NO EVENT SHALL THE AUTHOR BE  
 LIABLE FOR ANY SPECIAL, DIRECT,\r\n\r\nINDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY  
 DAMAGES WHATSOEVER RESULTING FROM\r\n\r\nLOSS OF USE, DATA OR PROFITS, WHETHER IN AN  
 ACTION OF CONTRACT, NEGLIGENCE OR\r\n\r\nOTHER TORTIOUS ACTION, ARISING OUT OF OR IN  
 CONNECTION WITH THE USE OR\r\n\r\nPERFORMANCE OF THIS  
 SOFTWARE.\r\n\*\*\*\*\*

```

*/\r\n*/\n\n global Reflect, Promise */\r\n\r\nvar extendStatics = function(d, b) {\r\n  extendStatics\n  = Object.setPrototypeOf ||\r\n  ({ __proto__: [] } instanceof Array && function(d, b) { d.__proto__ = b; }) ||\r\n  function(d, b) { for (var p in b) if (Object.prototype.hasOwnProperty.call(b, p)) d[p] = b[p]; }; \r\n  return\n  extendStatics(d, b);\r\n};\r\n\r\nexport function __extends(d, b) {\r\n  if (typeof b !== \"function\" && b !==\n  null)\r\n    throw new TypeError(\"Class extends value \" + String(b) + \" is not a constructor or null\");\r\n  extendStatics(d, b);\r\n  function __() { this.constructor = d; }\r\n  d.prototype = b === null ? Object.create(b) :\n  (__proto__ = b.prototype, new __());\r\n}\r\n\r\nexport var __assign = function() {\r\n  __assign = Object.assign\n  || function __assign(t) {\r\n    for (var s, i = 1, n = arguments.length; i < n; i++) {\r\n      s = arguments[i];\r\n      for (var p in s) if (Object.prototype.hasOwnProperty.call(s, p)) t[p] = s[p];\r\n    }\r\n    return t;\r\n  };\r\n  return __assign.apply(this,

```



```

arguments);\r\n\r\n\r\nexport function __rest(s, e) {\r\n  var t = {};\r\n  for (var p in s) if
(Object.prototype.hasOwnProperty.call(s, p) && e.indexOf(p) < 0)\r\n    t[p] = s[p];\r\n  if (s != null && typeof
Object.getOwnPropertySymbols === "function")\r\n    for (var i = 0, p = Object.getOwnPropertySymbols(s); i <
p.length; i++) {\r\n      if (e.indexOf(p[i]) < 0 && Object.prototype.propertyIsEnumerable.call(s, p[i]))\r\n
t[p[i]] = s[p[i]];\r\n    }\r\n  return t;\r\n}\r\n\r\nexport function __decorate(decorators, target, key, desc) {\r\n
var c = arguments.length, r = c < 3 ? target : desc === null ? desc = Object.getOwnPropertyDescriptor(target, key) :
desc, d;\r\n  if (typeof Reflect === "object" && typeof Reflect.decorate === "function") r =
Reflect.decorate(decorators, target, key, desc);\r\n  else for (var i = decorators.length - 1; i >= 0; i--) if (d =
decorators[i]) r = (c < 3 ? d(r) : c > 3 ? d(target, key,
r) : d(target, key)) || r;\r\n  return c > 3 && r && Object.defineProperty(target, key, r), r;\r\n}\r\n\r\n\r\nexport
function __param(paramIndex, decorator) {\r\n  return function (target, key) { decorator(target, key, paramIndex);
}\r\n}\r\n\r\n\r\nexport function __metadata(metadataKey, metadataValue) {\r\n  if (typeof Reflect === "object" &&
typeof Reflect.metadata === "function") return Reflect.metadata(metadataKey, metadataValue);\r\n}\r\n\r\n\r\nexport
function __awaiter(thisArg, _arguments, P, generator) {\r\n  function adopt(value) { return value instanceof P ?
value : new P(function (resolve) { resolve(value); }); }\r\n  return new (P || (P = Promise))(function (resolve, reject)
{\r\n    function fulfilled(value) { try { step(generator.next(value)); } catch (e) { reject(e); } }\r\n    function
rejected(value) { try { step(generator["throw"](value)); } catch (e) { reject(e); } }\r\n    function step(result) {
result.done ? resolve(result.value) : adopt(result.value).then(fulfilled,
rejected); }\r\n    step((generator = generator.apply(thisArg, _arguments || [])).next());\r\n  });\r\n}\r\n\r\n\r\nexport
function __generator(thisArg, body) {\r\n  var _ = { label: 0, sent: function() { if (t[0] & 1) throw t[1]; return t[1];
}, trys: [], ops: [] }, f, y, t, g;\r\n  return g = { next: verb(0), "throw": verb(1), "return": verb(2) }, typeof Symbol
=== "function" && (g[Symbol.iterator] = function() { return this; }), g;\r\n  function verb(n) { return function (v)
{ return step([n, v]); }; }\r\n  function step(op) {\r\n    if (f) throw new TypeError("Generator is already
executing.");\r\n    while (_) try {\r\n      if (f = 1, y && (t = op[0] & 2 ? y["return"] : op[0] ? y["throw"] ||
((t = y["return"]) && t.call(y, 0) : y.next) && !(t = t.call(y, op[1])).done) return t;\r\n      if (y = 0, t) op =
[op[0] & 2, t.value];\r\n      switch (op[0]) {\r\n        case 0: case 1: t = op; break;\r\n
        case 4: _.label++; return { value: op[1], done: false }; \r\n        case 5: _.label++; y = op[1]; op = [0];
continue;\r\n        case 7: op = _.ops.pop(); _.trys.pop(); continue;\r\n        default: \r\n          if (!(t =
_.trys, t = t.length > 0 && t[t.length - 1]) && (op[0] === 6 || op[0] === 2)) { _ = 0; continue; }\r\n          if
(op[0] === 3 && (!t || (op[1] > t[0] && op[1] < t[3]))) { _.label = op[1]; break; }\r\n          if (op[0] === 6 &&
_.label < t[1]) { _.label = t[1]; t = op; break; }\r\n          if (t && _.label < t[2]) { _.label = t[2]; _.ops.push(op);
break; }\r\n          if (t[2]) _.ops.pop(); \r\n          _.trys.pop(); continue;\r\n        }\r\n        op =
body.call(thisArg, _);\r\n      } catch (e) { op = [6, e]; y = 0; } finally { f = t = 0; }\r\n      if (op[0] & 5) throw
op[1]; return { value: op[0] ? op[1] : void 0, done: true }; }\r\n  }\r\n}\r\n\r\n\r\n\r\nexport
var __createBinding = Object.create ? (function(o, m, k, k2) {\r\n  if (k2 === undefined) k2 = k;\r\n
Object.defineProperty(o, k2, { enumerable: true, get: function() { return m[k]; } });\r\n}) : (function(o, m, k, k2)
{\r\n  if (k2 === undefined) k2 = k;\r\n  o[k2] = m[k];\r\n});\r\n\r\n\r\nexport function __exportStar(m, o) {\r\n  for
(var p in m) if (p !== "default" && !Object.prototype.hasOwnProperty.call(o, p)) __createBinding(o, m,
p);\r\n}\r\n\r\n\r\n\r\nexport function __values(o) {\r\n  var s = typeof Symbol === "function" && Symbol.iterator, m =
s && o[s], i = 0;\r\n  if (m) return m.call(o);\r\n  if (o && typeof o.length === "number") return {\r\n    next:
function () {\r\n      if (o && i >= o.length) o = void 0;\r\n      return { value: o && o[i++], done: !o }; \r\n
    }\r\n  };\r\n  throw new TypeError(s ? "Object is not iterable." : "Symbol.iterator is not
defined.");\r\n}\r\n\r\n\r\n\r\nexport function __read(o, n) {\r\n  var m =
typeof Symbol === "function" && o[Symbol.iterator];\r\n  if (!m) return o;\r\n  var i = m.call(o), r, ar = [],
e;\r\n  try {\r\n    while ((n === void 0 || n-- > 0) && !(r = i.next()).done) ar.push(r.value);\r\n  }\r\n  catch
(error) { e = { error: error }; }\r\n  finally {\r\n    try {\r\n      if (r && !r.done && (m = i["return"]))
m.call(i);\r\n    }\r\n    finally { if (e) throw e.error; }\r\n  }\r\n  return ar;\r\n}\r\n\r\n\r\n\r\n\r\n/** @deprecated
*/\r\n\r\nexport function __spread() {\r\n  for (var ar = [], i = 0; i < arguments.length; i++)\r\n    ar =

```

```

ar.concat(__read(arguments[i]));\r\n  return ar;\r\n}\r\n\r\n/** @deprecated */\r\nexport function __spreadArrays()
{\r\n  for (var s = 0, i = 0, il = arguments.length; i < il; i++) s += arguments[i].length;\r\n  for (var r = Array(s), k
= 0, i = 0; i < il; i++)\r\n    for (var a = arguments[i], j = 0, jl = a.length; j < jl; j++, k++)\r\n      r[k] = a[j];\r\n
return r;\r\n}\r\n\r\nexport
function __spreadArray(to, from, pack) {\r\n  if (pack || arguments.length === 2) for (var i = 0, l = from.length, ar;
i < l; i++) {\r\n    if (ar != !(i in from)) {\r\n      if (!ar) ar = Array.prototype.slice.call(from, 0, i);\r\n      ar[i]
= from[i];\r\n    }\r\n  }\r\n  return to.concat(ar || from);\r\n}\r\n\r\nexport function __await(v) {\r\n  return this
instanceof __await ? (this.v = v, this) : new __await(v);\r\n}\r\n\r\nexport function __asyncGenerator(thisArg,
_arguments, generator) {\r\n  if (!Symbol.asyncIterator) throw new TypeError("\r\nSymbol.asyncIterator is not
defined.");\r\n  var g = generator.apply(thisArg, _arguments || []), i, q = [];\r\n  return i = {}, verb("\r\nnext\r\n"),
verb("\r\nthrow\r\n"), verb("\r\nreturn\r\n"), i[Symbol.asyncIterator] = function () { return this; }, i; \r\n  function verb(n) { if
(g[n]) i[n] = function (v) { return new Promise(function (a, b) { q.push([n, v, a, b]) > 1 || resume(n, v); }); }; }\r\n
function
resume(n, v) { try { step(g[n](v)); } catch (e) { settle(q[0][3], e); } }\r\n  function step(r) { r.value instanceof
__await ? Promise.resolve(r.value.v).then(fulfill, reject) : settle(q[0][2], r); }\r\n  function fulfill(value) {
resume("\r\nnext\r\n", value); }\r\n  function reject(value) { resume("\r\nthrow\r\n", value); }\r\n  function settle(f, v) { if
(f(v), q.shift(), q.length) resume(q[0][0], q[0][1]); }\r\n}\r\n\r\nexport function __asyncDelegator(o) {\r\n  var i,
p;\r\n  return i = {}, verb("\r\nnext\r\n"), verb("\r\nthrow\r\n"), function (e) { throw e; }, verb("\r\nreturn\r\n"), i[Symbol.iterator] =
function () { return this; }, i; \r\n  function verb(n, f) { i[n] = o[n] ? function (v) { return (p = !p) ? { value:
__await(o[n](v)), done: n === "\r\nreturn\r\n" } : f ? f(v) : v; } : f; }\r\n}\r\n\r\nexport function __asyncValues(o) {\r\n  if
(!Symbol.asyncIterator) throw new TypeError("\r\nSymbol.asyncIterator is not defined.");\r\n  var m =
o[Symbol.asyncIterator], i;\r\n  return m ? m.call(o)
: (o = typeof __values === "\r\nfunction\r\n" ? __values(o) : o[Symbol.iterator](), i = {}, verb("\r\nnext\r\n"), verb("\r\nthrow\r\n"),
verb("\r\nreturn\r\n"), i[Symbol.asyncIterator] = function () { return this; }, i); \r\n  function verb(n) { i[n] = o[n] &&
function (v) { return new Promise(function (resolve, reject) { v = o[n](v), settle(resolve, reject, v.done, v.value); }); };
}\r\n  function settle(resolve, reject, d, v) { Promise.resolve(v).then(function(v) { resolve({ value: v, done: d });
}, reject); }\r\n}\r\n\r\nexport function __makeTemplateObject(cooked, raw) {\r\n  if (Object.defineProperty) {
Object.defineProperty(cooked, "\r\nraw\r\n", { value: raw }); } else { cooked.raw = raw; }\r\n  return
cooked;\r\n};\r\n\r\nvar __setModuleDefault = Object.create ? (function(o, v) {\r\n  Object.defineProperty(o,
"\r\ndefault\r\n", { enumerable: true, value: v });\r\n}) : function(o, v) {\r\n  o["\r\ndefault\r\n"] = v;\r\n};\r\n\r\nexport
function __importStar(mod) {\r\n  if (mod && mod.__esModule) return mod;\r\n  var result = {};\r\n  if (mod != null) for (var k in mod) if (k !== "\r\ndefault\r\n" &&
Object.prototype.hasOwnProperty.call(mod, k)) __createBinding(result, mod, k);\r\n  __setModuleDefault(result,
mod);\r\n  return result;\r\n};\r\n\r\nexport function __importDefault(mod) {\r\n  return (mod &&
mod.__esModule) ? mod : { default: mod }; }\r\n}\r\n\r\nexport function __classPrivateFieldGet(receiver, state, kind,
f) {\r\n  if (kind === "\r\na\r\n" && !f) throw new TypeError("\r\nPrivate accessor was defined without a getter\r\n");\r\n  if
(typeof state === "\r\nfunction\r\n" ? receiver !== state || !f : !state.has(receiver)) throw new TypeError("\r\nCannot read
private member from an object whose class did not declare it\r\n");\r\n  return kind === "\r\nm\r\n" ? f : kind === "\r\na\r\n" ?
f.call(receiver) : f ? f.value : state.get(receiver);\r\n}\r\n\r\nexport function __classPrivateFieldSet(receiver, state,
value, kind, f) {\r\n  if (kind === "\r\nm\r\n") throw new TypeError("\r\nPrivate method is not writable\r\n");\r\n
if (kind === "\r\na\r\n" && !f) throw new TypeError("\r\nPrivate accessor was defined without a setter\r\n");\r\n  if (typeof
state === "\r\nfunction\r\n" ? receiver !== state || !f : !state.has(receiver)) throw new TypeError("\r\nCannot write private
member to an object whose class did not declare it\r\n");\r\n  return (kind === "\r\na\r\n" ? f.call(receiver, value) : f ?
f.value = value : state.set(receiver, value)), value;\r\n}\r\n\r\n", "import Node from './node';\r\nimport Anonymous from
'./anonymous';\r\nimport FunctionCaller from './functions/function-caller';\r\n\r\n\r\n// A function call node.\r\n\r\nconst
Call = function(name, args, index, currentFileInfo) {\r\n  this.name = name;\r\n  this.args = args;\r\n  this.calc = name
=== 'calc';\r\n  this._index = index;\r\n  this._fileInfo = currentFileInfo;\r\n}\r\n\r\nCall.prototype = Object.assign(new
Node(), {\r\n  type: 'Call',\r\n  accept(visitor) {\r\n    if (this.args) {\r\n      this.args =

```

```

visitor.visitArray(this.args);\n    }\n  },\n\n  /\n
  // When evaluating a function call,\n  // we either find the function in the functionRegistry,\n  // in which case
we call it, passing the evaluated arguments,\n  // if this returns null or we cannot find the function, we\n  // simply
print it out as it appeared originally [2].\n  /\n  // The reason why we evaluate the arguments, is in the case
where\n  // we try to pass a variable to a function, like: `saturate(@color)`.\n  // The function should receive the
value, not the variable.\n  /\n  eval(context) {\n    /**\n     * Turn off math for calc(), and switch back on for
evaluating nested functions\n     */\n    const currentMathContext = context.mathOn;\n    context.mathOn =
!this.calc;\n    if (this.calc || context.inCalc) {\n      context.enterCalc();\n    }\n\n    const exitCalc = () =>
{\n      if (this.calc || context.inCalc) {\n        context.exitCalc();\n      }\n      context.mathOn =
currentMathContext;\n    };\n\n    let result;\n    const funcCaller = new FunctionCaller(this.name, context, this.getIndex(),
this.fileInfo());\n    if (funcCaller.isValid()) {\n      try {\n        result = funcCaller.call(this.args);\n      }
catch (e) {\n        if (e.hasOwnProperty('line') && e.hasOwnProperty('column')) {\n          throw e;\n        }
throw {\n          type: e.type || 'Runtime',\n          message:
`Error evaluating function \\`${this.name}\\`${e.message} ? : ${e.message}` : "`,\n          index:
this.getIndex(),\n          filename: this.fileInfo().filename,\n          line: e.lineNumber,\n          column: e.columnNumber\n        };\n      }\n    }\n\n    if (result !== null && result !== undefined) {\n      // Results that that are not nodes are cast as Anonymous
nodes\n      // Falsy values or booleans are returned as empty nodes\n      if (!(result instanceof Node)) {\n        if (!result || result === true) {\n          result = new Anonymous(null);\n        } else {\n          result = new Anonymous(result.toString());\n        }\n        result._index =
this._index;\n        result._fileInfo = this._fileInfo;\n        return result;\n      }\n      const args =
this.args.map(a => a.eval(context));\n      exitCalc();\n      return new Call(this.name, args, this.getIndex(),
this.fileInfo());\n    },\n\n    genCSS(context, output) {\n      output.add(`${this.name}`, this.fileInfo(),
this.getIndex());\n      for (let i = 0; i < this.args.length; i++) {\n        this.args[i].genCSS(context, output);\n        if (i + 1 < this.args.length) {\n          output.add(', ');\n        }\n      }\n      output.add(');\n    });\n\nexport default Call;\n", "import Node from './node';\nimport Call from
'./call';\n\nconst Variable = function(name, index, currentFileInfo) {\n  this.name = name;\n  this._index =
index;\n  this._fileInfo = currentFileInfo;\n};\n\nVariable.prototype = Object.assign(new Node(), {\n  type:
'Variable',\n\n  eval(context) {\n    let variable, name = this.name;\n\n    if (name.indexOf('@') === 0) {\n      name = `@${new Variable(name.slice(1), this.getIndex(), this.fileInfo()).eval(context).value}`;\n    }\n\n    if (this.evaluating) {\n      throw { type: 'Name',\n        message: `Recursive variable definition for
${name}`,\n        filename: this.fileInfo().filename,\n        index: this.getIndex() };\n    }\n\n    this.evaluating = true;\n\n    variable = this.find(context.frames, function (frame) {\n      const v =
frame.variable(name);\n      if (v) {\n        if (v.important) {\n          const importantScope =
context.importantScope[context.importantScope.length - 1];\n          importantScope.important =
v.important;\n        }\n        // If in calc, wrap vars in a function call to cascade evaluate args first\n        if (context.inCalc) {\n          return (new Call('_SELF', [v.value])).eval(context);\n        } else {\n          return v.value.eval(context);\n        }\n      }\n    });\n\n    if (variable) {\n      this.evaluating = false;\n      return variable;\n    } else {\n      throw { type: 'Name',\n        message:
`variable ${name} is undefined`,\n        filename: this.fileInfo().filename,\n        index: this.getIndex() };\n    }\n  },\n\n  find(obj, fun) {\n    for (let i = 0, r; i < obj.length; i++) {\n      r = fun.call(obj, obj[i]);\n      if (r) {\n        return r;\n      }\n    }\n    return null;\n  }\n});\n\nexport default Variable;\n", "import Node from
'./node';\nimport Declaration from './declaration';\n\nconst Property = function(name, index, currentFileInfo) {\n  this.name = name;\n  this._index = index;\n  this._fileInfo = currentFileInfo;\n};\n\nProperty.prototype =
Object.assign(new Node(), {\n  type: 'Property',\n\n  eval(context) {\n    let property;\n    const name =
this.name;\n    // TODO: shorten this reference\n    const mergeRules =

```

```

context.pluginManager.less.visitors.ToCSSVisitor.prototype._mergeRules;\n\n    if (this.evaluating) {\n
throw { type: 'Name',\n        message: `Recursive property reference for ${name}`, \n        filename:\n
this.fileInfo().filename,\n        index: this.getIndex() };\n    }\n\n    this.evaluating = true;\n\n    property\n
= this.find(context.frames, function (frame) {\n        let v;\n
        const vArr = frame.property(name);\n        if (vArr) {\n            for (let i = 0; i < vArr.length; i++) {\n
                v = vArr[i];\n                vArr[i] = new Declaration(v.name,\n                    v.value,\n
v.important,\n                    v.merge,\n                    v.index,\n                    v.currentFileInfo,\n
v.inline,\n                    v.variable\n                );\n            }\n            mergeRules(vArr);\n\n            v =\n
vArr[vArr.length - 1];\n            if (v.important) {\n                const importantScope =\n
context.importantScope[context.importantScope.length - 1];\n                importantScope.important =\n
v.important;\n                }\n                v = v.value.eval(context);\n                return v;\n            }\n        });\n        if\n
(property) {\n            this.evaluating = false;\n            return property;\n
        } else {\n            throw { type: 'Name',\n                message: `Property '${name}' is undefined`,\n
filename: this.currentFileInfo.filename,\n                index: this.index };\n        }\n    },\n\n    find(obj, fun) {\n        for\n
(let i = 0, r; i < obj.length; i++) {\n            r = fun.call(obj, obj[i]);\n            if (r) { return r; }\n        }\n        return\n
null;\n    });\n\nexport default Property;\n", "import Node from './node';\n\nconst Attribute = function(key, op,\n
value, cif) {\n    this.key = key;\n    this.op = op;\n    this.value = value;\n    this.cif = cif;\n}\n\nAttribute.prototype =\n
Object.assign(new Node(), {\n    type: 'Attribute',\n\n    eval(context) {\n        return new Attribute(\n
this.key.eval ? this.key.eval(context) : this.key,\n            this.op,\n            (this.value && this.value.eval) ?\n
this.value.eval(context) : this.value,\n            this.cif\n        );\n    },\n\n    genCSS(context, output)\n
{\n        output.add(this.toCSS(context));\n    },\n\n    toCSS(context) {\n        let value = this.key.toCSS ?\n
this.key.toCSS(context) : this.key;\n\n        if (this.op) {\n            value += this.op;\n            value +=\n
(this.value.toCSS ? this.value.toCSS(context) : this.value);\n        }\n\n        if (this.cif) {\n            value = value + `\n
` + this.cif;\n        }\n\n        return `[${value}]`;\n    });\n\nexport default Attribute;\n", "import Node from\n
'./node';\n\nimport Variable from './variable';\n\nimport Property from './property';\n\n\nconst Quoted = function(str,\n
content, escaped, index, currentFileInfo) {\n    this.escaped = (escaped == null) ? true : escaped;\n    this.value =\n
content || "";\n    this.quote = str.charAt(0);\n    this._index = index;\n    this._fileInfo = currentFileInfo;\n
this.variableRegex = /@\{\{([\w-]+\)\}\}/g;\n    this.propRegex = /\$\{\{([\w-]+\)\}\}/g;\n    this.allowRoot =\n
escaped;\n};\n\nQuoted.prototype = Object.assign(new Node(),\n
{\n    type: 'Quoted',\n\n    genCSS(context, output) {\n        if (!this.escaped) {\n            output.add(this.quote,\n
this.fileInfo(), this.getIndex());\n        }\n        output.add(this.value);\n        if (!this.escaped) {\n
            output.add(this.quote);\n        }\n    },\n\n    containsVariables() {\n        return\n
this.value.match(this.variableRegex);\n    },\n\n    eval(context) {\n        const that = this;\n        let value =\n
this.value;\n        const variableReplacement = function (_, name) {\n            const v = new Variable(`@${name}`,\n
that.getIndex(), that.fileInfo()).eval(context, true);\n            return (v instanceof Quoted) ? v.value : v.toCSS();\n
        };\n        const propertyReplacement = function (_, name) {\n            const v = new Property(`$$${name}`,\n
that.getIndex(), that.fileInfo()).eval(context, true);\n            return (v instanceof Quoted) ? v.value : v.toCSS();\n
        };\n        function iterativeReplace(value, regexp, replacementFnc)\n
{\n            let evaluatedValue = value;\n            do {\n                value = evaluatedValue.toString();\n
evaluatedValue = value.replace(regexp, replacementFnc);\n            } while (value !== evaluatedValue);\n
return evaluatedValue;\n        }\n        value = iterativeReplace(value, this.variableRegex, variableReplacement);\n
value = iterativeReplace(value, this.propRegex, propertyReplacement);\n        return new Quoted(this.quote + value\n
+ this.quote, value, this.escaped, this.getIndex(), this.fileInfo());\n    },\n\n    compare(other) {\n        // when\n
comparing quoted strings allow the quote to differ\n        if (other.type === 'Quoted' && !this.escaped &&\n
!other.escaped) {\n            return Node.numericCompare(this.value, other.value);\n        } else {\n            return\n
other.toCSS() && this.toCSS() === other.toCSS() ? 0 : undefined;\n        }\n    });\n\nexport default\n
Quoted;\n", "import Node from './node';\n\nfunction

```

```

escapePath(path) {\n  return path.replace(/[\\(\|\)\*\?]/g, function(match) { return `\\${match}`; });\n}\n\nconst
URL = function(val, index, currentFileInfo, isEvald) {\n  this.value = val;\n  this._index = index;\n  this._fileInfo
= currentFileInfo;\n  this.isEvald = isEvald;\n};\n\nURL.prototype = Object.assign(new Node(), {\n  type:
'Url',\n\n  accept(visitor) {\n    this.value = visitor.visit(this.value);\n  },\n\n  genCSS(context, output) {\n
output.add('url(');\n    this.value.genCSS(context, output);\n    output.add('');\n  },\n\n  eval(context) {\n
const val = this.value.eval(context);\n    let rootpath;\n\n    if (!this.isEvald) {\n      // Add the rootpath if the
URL requires a rewrite\n      rootpath = this.fileInfo() && this.fileInfo().rootpath;\n      if (typeof rootpath
=== 'string' &&\n        typeof val.value === 'string' &&\n        context.pathRequiresRewrite(val.value)) {\n
        if (!val.quote) {\n          rootpath = escapePath(rootpath);\n        }\n        val.value =
context.rewritePath(val.value, rootpath);\n      } else {\n        val.value =
context.normalizePath(val.value);\n      }\n\n      // Add url args if enabled\n      if (context.urlArgs) {\n
        if (!val.value.match(/^\\s*data:/)) {\n          const delimiter = val.value.indexOf('?') === -1 ? '?' : '&';\n
          const urlArgs = delimiter + context.urlArgs;\n          if (val.value.indexOf('#') !== -1) {\n
            val.value = val.value.replace('#', `_${urlArgs}#`);\n          } else {\n            val.value += urlArgs;\n
          }\n        }\n      }\n\n      return new URL(val, this.getIndex(), this.fileInfo(), true);\n    }\n  });\n\nexport default URL;\n", "import Ruleset from './ruleset';\nimport Value from
'./value';\nimport Selector from './selector';\nimport Anonymous from './anonymous';\nimport Expression from
'./expression';\nimport AtRule from './atrule';\nimport * as utils from './utils';\n\nconst Media = function(value,
features, index, currentFileInfo, visibilityInfo) {\n  this._index = index;\n  this._fileInfo = currentFileInfo;\n\n
const selectors = (new Selector([], null, null, this._index, this._fileInfo)).createEmptySelectors();\n\n  this.features
= new Value(features);\n  this.rules = [new Ruleset(selectors, value)];\n  this.rules[0].allowImports = true;\n\n
this.copyVisibilityInfo(visibilityInfo);\n  this.allowRoot = true;\n  this.setParent(selectors, this);\n\n
this.setParent(this.features, this);\n  this.setParent(this.rules, this);\n};\n\nMedia.prototype = Object.assign(new
AtRule(), {\n  type: 'Media',\n\n  isRulesetLike() {\n    return true;\n  },\n\n  accept(visitor) {\n    if
(this.features) {\n      this.features = visitor.visit(this.features);\n    }\n\n    if (this.rules) {\n      this.rules = visitor.visitArray(this.rules);\n    }\n  },\n\n  genCSS(context,
output) {\n    output.add('@media ', this._fileInfo, this._index);\n    this.features.genCSS(context, output);\n
this.outputRuleset(context, output, this.rules);\n  },\n\n  eval(context) {\n    if (!context.mediaBlocks) {\n
context.mediaBlocks = [];\n      context.mediaPath = [];\n    }\n\n    const media = new Media(null, [],
this._index, this._fileInfo, this.visibilityInfo());\n    if (this.debugInfo) {\n      this.rules[0].debugInfo =
this.debugInfo;\n      media.debugInfo = this.debugInfo;\n    }\n\n    media.features =
this.features.eval(context);\n\n    context.mediaPath.push(media);\n    context.mediaBlocks.push(media);\n\n
this.rules[0].functionRegistry = context.frames[0].functionRegistry.inherit();\n\n    context.frames.unshift(this.rules[0]);\n\n
media.rules = [this.rules[0].eval(context)];\n    context.frames.shift();\n\n    context.mediaPath.pop();\n\n
return context.mediaPath.length === 0 ? media.evalTop(context) :\n      media.evalNested(context);\n  },\n\n
evalTop(context) {\n    let result = this;\n\n    // Render all dependent Media blocks.\n    if
(context.mediaBlocks.length > 1) {\n      const selectors = (new Selector([], null, null, this.getIndex(),
this.fileInfo())).createEmptySelectors();\n      result = new Ruleset(selectors, context.mediaBlocks);\n
result.multiMedia = true;\n      result.copyVisibilityInfo(this.visibilityInfo);\n      this.setParent(result,
this);\n    }\n\n    delete context.mediaBlocks;\n    delete context.mediaPath;\n\n    return result;\n  },\n\n
evalNested(context) {\n    let i;\n    let value;\n    const path = context.mediaPath.concat([this]);\n\n
    // Extract the media-query conditions separated with ` ` (OR).\n    for (i = 0; i < path.length; i++) {\n
value = path[i].features instanceof Value ?\n      path[i].features.value : path[i].features;\n      path[i] =
Array.isArray(value) ? value : [value];\n    }\n\n    // Trace all permutations to generate the resulting media-
query.\n    //\n    // (a, b and c) with nested (d, e) ->\n    // a and d\n    // a and e\n    // b and c and
d\n    // b and c and e\n    this.features = new Value(this.permute(path).map(path => {\n      path =

```

```

path.map(fragment => fragment.toCSS ? fragment : new Anonymous(fragment));\n\n      for (i = path.length - 1;
i > 0; i--) {\n      path.splice(i, 0, new Anonymous('and'));\n      }\n      return new Expression(path);\n    });\n    this.setParent(this.features, this);\n    // Fake a tree-node that doesn't output anything.\n    return new Ruleset([], []);\n  },\n  permute(arr) {\n    if (arr.length === 0) {\n      return [];\n    }
else if (arr.length === 1) {\n      return arr[0];\n    } else {\n      const result = [];\n      const rest =
this.permute(arr.slice(1));\n      for (let i = 0; i < rest.length; i++) {\n      for (let j = 0; j < arr[0].length; j++)
{\n      result.push([arr[0][j]].concat(rest[i]));\n      }\n      }\n      return result;\n    }
},\n  bubbleSelectors(selectors) {\n    if (!selectors) {\n      return;\n    }\n    this.rules = [new
Ruleset(utils.copyArray(selectors), [this.rules[0]]);\n    this.setParent(this.rules, this);\n  }]);\n\nexport default
Media;\n", "import Node from './node';\nimport Media from './media';\nimport URL from './url';\nimport Quoted
from './quoted';\nimport Ruleset from './ruleset';\nimport Anonymous from './anonymous';\nimport
* as utils from './utils';\nimport LessError from './less-error';\n\n/\n// CSS @import node\n/\n// The general
strategy here is that we don't want to wait\n// for the parsing to be completed, before we start importing\n// the file.
That's because in the context of a browser,\n// most of the time will be spent waiting for the server to respond.\n\n/\n//
On creation, we push the import path to our import queue, though\n// `import, push`, we also pass it a callback,
which it'll call once\n// the file has been fetched, and parsed.\n\nconst Import = function(path, features, options,
index, currentFileInfo, visibilityInfo) {\n  this.options = options;\n  this._index = index;\n  this._fileInfo =
currentFileInfo;\n  this.path = path;\n  this.features = features;\n  this.allowRoot = true;\n\n  if (this.options.less
!== undefined || this.options.inline) {\n    this.css = !this.options.less || this.options.inline;\n  } else {\n    const
pathValue = this.getPath();\n\n    if (pathValue && /[#\.\&\\?]?css(?:[\\?;].*)?$/i.test(pathValue)) {\n      this.css = true;\n    }
}\n\n  this.copyVisibilityInfo(visibilityInfo);\n  this.setParent(this.features, this);\n  this.setParent(this.path,
this);\n\n  Import.prototype = Object.assign(new Node(), {\n    type: 'Import',\n\n    accept(visitor) {\n      if
(this.features) {\n        this.features = visitor.visit(this.features);\n      }\n      this.path = visitor.visit(this.path);\n\n
      if (!this.options.isPlugin && !this.options.inline && this.root) {\n        this.root = visitor.visit(this.root);\n      }
},\n\n    genCSS(context, output) {\n      if (this.css && this.path._fileInfo.reference === undefined) {\n      output.add('@import ',
this._fileInfo, this._index);\n      this.path.genCSS(context, output);\n      if
(this.features) {\n        output.add('');\n        this.features.genCSS(context, output);\n      }
}\n      output.add(';');\n    },\n\n    getPath() {\n      return (this.path instanceof URL) ?\n      this.path.value.value : this.path.value;\n    },\n\n    isVariableImport() {\n      let path = this.path;\n      if (path
instanceof URL) {\n        path = path.value;\n      }\n      if (path instanceof Quoted) {\n        return
path.containsVariables();\n      }\n      return true;\n    },\n\n    evalForImport(context) {\n      let path =
this.path;\n\n      if (path instanceof URL) {\n        path = path.value;\n      }\n      return new
Import(path.eval(context), this.features, this.options, this._index, this._fileInfo, this.visibilityInfo);\n    },\n\n    evalPath(context) {\n      const path = this.path.eval(context);\n      const fileInfo = this._fileInfo;\n      if (!(path
instanceof URL)) {\n        // Add the rootpath if the URL requires a rewrite\n        const pathValue =
path.value;\n\n        if (fileInfo &&\n        pathValue &&\n        context.pathRequiresRewrite(pathValue)) {\n      path.value = context.rewritePath(pathValue, fileInfo.rootpath);\n        } else {\n        path.value =
context.normalizePath(path.value);\n        }\n      }\n      return path;\n    },\n\n    eval(context) {\n      const
result = this.doEval(context);\n      if (this.options.reference || this.blocksVisibility()) {\n        if (result.length ||
result.length === 0) {\n          result.forEach(function (node) {\n            node.addVisibilityBlock();\n          }
);\n        } else {\n          result.addVisibilityBlock();\n        }\n      }\n      return result;\n    },\n\n    doEval(context) {\n      let ruleset;\n      let registry;\n      const features = this.features &&
this.features.eval(context);\n\n      if (this.options.isPlugin) {\n        if (this.root &&
this.root.eval) {\n          try {\n            this.root.eval(context);\n          }\n          catch (e) {\n            e.message = 'Plugin error during evaluation';\n            throw new LessError(e, this.root.imports,
this.root.filename);\n          }\n        }\n      }\n      registry = context.frames[0] &&

```

```

context.frames[0].functionRegistry;\n      if ( registry && this.root && this.root.functions ) {\n
registry.addMultiple( this.root.functions );\n      }\n      return [];\n    }\n    if (this.skip) {\n    if\n
(typeof this.skip === 'function') {\n      this.skip = this.skip();\n    } \n    if (this.skip) {\n
return [];\n    }\n    if (this.options.inline) {\n      const contents = new Anonymous(this.root, 0,\n      {\n      filename: this.importedFilename,\n      reference:\n
this.path._fileInfo && this.path._fileInfo.reference\n      }, true, true);\n      return this.features ? new\n
Media([contents], this.features.value) : [contents];\n    } else if (this.css) {\n      const newImport = new\n
Import(this.evalPath(context), features, this.options, this._index);\n      if (!newImport.css && this.error) {\n
throw this.error;\n      }\n      return newImport;\n    } else if (this.root) {\n      ruleset = new\n
Ruleset(null, utils.copyArray(this.root.rules));\n      ruleset.evalImports(context);\n      return this.features ?\n
new Media(ruleset.rules, this.features.value) : ruleset.rules;\n    } else {\n      return [];\n    } \n\n
}\n});\n\nexport default Import;\n", "import Node from './node';\nimport Variable from './variable';\n\nconst\n
JsEvalNode = function() {\n};\n\nJsEvalNode.prototype = Object.assign(new Node(), {\n\n
evaluateJavaScript(expression, context) {\n\n
  let result;\n  const that = this;\n  const evalContext = {};\n  if (!context.javascriptEnabled) {\n
throw { message: 'Inline JavaScript is not enabled. Is it set in your options?',\n      filename:\n
this.fileInfo().filename,\n      index: this.getIndex() }; \n    }\n    expression =\n
expression.replace(/@\\{([\\w-]+)\\}/g, function (_, name) {\n      return that.jsify(new Variable(`@${name}`,\n
that.getIndex(), that.fileInfo()).eval(context));\n    });\n\n    try {\n      expression = new Function(`return\n
(${expression})`);\n    } catch (e) {\n      throw { message: `JavaScript evaluation error: ${e.message} from\n
`${expression}``,\n      filename: this.fileInfo().filename,\n      index: this.getIndex() }; \n    } \n\n
const variables = context.frames[0].variables();\n    for (const k in variables) {\n      if\n
(variables.hasOwnProperty(k)) {\n\n      /* jshint loopfunc:true */\n      evalContext[k.slice(1)] = {\n      value: variables[k].value,\n
toJS: function () {\n      return this.value.eval(context).toCSS();\n      } \n    };\n    }\n  }\n\n  try {\n    result = expression.call(evalContext);\n  } catch (e) {\n    throw {\n
message: `JavaScript evaluation error: '${e.name}: ${e.message.replace(/\\"/g, '\\\"')}`,\n      filename:\n
this.fileInfo().filename,\n      index: this.getIndex() }; \n    }\n  }\n  return result;\n },\n\n  jsify(obj) {\n
if (Array.isArray(obj.value) && (obj.value.length > 1)) {\n      return `[${obj.value.map(function (v) {\n      return\n
v.toCSS();\n    }).join(', ')}]`; \n    }\n    } else {\n      return obj.toCSS();\n    } \n  } \n\n});\n\nexport default\n
JsEvalNode;\n", "import JsEvalNode from './js-eval-node';\nimport Dimension from './dimension';\nimport\n
Quoted from './quoted';\nimport Anonymous from './anonymous';\n\nconst JavaScript = function(string, escaped,\n
index, currentFileInfo) {\n  this.escaped = escaped;\n  this.expression = string;\n  this._index = index;\n
this._fileInfo = currentFileInfo;\n}\n\nJavaScript.prototype = Object.assign(new JsEvalNode(), {\n  type:\n
'JavaScript',\n\n  eval(context) {\n    const result = this.evaluateJavaScript(this.expression, context);\n    const\n
type = typeof result;\n\n    if (type === 'number' && !isNaN(result)) {\n      return new Dimension(result);\n    }\n
} else if (type === 'string') {\n      return new Quoted(`"${result}"`, result, this.escaped, this._index);\n    }\n
} else if (Array.isArray(result)) {\n      return new Anonymous(result.join(', '));\n    } else {\n      return new\n
Anonymous(result);\n    } \n  } \n\n});\n\nexport default JavaScript;\n", "import Node from './node';\n\nconst\n
Assignment = function(key,\n\n  val) {\n  this.key = key;\n  this.value = val;\n}\n\nAssignment.prototype = Object.assign(new Node(), {\n  type:\n
'Assignment',\n\n  accept(visitor) {\n    this.value = visitor.visit(this.value);\n  },\n\n  eval(context) {\n    if\n
(this.value.eval) {\n      return new Assignment(this.key, this.value.eval(context));\n    } \n    return this;\n  },\n\n
  genCSS(context, output) {\n    output.add(`${this.key}=`);\n    if (this.value.genCSS) {\n
this.value.genCSS(context, output);\n    } else {\n      output.add(this.value);\n    } \n  } \n\n});\n\nexport\n
default Assignment;\n", "import Node from './node';\n\nconst Condition = function(op, l, r, i, negate) {\n  this.op =\n
op.trim();\n  this.lvalue = l;\n  this.rvalue = r;\n  this._index = i;\n  this.negate =\n
negate;\n}\n\nCondition.prototype = Object.assign(new Node(), {\n  type: 'Condition',\n\n  accept(visitor) {\n

```

```

this.lvalue = visitor.visit(this.lvalue);\n
    this.rvalue = visitor.visit(this.rvalue);\n  },\n\n  eval(context) {\n    const result = (function (op, a, b) {\n      switch (op) {\n        case 'and': return a && b;\n        case 'or': return a || b;\n        default:\n          switch (Node.compare(a, b)) {\n            case -1:\n              return op === '<' || op === '=<' || op === '<=';\n            case 0:\n              return op === '=' || op === '>=' || op === '<=' || op === '<=';\n            case 1:\n              return op === '>' || op === '>=';\n            default:\n              return false;\n          }\n        }\n      })(this.op, this.lvalue.eval(context), this.rvalue.eval(context));\n\n    return this.negate ? !result : result;\n  });\n\nexport default Condition;\n", "import Node from './node';\n\nconst\nUnicodeDescriptor\n= function(value) {\n  this.value = value;\n}\n\nUnicodeDescriptor.prototype = Object.assign(new Node(), {\n  type: 'UnicodeDescriptor'\n});\n\nexport default UnicodeDescriptor;\n", "import Node from './node';\n\nimport\nOperation from './operation';\n\nimport Dimension from './dimension';\n\nconst Negative = function(node) {\n  this.value = node;\n};\n\nNegative.prototype = Object.assign(new Node(), {\n  type: 'Negative',\n\n  genCSS(context, output) {\n    output.add('-');\n    this.value.genCSS(context, output);\n  },\n\n  eval(context)\n  {\n    if (context.isMathOn()) {\n      return (new Operation('*', [new Dimension(-1),\nthis.value])).eval(context);\n    }\n    return new Negative(this.value.eval(context));\n  }\n});\n\nexport default\nNegative;\n", "import Node from './node';\n\nimport Selector from './selector';\n\nconst Extend = function(selector,\noption, index, currentFileInfo, visibilityInfo) {\n  this.selector = selector;\n  this.option\n= option;\n  this.object_id = Extend.next_id++;\n  this.parent_ids = [this.object_id];\n  this._index = index;\n  this._fileInfo = currentFileInfo;\n  this.copyVisibilityInfo(visibilityInfo);\n  this.allowRoot = true;\n\n  switch\n(option) {\n    case 'all':\n      this.allowBefore = true;\n      this.allowAfter = true;\n      break;\n    default:\n      this.allowBefore = false;\n      this.allowAfter = false;\n      break;\n  }\n\n  this.setParent(this.selector, this);\n};\n\nExtend.prototype = Object.assign(new Node(), {\n  type: 'Extend',\n\n  accept(visitor) {\n    this.selector = visitor.visit(this.selector);\n  },\n\n  eval(context) {\n    return new\nExtend(this.selector.eval(context), this.option, this.getIndex(), this.fileInfo(), this.visibilityInfo());\n  },\n\n  clone(context) {\n    return new Extend(this.selector, this.option, this.getIndex(), this.fileInfo(),\nthis.visibilityInfo());\n  },\n\n  // it concatenates (joins) all selectors in selector array\n  findSelfSelectors(selectors) {\n    let selfElements =\n[], i, selectorElements;\n\n    for (i = 0; i < selectors.length; i++) {\n      selectorElements =\nselectors[i].elements;\n      // duplicate the logic in genCSS function inside the selector node. // future\n      // TODO - move both logics into the selector joiner visitor\n      if (i > 0 && selectorElements.length &&\nselectorElements[0].combinator.value === ") {\n        selectorElements[0].combinator.value = ' ';\n      }\n\n      selfElements = selfElements.concat(selectors[i].elements);\n    }\n\n    this.selfSelectors = [new\nSelector(selfElements)];\n    this.selfSelectors[0].copyVisibilityInfo(this.visibilityInfo());\n  }\n});\n\nExtend.next_id = 0;\n\nexport default Extend;\n", "import Node from './node';\n\nimport Variable from\n'./variable';\n\nimport Ruleset from './ruleset';\n\nimport DetachedRuleset\nfrom './detached-ruleset';\n\nimport LessError from './less-error';\n\nconst VariableCall = function(variable, index,\ncurrentFileInfo) {\n  this.variable = variable;\n  this._index = index;\n  this._fileInfo = currentFileInfo;\n\n  this.allowRoot = true;\n};\n\nVariableCall.prototype = Object.assign(new Node(), {\n  type: 'VariableCall',\n\n  eval(context) {\n    let rules;\n    let detachedRuleset = new Variable(this.variable, this.geIndex(),\nthis.fileInfo()).eval(context);\n    const error = new LessError({ message: `Could not evaluate variable call\n${this.variable}` });\n\n    if (!detachedRuleset.ruleset) {\n      if (detachedRuleset.rules) {\n        rules =\ndetachedRuleset;\n      }\n      else if (Array.isArray(detachedRuleset)) {\n        rules = new Ruleset(",\ndetachedRuleset);\n      }\n      else if (Array.isArray(detachedRuleset.value)) {\n        rules = new\nRuleset(", detachedRuleset.value);\n      }\n      else {\n        throw error;\n      }\n      detachedRuleset = new\nDetachedRuleset(rules);\n    }\n\n    if (detachedRuleset.ruleset) {\n      return\ndetachedRuleset.callEval(context);\n    }\n\n    throw error;\n  }\n});\n\nexport default VariableCall;\n", "import

```



```

Node from './node';\nimport Variable from './variable';\nimport Ruleset from './ruleset';\nimport Selector from
 './selector';\n\nconst NamespaceValue = function(ruleCall, lookups, index, fileInfo) {\n  this.value = ruleCall;\n
  this.lookups = lookups;\n  this._index = index;\n  this._fileInfo = fileInfo;\n};\n\nNamespaceValue.prototype =
 Object.assign(new Node(), {\n  type: 'NamespaceValue',\n\n  eval(context) {\n    let i, j, name, rules =
  this.value.eval(context);\n    \n    for (i = 0; i < this.lookups.length; i++) {\n      name = this.lookups[i];\n\n
    /**\n      * Eval'd DRs return rulesets.\n\n      * Eval'd mixins return rules, so let's make a ruleset if we need it.\n      * We need to do this because of late
    parsing of values\n      */\n    if (Array.isArray(rules)) {\n      rules = new Ruleset([new Selector()],
    rules);\n    }\n\n    if (name === '') {\n      rules = rules.lastDeclaration();\n    }\n\n    else if
    (name.charAt(0) === '@') {\n      if (name.charAt(1) === '@') {\n        name = `@${new
    Variable(name.substr(1)).eval(context).value}`;\n      }\n\n      if (rules.variables) {\n        rules =
    rules.variable(name);\n      }\n\n      \n      if (!rules) {\n        throw { type: 'Name',\n
        message: `variable ${name} not found`,\n        filename: this.fileInfo().filename,\n
        index: this.getIndex() }; \n      }\n    }\n\n    else\n    {\n      if (name.substring(0, 2) === '$@') {\n        name = `$$${new
    Variable(name.substr(1)).eval(context).value}`;\n      }\n\n      else {\n        name = name.charAt(0)
    === '$' ? name : `$$${name}`;\n      }\n\n      if (rules.properties) {\n        rules =
    rules.property(name);\n      }\n\n      \n      if (!rules) {\n        throw { type: 'Name',\n
        message: `property \"${name.substr(1)}\" not found`,\n        filename: this.fileInfo().filename,\n
        index: this.getIndex() }; \n      }\n      // Properties are an array of values, since a ruleset can have
    multiple props.\n      // We pick the last one (the \"cascaded\" value)\n      rules = rules[rules.length -
    1];\n    }\n\n    if (rules.value) {\n      rules = rules.eval(context).value;\n    }\n\n    if (rules.ruleset) {\n      rules = rules.ruleset.eval(context);\n    }\n\n    }\n\n    return
    rules;\n  }\n});\n\nexport default NamespaceValue;\n\n\", \"import Selector from './selector';\nimport Element from
 './element';\nimport Ruleset from './ruleset';\nimport Declaration from './declaration';\nimport DetachedRuleset from
 './detached-ruleset';\nimport Expression from './expression';\nimport contexts from './contexts';\nimport * as utils
    from './utils';\n\nconst Definition = function(name, params, rules, condition, variadic, frames, visibilityInfo) {\n
  this.name = name || 'anonymous mixin';\n  this.selectors = [new Selector([new Element(null, name, false,
  this._index, this._fileInfo)])];\n  this.params = params;\n  this.condition = condition;\n  this.variadic = variadic;\n
  this.arity = params.length;\n  this.rules = rules;\n  this._lookups = {};\n  const optionalParameters = [];\n
  this.required = params.reduce(function
  (count, p) {\n    if (!p.name || (p.name && !p.value)) {\n      return count + 1;\n    }\n    else {\n
    optionalParameters.push(p.name);\n    return count;\n    }\n  }, 0);\n  this.optionalParameters =
  optionalParameters;\n  this.frames = frames;\n  this.copyVisibilityInfo(visibilityInfo);\n  this.allowRoot =
  true;\n};\n\nDefinition.prototype = Object.assign(new Ruleset(), {\n  type: 'MixinDefinition',\n  evalFirst: true,\n\n
  accept(visitor) {\n    if (this.params && this.params.length) {\n      this.params =
    visitor.visitArray(this.params);\n    }\n\n    this.rules = visitor.visitArray(this.rules);\n    if (this.condition) {\n
    this.condition = visitor.visit(this.condition);\n    }\n  },\n\n  evalParams(context, mixinEnv, args,
  evaldArguments) {\n    /* jshint boss:true */\n    const frame = new Ruleset(null, null);\n\n    let varargs;\n
    let arg;\n    const params
    = utils.copyArray(this.params);\n    let i;\n    let j;\n    let val;\n    let name;\n    let isNamedFound;\n
    let argIndex;\n    let argsLength = 0;\n\n    if (mixinEnv.frames && mixinEnv.frames[0] &&
    mixinEnv.frames[0].functionRegistry) {\n      frame.functionRegistry =
    mixinEnv.frames[0].functionRegistry.inherit();\n    }\n\n    mixinEnv = new contexts.Eval(mixinEnv,
    [frame].concat(mixinEnv.frames));\n\n    if (args) {\n      args = utils.copyArray(args);\n      argsLength =
    args.length;\n\n      for (i = 0; i < argsLength; i++) {\n        arg = args[i];\n        if (name = (arg &&
    arg.name)) {\n          isNamedFound = false;\n          for (j = 0; j < params.length; j++) {\n
          if (!evaldArguments[j] && name === params[j].name) {\n            evaldArguments[j] =

```



```

important) {\n  this.selector = new Selector(elements);\n  this.arguments = args || [];\n  this._index = index;\n  this._fileInfo = currentFileInfo;\n  this.important = important;\n  this.allowRoot = true;\n  this.setParent(this.selector,\n    this);\n};\n\nMixinCall.prototype = Object.assign(new Node(), {\n  type: 'MixinCall',\n  accept(visitor) {\n    if (this.selector) {\n      this.selector = visitor.visit(this.selector);\n    }\n    if (this.arguments.length) {\n      this.arguments = visitor.visitArray(this.arguments);\n    }\n  },\n  eval(context) {\n    let mixins;\n    let\n    mixin;\n    let mixinPath;\n    const args = [];\n    let arg;\n    let argValue;\n    const rules = [];\n    let\n    match = false;\n    let i;\n    let m;\n    let f;\n    let isRecursive;\n    let isOneFound;\n    const\n    candidates = [];\n    let candidate;\n    const conditionResult = [];\n    let defaultResult;\n    const\n    defFalseEitherCase = -1;\n    const defNone = 0;\n    const defTrue = 1;\n    const defFalse = 2;\n    let\n    count;\n    let originalRuleset;\n    let noArgumentsFilter;\n\n    this.selector\n    = this.selector.eval(context);\n\n    function calcDefGroup(mixin, mixinPath) {\n      let f, p, namespace;\n\n      for (f = 0; f < 2; f++) {\n        conditionResult[f] = true;\n        defaultFunc.value(f);\n        for (p\n        = 0; p < mixinPath.length && conditionResult[f]; p++) {\n          namespace = mixinPath[p];\n          if\n          (namespace.matchCondition) {\n            conditionResult[f] = conditionResult[f] &&\n            namespace.matchCondition(null, context);\n          }\n          }\n          if (mixin.matchCondition) {\n            conditionResult[f] = conditionResult[f] && mixin.matchCondition(args, context);\n          }\n        }\n      }\n      if (conditionResult[0] || conditionResult[1]) {\n        if (conditionResult[0] != conditionResult[1]) {\n          return conditionResult[1] ?\n            defTrue : defFalse;\n        }\n        return defNone;\n      }\n      return defFalseEitherCase;\n    }\n\n    for (i = 0; i <\n    this.arguments.length; i++) {\n      arg = this.arguments[i];\n      argValue = arg.value.eval(context);\n      if (arg.expand && Array.isArray(argValue.value)) {\n        argValue = argValue.value;\n        for (m = 0;\n        m < argValue.length; m++) {\n          args.push({ value: argValue[m]});\n        }\n      } else {\n        args.push({ name: arg.name, value: argValue});\n      }\n    }\n\n    noArgumentsFilter = function(rule)\n    {\n      return rule.matchArgs(null, context);\n    }\n\n    for (i = 0; i < context.frames.length; i++) {\n      if ((mixins =\n      context.frames[i].find(this.selector, null, noArgumentsFilter)).length > 0) {\n        isOneFound = true;\n\n        // To make `default()` function independent of definition order we have two \"subpasses\" here.\n        // At first we evaluate each guard *twice* (with `default() == true` and `default() == false`),\n        // and\n        build candidate list with corresponding flags. Then, when we know all possible matches,\n        // we make a\n        final decision.\n\n        for (m = 0; m < mixins.length; m++) {\n          mixin = mixins[m].rule;\n          mixinPath = mixins[m].path;\n          isRecursive = false;\n          for (f = 0; f < context.frames.length;\n          f++) {\n            if (!((mixin instanceof MixinDefinition)) && mixin === (context.frames[f].originalRuleset ||\n            context.frames[f])) {\n              isRecursive = true;\n              break;\n            }\n          }\n          }\n          if (isRecursive) {\n            continue;\n          }\n          if\n          (mixin.matchArgs(args, context)) {\n            candidate = { mixin, group:\n            calcDefGroup(mixin, mixinPath)};\n            if (candidate.group !== defFalseEitherCase) {\n              candidates.push(candidate);\n            }\n            match = true;\n          }\n        }\n        defaultFunc.reset();\n        count = [0, 0, 0];\n        for (m = 0; m < candidates.length; m++) {\n          count[candidates[m].group]++;\n        }\n        if (count[defNone] > 0) {\n          defaultResult = defFalse;\n        } else {\n          defaultResult = defTrue;\n          if\n          ((count[defTrue] + count[defFalse]) > 1) {\n            throw { type: 'Runtime',\n            message:\n            `Ambiguous use of \\`default()\\` found when matching for \\`${this.format(args)}\\``,\n            index:\n            this.getIndex(), filename: this.fileInfo().filename };\n          }\n        }\n      }\n      for (m = 0; m < candidates.length; m++) {\n        candidate =\n        candidates[m].group;\n        if ((candidate === defNone) || (candidate === defaultResult)) {\n          try {\n            mixin = candidates[m].mixin;\n            if (!(mixin instanceof MixinDefinition))\n            {\n              originalRuleset = mixin.originalRuleset || mixin;\n              mixin = new\n              MixinDefinition("", [], mixin.rules, null, false, null, originalRuleset.visibilityInfo());\n            }\n          }\n        }\n      }\n    }\n  }\n});

```

```

mixin.originalRuleset = originalRuleset;\n
mixin.evalCall(context, args, this.important).rules;\n
this._setVisibilityToReplacement(newRules);\n
    } catch (e) {\n
        throw { message: e.message, index: this.getIndex(), filename: this.fileInfo().filename, stack: e.stack
};\n
    }\n
    }\n
    }\n\n
    if (match) {\n
        return rules;\n
    }\n
    }\n
    if (isOneFound) {\n
        throw { type: 'Runtime',\n
            message: `No matching
definition was found for \\`${this.format(args)}\\``,\n
            index: this.getIndex(), filename:
this.fileInfo().filename };\n
    } else {\n
        throw { type: 'Name',\n
            message:
`${this.selector.toCSS().trim()} is undefined`,\n
            index: this.getIndex(), filename: this.fileInfo().filename
};\n
    }\n
    },\n\n
    _setVisibilityToReplacement(replacement) {\n
        let i, rule;\n
        if (this.blocksVisibility())\n
        {\n
            for (i = 0; i < replacement.length; i++) {\n
                rule = replacement[i];\n
                rule.setVisibilityBlock();\n
            }\n
        },\n\n
        format(args) {\n
            return
`${this.selector.toCSS().trim()}(${args ? args.map(function (a) {\n
                let argValue = ";\n
                if (a.name) {\n
                    argValue += `${a.name}`;\n
                }\n
                if (a.value.toCSS) {\n
                    argValue +=
a.value.toCSS();\n
                } else {\n
                    argValue += '??';\n
                }\n
                return argValue;\n
            }).join(',
') : '')}`;\n
        }\n
    });\n\n
    export default MixinCall;\n\n
    , "import Node from './node';\n
    import Color from './color';\n
    import AtRule from './atrule';\n
    import DetachedRuleset from './detached-ruleset';\n
    import Operation from './operation';\n
    import Dimension from './dimension';\n
    import Unit from './unit';\n
    import Keyword from './keyword';\n
    import Variable from './variable';\n
    import Property from './property';\n
    import Ruleset from './ruleset';\n
    import Element from './element';\n
    import Attribute from './attribute';\n
    import Combinator from './combinator';\n
    import Selector from './selector';\n
    import Quoted from './quoted';\n
    import Expression from './expression';\n
    import Declaration from './declaration';\n
    import Call from './call';\n
    import URL from './url';\n
    import Import from './import';\n
    import Comment from './comment';\n
    import Anonymous from './anonymous';\n
    import Value from './value';\n
    import JavaScript from './javascript';\n
    import Assignment from './assignment';\n
    import Condition from './condition';\n
    import Paren from './paren';\n
    import Media from './media';\n
    import UnicodeDescriptor from './unicode-descriptor';\n
    import Negative from './negative';\n
    import Extend from './extend';\n
    import VariableCall from './variable-call';\n
    import NamespaceValue from './namespace-value';\n\n
    // mixins\n
    import MixinCall from './mixin-call';\n
    import MixinDefinition from './mixin-definition';\n\n
    export default {\n
        Node, Color, AtRule, DetachedRuleset, Operation,\n
        Dimension, Unit, Keyword, Variable, Property,\n
        Ruleset, Element, Attribute, Combinator, Selector,\n
        Quoted, Expression, Declaration, Call, URL, Import,\n
        Comment, Anonymous, Value, JavaScript, Assignment,\n
        Condition, Paren, Media, UnicodeDescriptor, Negative,\n
        Extend, VariableCall, NamespaceValue,\n
        mixin: {\n
            Call: MixinCall,\n
            Definition: MixinDefinition\n
        }\n
    };", "class AbstractFileManager {\n
    getPath(filename) {\n
        let j = filename.lastIndexOf('?');\n
        if (j > 0) {\n
            filename = filename.slice(0, j);\n
        }\n
        j = filename.lastIndexOf('/');\n
        if (j < 0) {\n
            j = filename.lastIndexOf("\\\\");\n
        }\n
        if (j < 0) {\n
            return ";\n
        }\n
        return filename.slice(0, j + 1);\n
    }\n\n
    tryAppendExtension(path, ext) {\n
        return /([a-z]*$)([\\?;]*.*)/.test(path) ? path : path + ext;\n
    }\n\n
    tryAppendLessExtension(path) {\n
        return this.tryAppendExtension(path, 'less');\n
    }\n\n
    supportsSync()\n
    {\n
        return false;\n
    }\n\n
    alwaysMakePathsAbsolute() {\n
        return false;\n
    }\n\n
    isPathAbsolute(filename) {\n
        return (/^(?:[a-z]+:|\\\\\\\\|\\#|/i).test(filename);\n
    }\n\n
    // TODO: pull out / replace?\n
    join(basePath, laterPath) {\n
        if (!basePath) {\n
            return laterPath;\n
        }\n
        return basePath + laterPath;\n
    }\n\n
    pathDiff(url, baseUrl) {\n
        // diff between two paths to create a relative path\n\n
        const urlParts = this.extractUrlParts(url);\n\n
        const baseUrlParts = this.extractUrlParts(baseUrl);\n
        let i;\n
        let max;\n
        let urlDirectories;\n
        let baseUrlDirectories;\n
        let diff = ";\n
        if (urlParts.hostPart !== baseUrlParts.hostPart) {\n
            return ";\n
        }\n
        max = Math.max(baseUrlParts.directories.length, urlParts.directories.length);\n
        for (i = 0; i < max; i++) {\n
            if (baseUrlParts.directories[i] !==

```

```

urlParts.directories[i])
  { break; }\n    }\n    baseUrlDirectories = baseUrlParts.directories.slice(i);\n    urlDirectories =
urlParts.directories.slice(i);\n    for (i = 0; i < baseUrlDirectories.length - 1; i++) {\n      diff += './';\n    }\n    for (i = 0; i < urlDirectories.length - 1; i++) {\n      diff += `${urlDirectories[i]}`;\n    }\n    return diff;\n  }\n  // helper function, not part of API\n  extractUrlParts(url, baseUrl) {\n    // urlParts[1] =
protocol://hostname/ OR /\n    // urlParts[2] = / if path relative to host base\n    // urlParts[3] = directories\n// urlParts[4] = filename\n// urlParts[5] = parameters\n    const urlPartsRegex = /^(?:[a-z-
]+)?\v{2}(?:[^\v{2}#*\v{2})|(\v{2})?(?:[^\v{2}#*\v{2})*(\v{2})?$/i;\n    const urlParts =
url.match(urlPartsRegex);\n    const returner = {};\n    let rawDirectories = [];\n    const directories
= [];\n    let i;\n    let baseUrlParts;\n    if (!urlParts) {\n      throw new Error(`Could not parse sheet
href - '${url}'`);\n    }\n    // Stylesheets in IE don't always return the full path\n    if (baseUrl &&
(!urlParts[1] || urlParts[2])) {\n      baseUrlParts = baseUrl.match(urlPartsRegex);\n      if (!baseUrlParts) {\n
throw new Error(`Could not parse page url - '${baseUrl}'`);\n      }\n      urlParts[1] = urlParts[1] ||
baseUrlParts[1] || ";\n      if (!urlParts[2]) {\n        urlParts[3] = baseUrlParts[3] + urlParts[3];\n      }\n
}\n    if (urlParts[3]) {\n      rawDirectories = urlParts[3].replace(/\\v{2}g, '/').split('/');\n      // collapse '.'
and skip '.'\n      for (i = 0; i < rawDirectories.length; i++) {\n        if (rawDirectories[i] === '..') {\n
directories.pop();\n        }\n        else
if (rawDirectories[i] !== '.') {\n          directories.push(rawDirectories[i]);\n        }\n      }\n
}\n    returner.hostPart = urlParts[1];\n    returner.directories = directories;\n    returner.rawPath =
(urlParts[1] || "") + rawDirectories.join('/');\n    returner.path = (urlParts[1] || "") + directories.join('/');\n
returner.filename = urlParts[4];\n    returner.fileUrl = returner.path + (urlParts[4] || ");\n    returner.url =
returner.fileUrl + (urlParts[5] || ");\n    return returner;\n  }\n}\n\nexport default AbstractFileManager;\n", "import
functionRegistry from './functions/function-registry';\nimport LessError from './less-error';\n\nclass
AbstractPluginLoader {\n  constructor() {\n    // Implemented by Node.js plugin loader\n    this.require =
function() {\n      return null;\n    }\n  }\n  evalPlugin(contents, context, imports, pluginOptions, fileInfo)
{\n\n    let loader, registry, pluginObj, localModule, pluginManager, filename, result;\n    pluginManager =
context.pluginManager;\n    if (fileInfo) {\n      if (typeof fileInfo === 'string') {\n        filename =
fileInfo;\n      }\n      else {\n        filename = fileInfo.filename;\n      }\n    }\n    const shortname
= (new this.less.FileManager()).extractUrlParts(filename).filename;\n    if (filename) {\n      pluginObj =
pluginManager.get(filename);\n      if (pluginObj) {\n        result = this.trySetOptions(pluginObj,
filename, shortname, pluginOptions);\n        if (result) {\n          return result;\n        }\n      }\n      try
{\n        if (pluginObj.use) {\n          pluginObj.use.call(this.context, pluginObj);\n        }\n      }\n      catch (e) {\n        e.message = e.message || 'Error
during @plugin call';\n        return new LessError(e, imports, filename);\n      }\n      return
pluginObj;\n    }\n    }\n    localModule = {\n      exports: {},\n      pluginManager,\n      fileInfo,\n    };\n    registry = functionRegistry.create();\n    const registerPlugin = function(obj) {\n
pluginObj = obj;\n    };\n    try {\n      loader = new Function('module', 'require', 'registerPlugin',
'functions', 'tree', 'less', 'fileInfo', contents);\n      loader(localModule, this.require(filename), registerPlugin,
registry, this.less.tree, this.less, fileInfo);\n    }\n    catch (e) {\n      return new LessError(e, imports,
filename);\n    }\n    if (!pluginObj) {\n      pluginObj = localModule.exports;\n    }\n    pluginObj =
this.validatePlugin(pluginObj, filename, shortname);\n    if (pluginObj instanceof LessError) {\n
return pluginObj;\n    }\n    if (pluginObj) {\n      pluginObj.imports = imports;\n      pluginObj.filename = filename;\n      // For < 3.x (or unspecified minVersion) - setOptions() before install()\n
if (!pluginObj.minVersion || this.compareVersion('3.0.0', pluginObj.minVersion) < 0) {\n        result =
this.trySetOptions(pluginObj, filename, shortname, pluginOptions);\n        if (result) {\n          return
result;\n        }\n      }\n    }\n    // Run on first load\n    pluginManager.addPlugin(pluginObj,
fileInfo.filename, registry);\n    pluginObj.functions = registry.getLocalFunctions();\n    // Need to call

```

```

setOptions again because the pluginObj might have functions\n      result = this.trySetOptions(pluginObj,\nfilename, shortname, pluginOptions);\n      if (result) {\n      return result;\n      }\n\n // Run\n every @plugin\n call\n      try {\n      if (pluginObj.use) {\n      pluginObj.use.call(this.context, pluginObj);\n      }\n      }\n      catch (e) {\n      e.message = e.message || 'Error during @plugin call';\n      return\n new LessError(e, imports, filename);\n      }\n      else {\n      return new LessError({ message:\n 'Not a valid plugin' }, imports, filename);\n      }\n      return pluginObj;\n      }\n      trySetOptions(plugin,\nfilename, name, options) {\n      if (options && !plugin.setOptions) {\n      return new LessError({\nmessage: `Options have been provided but the plugin ${name} does not support any options.`\n      });\n      }\n      }\n      try {\n      plugin.setOptions && plugin.setOptions(options);\n      }\n      catch (e) {\n      return new\nLessError(e);\n      }\n      }\n      validatePlugin(plugin, filename, name) {\n      if\n(plugin) {\n      // support plugins being a function\n      // so that the plugin can be more usable\nprogrammatically\n      if (typeof plugin === 'function') {\n      plugin = new plugin();\n      }\n      }\n      if (plugin.minVersion) {\n      if (this.compareVersion(plugin.minVersion, this.less.version) < 0) {\n      return new LessError({\n      message: `Plugin ${name} requires version\n${this.versionToString(plugin.minVersion)}`\n      });\n      }\n      }\n      return plugin;\n      }\n      return null;\n      }\n      compareVersion(aVersion, bVersion) {\n      if (typeof aVersion === 'string') {\n      aVersion = aVersion.match(/^(\\d+)?\\.?(\\d+)?\\.?(\\d+)?/);\n      aVersion.shift();\n      }\n      for (let i = 0; i\n< aVersion.length; i++) {\n      if (aVersion[i] !== bVersion[i]) {\n      return parseInt(aVersion[i]) >\nparseInt(bVersion[i])\n      ? -1 : 1;\n      }\n      }\n      return 0;\n      }\n      versionToString(version) {\n      let versionString = '';\n      for (let i = 0; i < version.length; i++) {\n      versionString += (versionString ? '.' : '') + version[i];\n      }\n      return versionString;\n      }\n      printUsage(plugings) {\n      for (let i = 0; i < plugings.length; i++) {\n      const\nplugin = plugings[i];\n      if (plugin.printUsage) {\n      plugin.printUsage();\n      }\n      }\n      }\n      }\n      }\n      export default AbstractPluginLoader;\n      }\n      import tree from './tree';\n      }\n      const _visitArgs = { visitDeeper:\ntrue };\n      let _hasIndexed = false;\n      }\n      function _noop(node) {\n      return node;\n      }\n      }\n      }\n      function\nindexNodeTypes(parent, ticker) {\n      // add .typeIndex to tree node types for lookup table\n      let key, child;\n      for\n(key in parent) {\n      /* eslint guard-for-in: 0 */\n      child = parent[key];\n      switch (typeof child) {\n      case 'function':\n      // ignore bound functions directly on tree which do not have a prototype\n// or aren't nodes\n      if (child.prototype && child.prototype.type) {\n      child.prototype.typeIndex\n= ticker++;\n      }\n      break;\n      case 'object':\n      ticker = indexNodeTypes(child,\nticker);\n      break;\n      }\n      }\n      return ticker;\n      }\n      }\n      }\n      class Visitor {\n      constructor(implementation) {\n      this._implementation = implementation;\n      this._visitInCache = {};\n      this._visitOutCache = {};\n      if (!_hasIndexed) {\n      indexNodeTypes(tree, 1);\n      _hasIndexed =\ntrue;\n      }\n      }\n      visit(node) {\n      if (!node) {\n      return node;\n      }\n      }\n      }\n      }\n      const nodeTypeIndex\n= node.typeIndex;\n      if (!nodeTypeIndex) {\n      // MixinCall args aren't a node type?\n      if (node.value\n&& node.value.typeIndex) {\n      this.visit(node.value);\n      }\n      return node;\n      }\n      }\n      }\n      const impl = this._implementation;\n      let func = this._visitInCache[nodeTypeIndex];\n      let funcOut =\nthis._visitOutCache[nodeTypeIndex];\n      const visitArgs = _visitArgs;\n      let fnName;\n      visitArgs.visitDeeper = true;\n      if (!func) {\n      fnName = `visit${node.type}`;\n      func =\nimpl[fnName] || _noop;\n      funcOut = impl[`_${fnName}Out`] || _noop;\n      }\n      this._visitInCache[nodeTypeIndex] = func;\n      this._visitOutCache[nodeTypeIndex] = funcOut;\n      }\n      }\n      if (func !== _noop) {\n      const newNode = func.call(impl, node, visitArgs);\n      if (node &&\nimpl.isReplacing) {\n      node = newNode;\n      }\n      }\n      }\n      if (visitArgs.visitDeeper && node) {\n      if (node.length) {\n      for (let i = 0, cnt =\nnode.length; i < cnt; i++) {\n      if (node[i].accept) {\n      node[i].accept(this);\n      }\n      }\n      }\n      }\n      }\n      else if (node.accept) {\n      node.accept(this);\n      }\n      }\n      }\n      }\n      }\n      if (funcOut !==\n_noop) {\n      funcOut.call(impl, node);\n      }\n      }\n      }\n      return node;\n      }\n      }\n      }\n      visitArray(nodes,\n
```

```

nonReplacing) {\n    if (!nodes) {\n        return nodes;\n    }\n    const cnt = nodes.length;\n    let i;\n    // Non-replacing\n    if (nonReplacing || !this._implementation.isReplacing) {\n        for (i = 0; i < cnt; i++)\n        {\n            this.visit(nodes[i]);\n        }\n        return nodes;\n    }\n    // Replacing\n    const out = [];\n    for (i = 0; i < cnt; i++) {\n        const evald = this.visit(nodes[i]);\n        if (evald === undefined) {\n            continue;\n        }\n        if (!evald.splice) {\n            out.push(evald);\n        }\n        } else if (evald.length) {\n            this.flatten(evald, out);\n        }\n    }\n    return out;\n}\n\nflatten(arr, out) {\n    if (!out) {\n        out = [];\n    }\n    let cnt, i, item, nestedCnt, j, nestedItem;\n    for (i = 0, cnt = arr.length; i < cnt; i++) {\n        item = arr[i];\n        if (item === undefined) {\n            continue;\n        }\n        if (!item.splice) {\n            out.push(item);\n            continue;\n        }\n        for (j = 0, nestedCnt = item.length; j < nestedCnt; j++) {\n            nestedItem = item[j];\n            if (nestedItem === undefined) {\n                continue;\n            }\n            if (!nestedItem.splice) {\n                out.push(nestedItem);\n            }\n            } else if (nestedItem.length) {\n                this.flatten(nestedItem, out);\n            }\n        }\n    }\n    return out;\n}\n\n\nexport default Visitor;\n", "class ImportSequencer {\n    constructor(onSequencerEmpty) {\n        this.imports = [];\n        this.variableImports = [];\n        this._onSequencerEmpty = onSequencerEmpty;\n        this._currentDepth = 0;\n    }\n    addImport(callback) {\n        const importSequencer = this,\n            importItem = {\n                callback,\n                args: null,\n                isReady: false\n            };\n        this.imports.push(importItem);\n        return function() {\n            importItem.args =\n                Array.prototype.slice.call(arguments, 0);\n            importItem.isReady = true;\n            importSequencer.tryRun();\n        };\n    }\n    addVariableImport(callback) {\n        this.variableImports.push(callback);\n    }\n    tryRun() {\n        this._currentDepth++;\n        try {\n            while (true) {\n                while (this.imports.length > 0) {\n                    const importItem =\n                        this.imports[0];\n                    if (!importItem.isReady) {\n                        return;\n                    }\n                    this.imports = this.imports.slice(1);\n                    importItem.callback.apply(null, importItem.args);\n                }\n                if (this.variableImports.length === 0) {\n                    break;\n                }\n                const variableImport =\n                    this.variableImports[0];\n                this.variableImports = this.variableImports.slice(1);\n                variableImport();\n            }\n        } finally {\n            this._currentDepth--;\n        }\n        if (this._currentDepth === 0 && this._onSequencerEmpty) {\n            this._onSequencerEmpty();\n        }\n    }\n}\n\nexport default\n    ImportSequencer;\n", "import contexts from './contexts';\nimport Visitor from './visitor';\nimport ImportSequencer\n    from './import-sequencer';\nimport * as utils from './utils';\n\nconst ImportVisitor = function(importer, finish)\n    {\n        this._visitor = new Visitor(this);\n        this._importer = importer;\n        this._finish = finish;\n        this.context =\n            new contexts.Eval();\n        this.importCount = 0;\n        this.onceFileDetectionMap = {};\n        this.recursionDetector =\n            {};\n        this._sequencer = new\n            ImportSequencer(this._onSequencerEmpty.bind(this));\n    }\n\nImportVisitor.prototype = {\n    isReplacing: false,\n    run: function (root) {\n        try {\n            // process the contents\n            this._visitor.visit(root);\n        }\n        catch (e) {\n            this.error = e;\n        }\n        this.isFinished = true;\n        this._sequencer.tryRun();\n    },\n    _onSequencerEmpty: function() {\n        if (!this.isFinished) {\n            return;\n        }\n        this._finish(this.error);\n    },\n    visitImport: function (importNode, visitArgs) {\n        const inlineCSS =\n            importNode.options.inline;\n        if (!importNode.css || inlineCSS) {\n            const context = new\n                contexts.Eval(this.context,\n                    utils.copyArray(this.context.frames));\n            const importParent = context.frames[0];\n            this.importCount++;\n            if (importNode.isVariableImport()) {\n                this._sequencer.addVariableImport(this.processImportNode.bind(this, importNode, context, importParent));\n            }\n        } else {\n            this.processImportNode(importNode, context, importParent);\n        }\n    },\n    visitArgs.visitDeeper = false,\n    },\n    processImportNode: function(importNode, context, importParent) {\n        let evaldImportNode;\n        const inlineCSS = importNode.options.inline;\n        try {\n            evaldImportNode =\n                importNode.evalForImport(context);\n        } catch (e) {\n            if (!e.filename) {\n                e.index = importNode.getIndex();\n                e.filename = importNode.fileInfo().filename;\n            }\n            // attempt to eval properly and treat as css\n
```

```

importNode.css = true;\n      // if that fails, this error will
be thrown\n      importNode.error = e;\n    }\n    if (evaldImportNode && (!evaldImportNode.css ||
inlineCSS)) {\n      if (evaldImportNode.options.multiple) {\n        context.importMultiple = true;\n      }\n      // try appending if we haven't determined if it is css or not\n      const tryAppendLessExtension =
evaldImportNode.css === undefined;\n      for (let i = 0; i < importParent.rules.length; i++) {\n        if
(importParent.rules[i] === importNode) {\n          importParent.rules[i] = evaldImportNode;\n          break;\n        }\n      }\n      const onImported = this.onImported.bind(this, evaldImportNode, context),
sequencedOnImported = this._sequencer.addImport(onImported);\n      this._importer.push(evaldImportNode.getPath(), tryAppendLessExtension, evaldImportNode.fileInfo(),\n      evaldImportNode.options, sequencedOnImported);\n    } else
{\n      this.importCount--;\n      if (this.isFinished) {\n        this._sequencer.tryRun();\n      }\n    },\n    onImported: function (importNode, context, e, root, importedAtRoot, fullPath) {\n      if (e) {\n        if (!e.filename) {\n          e.index = importNode.getIndex(); e.filename = importNode.fileInfo().filename;\n        }\n        this.error = e;\n      }\n      const importVisitor = this,\n        inlineCSS =
importNode.options.inline,\n        isPlugin = importNode.options.isPlugin,\n        isOptional =
importNode.options.optional,\n        duplicateImport = importedAtRoot || fullPath in
importVisitor.recursionDetector;\n      if (!context.importMultiple) {\n        if (duplicateImport) {\n          importNode.skip = true;\n        } else {\n          importNode.skip = function() {\n            if (fullPath in
importVisitor.onceFileDetectionMap) {\n              return true;\n            }\n            importVisitor.onceFileDetectionMap[fullPath] = true;\n            return false;\n          };\n        }\n      }\n      if (!fullPath && isOptional) {\n        importNode.skip =
true;\n      }\n      if (root) {\n        importNode.root = root;\n        importNode.importedFilename =
fullPath;\n      }\n      if (!inlineCSS && !isPlugin && (context.importMultiple || !duplicateImport)) {\n        importVisitor.recursionDetector[fullPath] = true;\n      }\n      const oldContext = this.context;\n      this.context = context;\n      try {\n        this._visitor.visit(root);\n      } catch (e) {\n        this.error = e;\n      }\n      this.context = oldContext;\n    },\n    }\n  },\n  visitDeclaration: function (declNode, visitArgs) {\n    if (declNode.value.type ===
'DetachedRuleset') {\n      this.context.frames.unshift(declNode);\n    } else {\n      visitArgs.visitDeeper =
false;\n    }\n  },\n  visitDeclarationOut: function (declNode) {\n    if (declNode.value.type ===
'DetachedRuleset') {\n      this.context.frames.shift();\n    }\n  },\n  visitAtRule: function (atRuleNode,
visitArgs) {\n    this.context.frames.unshift(atRuleNode);\n  },\n  visitAtRuleOut: function (atRuleNode) {\n    this.context.frames.shift();\n  },\n  visitMixinDefinition: function (mixinDefinitionNode, visitArgs) {\n    this.context.frames.unshift(mixinDefinitionNode);\n  },\n  visitMixinDefinitionOut: function
(mixinDefinitionNode) {\n    this.context.frames.shift();\n  },\n  visitRuleset: function (rulesetNode, visitArgs)
{\n    this.context.frames.unshift(rulesetNode);\n  },\n  visitRulesetOut: function (rulesetNode) {\n    this.context.frames.shift();\n  },\n  visitMedia: function
(mediaNode, visitArgs) {\n    this.context.frames.unshift(mediaNode.rules[0]);\n  },\n  visitMediaOut: function
(mediaNode) {\n    this.context.frames.shift();\n  }\n};\n\nexport default ImportVisitor;\n","class
SetTreeVisibilityVisitor {\n  constructor(visible) {\n    this.visible = visible;\n  }\n  run(root) {\n    this.visit(root);\n  }\n  visitArray(nodes) {\n    if (!nodes) {\n      return nodes;\n    }\n    const cnt =
nodes.length;\n    let i;\n    for (i = 0; i < cnt; i++) {\n      this.visit(nodes[i]);\n    }\n    return nodes;\n  }\n  visit(node) {\n    if (!node) {\n      return node;\n    }\n    if (node.constructor === Array) {\n      return this.visitArray(node);\n    }\n    if (!node.blocksVisibility || node.blocksVisibility())
{\n      return node;\n    }\n    if (this.visible) {\n      node.ensureVisibility();\n    } else {\n      node.ensureInvisibility();\n    }\n    node.accept(this);\n    return node;\n  }\n}\n\nexport default
SetTreeVisibilityVisitor;","import tree from './tree';\nimport Visitor from './visitor';\nimport logger from
'./logger';\nimport * as utils from './utils';\n\n/* jshint loopfunc:true */\n\nclass ExtendFinderVisitor {\n

```



```

constructor() {\n    this._visitor = new Visitor(this);\n    this.contexts = [];\n    this.allExtendsStack = [[]];\n}\n\nrun(root) {\n    root = this._visitor.visit(root);\n    root.allExtends = this.allExtendsStack[0];\n    return root;\n}\n\nvisitDeclaration(declNode, visitArgs) {\n    visitArgs.visitDeeper = false;\n}\n\nvisitMixinDefinition(mixinDefinitionNode, visitArgs) {\n    visitArgs.visitDeeper = false;\n}\n\nvisitRuleset(rulesetNode,\n    visitArgs) {\n    if (rulesetNode.root) {\n        return;\n    }\n    let i;\n    let j;\n    let extend;\n    const allSelectorsExtendList = [];\n    let extendList;\n    // get &:extend(.a); rules which apply to all selectors\n    in this ruleset\n    const rules = rulesetNode.rules, ruleCnt = rules ? rules.length : 0;\n    for (i = 0; i < ruleCnt;\n    i++) {\n        if (rulesetNode.rules[i] instanceof tree.Extend) {\n            allSelectorsExtendList.push(rules[i]);\n            rulesetNode.extendOnEveryPath = true;\n        }\n    }\n    // now find every selector and apply the\n    extends that apply to all extends\n    // and the ones which apply to an individual extend\n    const paths =\n    rulesetNode.paths;\n    for (i = 0; i < paths.length; i++) {\n        const selectorPath = paths[i], selector =\n        selectorPath[selectorPath.length - 1], selExtendList = selector.extendList;\n        extendList = selExtendList\n        ? utils.copyArray(selExtendList).concat(allSelectorsExtendList)\n        : allSelectorsExtendList;\n        if\n        (extendList) {\n            extendList = extendList.map(function(allSelectorsExtend) {\n                return\n                allSelectorsExtend.clone();\n            });\n            for (j = 0; j < extendList.length; j++) {\n                this.foundExtends = true;\n                extend = extendList[j];\n                extend.findSelfSelectors(selectorPath);\n                extend.ruleset = rulesetNode;\n                if (j === 0) {\n                    extend.firstExtendOnThisSelectorPath = true;\n                }\n                this.allExtendsStack[this.allExtendsStack.length - 1].push(extend);\n            }\n        }\n        this.contexts.push(rulesetNode.selectors);\n    }\n    visitRulesetOut(rulesetNode) {\n        if (!rulesetNode.root) {\n            this.contexts.length = this.contexts.length - 1;\n        }\n    }\n    visitMedia(mediaNode, visitArgs)\n    {\n        mediaNode.allExtends = [];\n        this.allExtendsStack.push(mediaNode.allExtends);\n    }\n    visitMediaOut(mediaNode) {\n        this.allExtendsStack.length = this.allExtendsStack.length - 1;\n    }\n    visitAtRule(atRuleNode, visitArgs) {\n        atRuleNode.allExtends = [];\n        this.allExtendsStack.push(atRuleNode.allExtends);\n    }\n    visitAtRuleOut(atRuleNode) {\n        this.allExtendsStack.length = this.allExtendsStack.length - 1;\n    }\n}\n\nclass ProcessExtendsVisitor {\n    constructor() {\n        this._visitor = new Visitor(this);\n    }\n    run(root) {\n        const extendFinder = new\n        ExtendFinderVisitor();\n        this.extendIndices = {};\n        extendFinder.run(root);\n        if\n        (!extendFinder.foundExtends) {\n            return root;\n        }\n        root.allExtends =\n        root.allExtends.concat(this.doExtendChaining(root.allExtends, root.allExtends));\n        this.allExtendsStack =\n        [root.allExtends];\n        const newRoot = this._visitor.visit(root);\n        this.checkExtendsForNonMatched(root.allExtends);\n        return newRoot;\n    }\n    checkExtendsForNonMatched(extendList) {\n        const indices = this.extendIndices;\n        extendList.filter(function(extend) {\n            return !extend.hasFoundMatches && extend.parent_ids.length === 1;\n        }).forEach(function(extend) {\n            let selector = '_unknown_';\n            try {\n                selector =\n                extend.selector.toCSS({});\n            }\n            catch (_)\n            {\n            }\n            if (!indices[`${extend.index} ${selector}`])\n            {\n                indices[`${extend.index} ${selector}`] = true;\n                logger.warn(`extend '${selector}' has no\n                matches`);\n            }\n        });\n    }\n    doExtendChaining(extendsList, extendsListTarget, iterationCount) {\n        //\n        // chaining is different from normal extension.. if we extend an extend then we are not just copying,\n        altering\n        // and pasting the selector we would do normally,\n        but we are also adding an extend with the same target selector\n        // this means this new extend can then go and\n        alter other extends\n        // this method deals with all the chaining work - without it, extend is flat and\n        doesn't work on other extend selectors\n        // this is also the most expensive.. and a match on one selector can\n        cause an extension of a selector we had already\n        // processed if we look at each selector at a time, as is done in\n        visitRuleset\n        let extendIndex;\n        let targetExtendIndex;\n        let matches;\n        const extendsToAdd =\n        [];\n        let newSelector;\n        const extendVisitor = this;\n        let selectorPath;\n        let extend;\n        let\n        targetExtend;\n        let newExtend;\n        iterationCount = iterationCount || 0;\n        // loop through comparing\n        every extend with every target extend.\n        // a target extend is the one on the ruleset we are looking at

```

copy/edit/pasting in place

```
// e.g. .a:extend(.b) {} and .b:extend(.c) {} then the first extend extends the second one // and the second
is the target // the separation into two lists allows us to process a subset of chains with a bigger set, as is the
// case when processing media queries
for (extendIndex = 0; extendIndex < extendsList.length;
extendIndex++) {
    for (targetExtendIndex = 0; targetExtendIndex < extendsListTarget.length;
targetExtendIndex++) {
        extend = extendsList[extendIndex];
        targetExtend =
extendsListTarget[targetExtendIndex];
        // look for circular references
        if (
extend.parent_ids.indexOf( targetExtend.object_id ) >= 0 ) { continue; }
        // find a match in the target
extends self selector (the bit before :extend)
        selectorPath = [targetExtend.selfSelectors[0]];
matches = extendVisitor.findMatch(extend, selectorPath);

        if (matches.length) {
            extend.hasFoundMatches = true; // we found a match,
so for each self selector..
            extend.selfSelectors.forEach(function(selfSelector) {
                const
info = targetExtend.visibilityInfo();
                // process the extend as usual
                newSelector =
extendVisitor.extendSelector(matches, selectorPath, selfSelector, extend.isVisible());
                // but now
we create a new extend from it
                newExtend = new(tree.Extend)(targetExtend.selector,
targetExtend.option, 0, targetExtend.fileInfo(), info);
                newExtend.selfSelectors = newSelector;
                // add the extend onto the list of extends for that selector
                newSelector[newSelector.length
- 1].extendList = [newExtend];
                // record that we need to add it.
                extendsToAdd.push(newExtend);
                newExtend.ruleset = targetExtend.ruleset;
                // remember its parents for circular references
                newExtend.parent_ids =
newExtend.parent_ids.concat(targetExtend.parent_ids, extend.parent_ids);
                // only process the
selector once.. if we have :extend(.a,b) then multiple
                // extends will look at the same selector path,
so when extending
                // we know that any others will be duplicates in terms of what is added to the
css
                if (targetExtend.firstExtendOnThisSelectorPath) {
newExtend.firstExtendOnThisSelectorPath = true;
targetExtend.ruleset.paths.push(newSelector);
            }
        }
    }
}
// try to detect
circular references to stop a stack overflow.
// may no longer be needed.
this.extendChainCount++;
if (iterationCount > 100) {
    let selectorOne = '{unable to calculate}';
    let selectorTwo = '{unable to calculate}';
    try {
        selectorOne =
extendsToAdd[0].selfSelectors[0].toCSS();
        selectorTwo = extendsToAdd[0].selector.toCSS();
    }
    catch (e) {
        throw { message: `extend circular reference detected. One of the circular
extends is currently:${selectorOne}:extend(${selectorTwo})`; }
    }
    // now process the new extends
on the existing rules so that we can handle a extending b extending c extending
// d extending e..
return extendsToAdd.concat(extendVisitor.doExtendChaining(extendsToAdd, extendsListTarget, iterationCount +
1));
} else {
    return
extendsToAdd;
}
}

visitDeclaration(ruleNode, visitArgs) {
    visitArgs.visitDeeper = false;
}

visitMixinDefinition(mixinDefinitionNode, visitArgs) {
    visitArgs.visitDeeper = false;
}

visitSelector(selectorNode, visitArgs) {
    visitArgs.visitDeeper = false;
}

visitRuleset(rulesetNode,
visitArgs) {
    if (rulesetNode.root) {
        return;
    }
    let matches;
    let pathIndex;
    let
extendIndex;
    const allExtends = this.allExtendsStack[this.allExtendsStack.length - 1];
    const
selectorsToAdd = [];
    const extendVisitor = this;
    let selectorPath;
    // look at each selector path in
the ruleset, find any extend matches and then copy, find and replace
for (extendIndex = 0; extendIndex <
allExtends.length; extendIndex++) {
        for (pathIndex = 0; pathIndex < rulesetNode.paths.length;
pathIndex++) {
            selectorPath
= rulesetNode.paths[pathIndex];
            // extending extends happens initially, before the main pass
            if (rulesetNode.extendOnEveryPath) { continue; }
            const extendList = selectorPath[selectorPath.length -
1].extendList;
            if (extendList && extendList.length) {
                continue;
            }
            matches =
```

```

this.findMatch(allExtends[extendIndex], selectorPath);\n\n        if (matches.length) {\n
allExtends[extendIndex].hasFoundMatches = true;\n\n
allExtends[extendIndex].selfSelectors.forEach(function(selfSelector) {\n\n                let extendedSelectors;\n
                extendedSelectors = extendVisitor.extendSelector(matches, selectorPath, selfSelector,\n
allExtends[extendIndex].isVisible());\n\n                selectorsToAdd.push(extendedSelectors);\n\n                });\n
                }\n\n                }\n\n                rulesetNode.paths = rulesetNode.paths.concat(selectorsToAdd);\n
                }\n\n                findMatch(extend, haystackSelectorPath) {\n\n                /\n\n                // look through the haystack selector path to try\n
and find the needle - extend.selector\n                // returns an array of selector matches that can then be replaced\n                /\n
                let haystackSelectorIndex;\n                let haystackSelector;\n                let haystackElementIndex;\n                let\n
haystackElement;\n                let targetCombinator;\n                let i;\n                const extendVisitor = this;\n                const\n
needleElements = extend.selector.elements;\n                const potentialMatches = [];\n                let potentialMatch;\n                const\n
matches = [];\n\n                // loop through the haystack elements\n                for (haystackSelectorIndex = 0;\n
haystackSelectorIndex < haystackSelectorPath.length; haystackSelectorIndex++) {\n\n                haystackSelector =\n
haystackSelectorPath[haystackSelectorIndex];\n\n                for (haystackElementIndex = 0; haystackElementIndex\n
< haystackSelector.elements.length;\n
                haystackElementIndex++) {\n\n                haystackElement =\n
haystackSelector.elements[haystackElementIndex];\n\n                // if we allow elements before our match we can\n
add a potential match every time. otherwise only at the first element.\n\n                if (extend.allowBefore ||\n
(haystackSelectorIndex === 0 && haystackElementIndex === 0)) {\n\n                potentialMatches.push({pathIndex: haystackSelectorIndex, index: haystackElementIndex, matched: 0,\n
                initialCombinator: haystackElement.combinator});\n\n                }\n\n                for (i = 0; i <\n
potentialMatches.length; i++) {\n\n                potentialMatch = potentialMatches[i];\n\n                // selectors add\n
\" \" onto the first element. When we use & it joins the selectors together, but if we don't\n\n                // then each\n
selector in haystackSelectorPath has a space before it added in the toCSS phase. so we need to\n\n                // work\n
out what the resulting combinator will be\n\n                targetCombinator = haystackElement.combinator.value;\n\n                if (targetCombinator === \" && haystackElementIndex === 0) {\n\n                targetCombinator = ' ';\n\n                }\n\n                // if we don't match, null our match to indicate failure\n\n                if\n
(!extendVisitor.isElementValuesEqual(needleElements[potentialMatch.matched].value, haystackElement.value) ||\n
                (potentialMatch.matched > 0 && needleElements[potentialMatch.matched].combinator.value !==\n
targetCombinator)) {\n\n                potentialMatch = null;\n\n                } else {\n\n                potentialMatch.matched++;\n\n                }\n\n                // if we are still valid and have finished, test whether we\n
have elements after and whether these are allowed\n\n                if (potentialMatch) {\n\n                potentialMatch.finished\n
= potentialMatch.matched === needleElements.length;\n\n                if (potentialMatch.finished &&\n
                (!extend.allowAfter &&\n
                (haystackElementIndex + 1 <\n
                haystackSelector.elements.length || haystackSelectorIndex + 1 < haystackSelectorPath.length))) {\n\n                potentialMatch = null;\n\n                }\n\n                // if null we remove, if not, we are still valid,\n
so either push as a valid match or continue\n\n                if (potentialMatch) {\n\n                if\n
(potentialMatch.finished) {\n\n                potentialMatch.length = needleElements.length;\n\n                potentialMatch.endPathIndex = haystackSelectorIndex;\n\n                potentialMatch.endPathElementIndex =\n
                haystackElementIndex + 1; // index after end of match\n\n                potentialMatches.length = 0; // we don't\n
allow matches to\n
                overlap, so start matching again\n\n                matches.push(potentialMatch);\n\n                }\n\n                } else {\n\n                potentialMatches.splice(i, 1);\n\n                i--;\n\n                }\n\n                }\n\n                }\n\n                return matches;\n\n                }\n\n                isElementValuesEqual(elementValue1, elementValue2) {\n\n                if (typeof\n
elementValue1 === 'string' || typeof elementValue2 === 'string') {\n\n                return elementValue1 ===\n
                elementValue2;\n\n                }\n\n                if (elementValue1 instanceof tree.Attribute) {\n\n                if (elementValue1.op !==\n
                elementValue2.op || elementValue1.key !== elementValue2.key) {\n\n                return false;\n\n                }\n\n                if

```

```

(!elementValue1.value || !elementValue2.value) {\n          if (elementValue1.value || elementValue2.value) {\n
      return false;\n          }\n          return true;\n          }\n          elementValue1
= elementValue1.value.value || elementValue1.value;\n          elementValue2 = elementValue2.value.value ||
elementValue2.value;\n          return elementValue1 === elementValue2;\n          }\n          elementValue1 =
elementValue1.value;\n          elementValue2 = elementValue2.value;\n          if (elementValue1 instanceof
tree.Selector) {\n          if (!(elementValue2 instanceof tree.Selector) || elementValue1.elements.length !==
elementValue2.elements.length) {\n          return false;\n          }\n          for (let i = 0; i <
elementValue1.elements.length; i++) {\n          if (elementValue1.elements[i].combinator.value !==
elementValue2.elements[i].combinator.value) {\n          if (i !== 0 ||
(elementValue1.elements[i].combinator.value || ' ') !== (elementValue2.elements[i].combinator.value || ' ')) {\n
      return false;\n          }\n          }\n          if
(!this.isElementValuesEqual(elementValue1.elements[i].value,
elementValue2.elements[i].value)) {\n          return false;\n          }\n          }\n          return true;\n
}\n          return false;\n          }\n          \n          extendSelector(matches, selectorPath, replacementSelector, isVisible) {\n          //
for a set of matches, replace each match with the replacement selector\n          let currentSelectorPathIndex = 0,
currentSelectorPathElementIndex = 0, path = [], matchIndex, selector, firstElement, match, newElements;\n          for (matchIndex = 0; matchIndex < matches.length; matchIndex++) {\n          match = matches[matchIndex];\n
      selector = selectorPath[match.pathIndex];\n          firstElement = new tree.Element(\n
match.initialCombinator,\n          replacementSelector.elements[0].value,\n
replacementSelector.elements[0].isVariable,\n          replacementSelector.elements[0].getIndex(),\n
replacementSelector.elements[0].fileInfo()\n
);\n          if (match.pathIndex > currentSelectorPathIndex && currentSelectorPathElementIndex > 0) {\n
      path[path.length - 1].elements = path[path.length - 1]\n
.elements.concat(selectorPath[currentSelectorPathIndex].elements.slice(currentSelectorPathElementIndex));\n
      currentSelectorPathElementIndex = 0;\n          currentSelectorPathElementIndex++;\n          }\n          newElements = selector.elements\n
      .slice(currentSelectorPathElementIndex, match.index)\n
.concat([firstElement])\n          .concat(replacementSelector.elements.slice(1));\n          if
(currentSelectorPathIndex === match.pathIndex && matchIndex > 0) {\n          path[path.length - 1].elements
=\n          path[path.length - 1].elements.concat(newElements);\n          } else {\n          path =
path.concat(selectorPath.slice(currentSelectorPathIndex, match.pathIndex));\n          path.push(new tree.Selector(\n
      newElements\n
));\n          }\n          currentSelectorPathIndex = match.endPathIndex;\n          currentSelectorPathElementIndex =
match.endPathElementIndex;\n          if (currentSelectorPathElementIndex >=
selectorPath[currentSelectorPathIndex].elements.length) {\n          currentSelectorPathElementIndex = 0;\n
      currentSelectorPathElementIndex++;\n          }\n          }\n          if (currentSelectorPathIndex < selectorPath.length &&
currentSelectorPathElementIndex > 0) {\n          path[path.length - 1].elements = path[path.length - 1]\n
.elements.concat(selectorPath[currentSelectorPathIndex].elements.slice(currentSelectorPathElementIndex));\n
      currentSelectorPathElementIndex++;\n          }\n          path = path.concat(selectorPath.slice(currentSelectorPathIndex,
selectorPath.length));\n          path = path.map(function (currentValue) {\n          // we can re-use
elements here, because the visibility property matters only for selectors\n          const derived =
currentValue.createDerived(currentValue.elements);\n          if (isVisible) {\n          derived.ensureVisibility();\n
      } else {\n          derived.ensureInvisibility();\n          }\n          return derived;\n          });\n          return
path;\n          }\n          \n          visitMedia(mediaNode, visitArgs) {\n          let newAllExtends =
mediaNode.allExtends.concat(this.allExtendsStack[this.allExtendsStack.length - 1]);\n          newAllExtends =
newAllExtends.concat(this.doExtendChaining(newAllExtends, mediaNode.allExtends));\n          this.allExtendsStack.push(newAllExtends);\n          }\n          \n          visitMediaOut(mediaNode) {\n          const lastIndex =
this.allExtendsStack.length - 1;\n          this.allExtendsStack.length = lastIndex;\n          }\n          \n          visitAtRule(atRuleNode,
visitArgs) {\n          let newAllExtends =

```

```

atRuleNode.allExtends.concat(this.allExtendsStack[this.allExtendsStack.length
- 1]);\n    newAllExtends = newAllExtends.concat(this.doExtendChaining(newAllExtends,
atRuleNode.allExtends));\n    this.allExtendsStack.push(newAllExtends);\n  }\n\n  visitAtRuleOut(atRuleNode)
{\n    const lastIndex = this.allExtendsStack.length - 1;\n    this.allExtendsStack.length = lastIndex;\n  }\n}\n\nexport default ProcessExtendsVisitor;\n","import Visitor from './visitor';\n\nclass JoinSelectorVisitor {\n  constructor() {\n    this.contexts = [];\n    this._visitor = new Visitor(this);\n  }\n\n  run(root) {\n    return
this._visitor.visit(root);\n  }\n\n  visitDeclaration(declNode, visitArgs) {\n    visitArgs.visitDeeper = false;\n  }\n\n  visitMixinDefinition(mixinDefinitionNode, visitArgs) {\n    visitArgs.visitDeeper = false;\n  }\n\n  visitRuleset(rulesetNode, visitArgs) {\n    const context = this.contexts[this.contexts.length - 1];\n    const paths
= [];\n    let selectors;\n\n    this.contexts.push(paths);\n\n    if (!rulesetNode.root) {\n      selectors = rulesetNode.selectors;\n      if (selectors) {\n        selectors
= selectors.filter(function(selector) { return selector.getIsOutput(); });\n        rulesetNode.selectors =
selectors.length ? selectors : (selectors = null);\n        if (selectors) { rulesetNode.joinSelectors(paths, context,
selectors); }\n      }\n      if (!selectors) { rulesetNode.rules = null; }\n      rulesetNode.paths = paths;\n    }\n\n    visitRulesetOut(rulesetNode) {\n      this.contexts.length = this.contexts.length - 1;\n    }\n\n    visitMedia(mediaNode, visitArgs) {\n      const context = this.contexts[this.contexts.length - 1];\n      mediaNode.rules[0].root = (context.length === 0 || context[0].multiMedia);\n    }\n\n    visitAtRule(atRuleNode,
visitArgs) {\n      const context = this.contexts[this.contexts.length - 1];\n      if (atRuleNode.rules &&
atRuleNode.rules.length)
{\n        atRuleNode.rules[0].root = (atRuleNode.isRooted || context.length === 0 || null);\n      }\n    }\n\n  }\n}\n\nexport default JoinSelectorVisitor;\n","import tree from './tree';\nimport Visitor from './visitor';\n\nclass
CSSVisitorUtils {\n  constructor(context) {\n    this._visitor = new Visitor(this);\n    this._context = context;\n  }\n\n  containsSilentNonBlockedChild(bodyRules) {\n    let rule;\n    if (!bodyRules) {\n      return false;\n    }\n    for (let r = 0; r < bodyRules.length; r++) {\n      rule = bodyRules[r];\n      if (rule.isSilent &&
rule.isSilent(this._context) && !rule.blocksVisibility()) {\n        // the atrule contains something that was
referenced (likely by extend)\n        // therefore it needs to be shown in output too\n        return true;\n      }\n    }\n    return false;\n  }\n\n  keepOnlyVisibleChilds(owner) {\n    if (owner
&& owner.rules) {\n      owner.rules = owner.rules.filter(thing => thing.isVisible());\n    }\n  }\n\n  isEmpty(owner) {\n    return (owner && owner.rules) \n      ? (owner.rules.length === 0) : true;\n  }\n\n  hasVisibleSelector(rulesetNode) {\n    return (rulesetNode && rulesetNode.paths) \n      ?
(rulesetNode.paths.length > 0) : false;\n  }\n\n  resolveVisibility(node, originalRules) {\n    if
(!node.blocksVisibility()) {\n      if (this.isEmpty(node) &&
!this.containsSilentNonBlockedChild(originalRules)) {\n        return ;\n      }\n      return node;\n    }\n\n    const compiledRulesBody = node.rules[0];\n    this.keepOnlyVisibleChilds(compiledRulesBody);\n    if (this.isEmpty(compiledRulesBody)) {\n      return ;\n    }\n    node.ensureVisibility();\n    node.removeVisibilityBlock();\n    return node;\n  }\n\n  isVisibleRuleset(rulesetNode) {\n    if
(rulesetNode.firstRoot)
{\n      return true;\n    }\n    if (this.isEmpty(rulesetNode)) {\n      return false;\n    }\n    if
(!rulesetNode.root && !this.hasVisibleSelector(rulesetNode)) {\n      return false;\n    }\n    return true;\n  }\n}\n\nconst ToCSSVisitor = function(context) {\n  this._visitor = new Visitor(this);\n  this._context = context;\n  this.utils = new CSSVisitorUtils(context);\n};\n\nToCSSVisitor.prototype = {\n  isReplacing: true,\n  run:
function (root) {\n    return this._visitor.visit(root);\n  },\n  visitDeclaration: function (declNode, visitArgs)
{\n    if (declNode.blocksVisibility() || declNode.variable) {\n      return;\n    }\n    return declNode;\n  },\n  visitMixinDefinition: function (mixinNode, visitArgs) {\n    // mixin definitions do not get eval'd - this
means they keep state\n    // so we have to clear that state here so it isn't used if toCSS is called
twice\n    mixinNode.frames = [];\n  },\n  visitExtend: function (extendNode, visitArgs) {\n  },\n  visitComment: function (commentNode, visitArgs) {\n    if (commentNode.blocksVisibility() ||
commentNode.isSilent(this._context)) {\n      return;\n    }\n    return commentNode;\n  },\n};

```

```

visitMedia: function(mediaNode, visitArgs) {\n    const originalRules = mediaNode.rules[0].rules;\n
mediaNode.accept(this._visitor);\n    visitArgs.visitDeeper = false;\n    return
this.utils.resolveVisibility(mediaNode, originalRules);\n },\n\n visitImport: function (importNode, visitArgs) {\n
    if (importNode.blocksVisibility()) {\n        return ;\n    }\n    return importNode;\n },\n\n visitAtRule:
function(atRuleNode, visitArgs) {\n    if (atRuleNode.rules && atRuleNode.rules.length) {\n        return
this.visitAtRuleWithBody(atRuleNode, visitArgs);\n    } else {\n        return
this.visitAtRuleWithoutBody(atRuleNode,
    visitArgs);\n    }\n },\n\n visitAnonymous: function(anonymousNode, visitArgs) {\n    if
(!anonymousNode.blocksVisibility()) {\n        anonymousNode.accept(this._visitor);\n        return
anonymousNode;\n    }\n },\n\n visitAtRuleWithBody: function(atRuleNode, visitArgs) {\n    // if there is
only one nested ruleset and that one has no path, then it is\n    // just fake ruleset\n    function
hasFakeRuleset(atRuleNode) {\n        const bodyRules = atRuleNode.rules;\n        return bodyRules.length ===
1 && (!bodyRules[0].paths || bodyRules[0].paths.length === 0);\n    }\n    function getBodyRules(atRuleNode)
{\n        const nodeRules = atRuleNode.rules;\n        if (hasFakeRuleset(atRuleNode)) {\n            return
nodeRules[0].rules;\n        }\n        return nodeRules;\n    }\n    // it is still true that it is only one ruleset
in array\n    // this is last such
moment\n    // process childs\n    const originalRules = getBodyRules(atRuleNode);\n
atRuleNode.accept(this._visitor);\n    visitArgs.visitDeeper = false;\n    if (!this.utils.isEmpty(atRuleNode))
{\n        this._mergeRules(atRuleNode.rules[0].rules);\n    }\n    return
this.utils.resolveVisibility(atRuleNode, originalRules);\n },\n\n visitAtRuleWithoutBody: function(atRuleNode,
visitArgs) {\n    if (atRuleNode.blocksVisibility()) {\n        return;\n    }\n    if (atRuleNode.name ===
'@charset') {\n        // Only output the debug info together with subsequent @charset definitions\n        // a
comment (or @media statement) before the actual @charset atrule would\n        // be considered illegal css as it
has to be on the first line\n        if (this.charset) {\n            if (atRuleNode.debugInfo) {\n                const
comment = new tree.Comment(`/* ${atRuleNode.toCSS(this._context).replace(/\n/g,
    "\n")} */`);\n                comment.debugInfo = atRuleNode.debugInfo;\n                return
this._visitor.visit(comment);\n            }\n            return;\n        }\n        this.charset = true;\n    }\n\n
return atRuleNode;\n },\n\n checkValidNodes: function(rules, isRoot) {\n    if (!rules) {\n        return;\n
}\n\n    for (let i = 0; i < rules.length; i++) {\n        const ruleNode = rules[i];\n        if (isRoot && ruleNode
instanceof tree.Declaration && !ruleNode.variable) {\n            throw { message: 'Properties must be inside
selector blocks. They cannot be in the root',\n                index: ruleNode.getIndex(), filename: ruleNode.fileInfo()
&& ruleNode.fileInfo().filename};\n        }\n        if (ruleNode instanceof tree.Call) {\n            throw {
message: `Function '${ruleNode.name}' did not return a root node`,\n                index: ruleNode.getIndex(),
filename:
ruleNode.fileInfo() && ruleNode.fileInfo().filename};\n        }\n        if (ruleNode.type &&
!ruleNode.allowRoot) {\n            throw { message: `${ruleNode.type} node returned by a function is not valid
here`,\n                index: ruleNode.getIndex(), filename: ruleNode.fileInfo() && ruleNode.fileInfo().filename};\n
        }\n    }\n },\n\n visitRuleset: function (rulesetNode, visitArgs) {\n    // at this point rulesets are nested
into each other\n    let rule;\n\n    const rulesets = [];\n    this.checkValidNodes(rulesetNode.rules,
rulesetNode.firstRoot);\n    if (!rulesetNode.root) {\n        // remove invisible paths\n
this._compileRulesetPaths(rulesetNode);\n\n        // remove rulesets from this ruleset body and compile them
separately\n        const nodeRules = rulesetNode.rules;\n        let nodeRuleCnt = nodeRules ?
nodeRules.length : 0;\n        for (let i = 0; i < nodeRuleCnt;
    ) {\n            rule = nodeRules[i];\n            if (rule && rule.rules) {\n                // visit because we are moving
them out from being a child\n                rulesets.push(this._visitor.visit(rule));\n                nodeRules.splice(i,
1);\n                nodeRuleCnt--;\n                continue;\n            }\n            i++;\n        }\n        // accept
the visitor to remove rules and refactor itself\n        // then we can decide nogw whether we want it or not\n
// compile body\n        if (nodeRuleCnt > 0) {\n            rulesetNode.accept(this._visitor);\n        } else {\n

```

```

rulesetNode.rules = null;\n        }\n        visitArgs.visitDeeper = false;\n        } else { // if (!
rulesetNode.root) {\n        rulesetNode.accept(this._visitor);\n        visitArgs.visitDeeper = false;\n        }\n    if (rulesetNode.rules) {\n        this._mergeRules(rulesetNode.rules);\n        this._removeDuplicateRules(rulesetNode.rules);\n        }\n\n        // now decide whether we keep the ruleset\n        if (this.utils.isVisibleRuleset(rulesetNode)) {\n        rulesetNode.ensureVisibility();\n        rulesets.splice(0, 0, rulesetNode);\n        }\n\n        if (rulesets.length === 1) {\n        return rulesets[0];\n        }\n        return rulesets;\n    },\n\n    _compileRulesetPaths: function(rulesetNode) {\n        if (rulesetNode.paths) {\n        rulesetNode.paths = rulesetNode.paths\n            .filter(p => {\n                let i;\n                if (p[0].elements[0].combinator.value === ' ') {\n                p[0].elements[0].combinator = new(tree.Combinator)(");\n                }\n                for (i = 0; i < p.length; i++) {\n                if (p[i].isVisible() && p[i].getIsOutput()) {\n                return true;\n                }\n                }\n                return false;\n            });\n        }\n    },\n\n    _removeDuplicateRules: function(rules) {\n        if (!rules) { return; }\n\n        // remove duplicates\n        const ruleCache = {};\n        let ruleList;\n        let rule;\n        let i;\n        for (i = rules.length - 1; i >= 0; i--) {\n        rule = rules[i];\n        if (rule instanceof tree.Declaration) {\n        if (!ruleCache[rule.name]) {\n        ruleCache[rule.name] = rule;\n        }\n        else {\n        ruleList = ruleCache[rule.name];\n        if (ruleList instanceof tree.Declaration) {\n        ruleList = ruleCache[rule.name] = [ruleCache[rule.name].toCSS(this._context)];\n        }\n        }\n        }\n        const ruleCSS = rule.toCSS(this._context);\n        if (ruleList.indexOf(ruleCSS) !== -1) {\n        rules.splice(i, 1);\n        } else {\n        ruleList.push(ruleCSS);\n        }\n    },\n\n    _mergeRules: function(rules) {\n        if (!rules) {\n        return;\n        }\n        const groups = {};\n        const groupsArr = [];\n        for (let i = 0; i < rules.length; i++) {\n        const rule = rules[i];\n        if (rule.merge) {\n        const key = rule.name;\n        groups[key] ? rules.splice(i--, 1) : groupsArr.push(groups[key] = []);\n        groups[key].push(rule);\n        }\n        }\n        groupsArr.forEach(group => {\n        if (group.length > 0) {\n        const result = group[0];\n        let space = [];\n        const comma = [new tree.Expression(space)];\n        group.forEach(rule => {\n        if ((rule.merge === '+') && (space.length > 0)) {\n        comma.push(new tree.Expression(space = []));\n        }\n        space.push(rule.value);\n        result.important = result.important || rule.important;\n        });\n        result.value = new tree.Value(comma);\n        }\n    });\n}\n\nexport default ToCSSVisitor;\n", "import Visitor from './visitor';\nimport ImportVisitor from './import-visitor';\nimport MarkVisibleSelectorsVisitor from './set-tree-visibility-visitor';\nimport ExtendVisitor from './extend-visitor';\nimport JoinSelectorVisitor from './join-selector-visitor';\nimport ToCSSVisitor from './to-css-visitor';\n\nexport default {\n    Visitor,\n    ImportVisitor,\n    MarkVisibleSelectorsVisitor,\n    ExtendVisitor,\n    JoinSelectorVisitor,\n    ToCSSVisitor\n};\n", "import chunker from './chunker';\n\nexport default () => {\n    let // Less input string\n    input;\n\n    let // current chunk\n    j;\n\n    const // holds state for backtracking\n    saveStack = [];\n\n    let // furthest index the parser has gone to\n    furthest;\n\n    let // if this is furthest we got to, this is the probably cause\n    furthestPossibleErrorMessage;\n\n    let // chunkified input\n    chunks;\n\n    let // current chunk\n    current;\n\n    let // index of current chunk, in `input`\n    currentPos;\n\n    const parserInput = {};\n    const CHARCODE_SPACE = 32;\n    const CHARCODE_TAB = 9;\n    const CHARCODE_LF = 10;\n    const CHARCODE_CR = 13;\n    const CHARCODE_PLUS = 43;\n    const CHARCODE_COMMA = 44;\n    const CHARCODE_FORWARD_SLASH = 47;\n    const CHARCODE_9 = 57;\n\n    function skipWhitespace(length) {\n        const oldi = parserInput.i;\n        const oldj = j;\n        const curr = parserInput.i - currentPos;\n        const endIndex = parserInput.i + current.length - curr;\n        const mem = (parserInput.i += length);\n        const inp = input;\n        let c;\n        let nextChar;\n        let comment;\n\n        for (; parserInput.i < endIndex;\n        parserInput.i++) {\n        c = inp.charCodeAtAt(parserInput.i);\n        if (parserInput.autoCommentAbsorb && c === CHARCODE_FORWARD_SLASH) {\n        nextChar = inp.charAt(parserInput.i + 1);\n        if (nextChar === '/') {\n        comment = {index: parserInput.i, isLineComment: true};\n        let

```

```

nextNewLine = inp.indexOf("\n", parserInput.i + 2);\n          if (nextNewLine < 0) {\n
nextNewLine = endIndex;\n          }\n          parserInput.i = nextNewLine;\n          comment.text =
inp.substr(comment.index, parserInput.i - comment.index);\n
parserInput.commentStore.push(comment);\n          continue;\n          } else if (nextChar === '*') {\n
  const nextStarSlash = inp.indexOf('*/', parserInput.i + 2);\n          if (nextStarSlash >= 0) {\n
comment = {\n
  index: parserInput.i,\n          text: inp.substr(parserInput.i, nextStarSlash + 2 - parserInput.i),\n
  isLineComment: false\n          };\n          parserInput.i += comment.text.length - 1;\n
  parserInput.commentStore.push(comment);\n          continue;\n          }\n          }\n
break;\n          }\n          if ((c !== CHARCODE_SPACE) && (c !== CHARCODE_LF) && (c !==
CHARCODE_TAB) && (c !== CHARCODE_CR)) {\n          break;\n          }\n          }\n          current =
current.slice(length + parserInput.i - mem + curr);\n          currentPos = parserInput.i;\n          if (!current.length) {\n
  if (j < chunks.length - 1) {\n          current = chunks[++j];\n          skipWhitespace(0); // skip space at the
beginning of a chunk\n          return true; // things changed\n          }\n          parserInput.finished
= true;\n          }\n          return oldi !== parserInput.i || oldj !== j;\n          }\n          parserInput.save = () => {\n
currentPos = parserInput.i;\n          saveStack.push( { current, i: parserInput.i, j });\n          };\n          parserInput.restore =
possibleErrorMessage => {\n          if (parserInput.i > furthest || (parserInput.i === furthest &&
possibleErrorMessage && !furthestPossibleErrorMessage)) {\n          furthest = parserInput.i;\n
furthestPossibleErrorMessage = possibleErrorMessage;\n          }\n          const state = saveStack.pop();\n          current =
state.current;\n          currentPos = parserInput.i = state.i;\n          j = state.j;\n          };\n          parserInput.forget = () => {\n
saveStack.pop();\n          };\n          parserInput.isWhitespace = offset => {\n          const pos = parserInput.i + (offset || 0);\n
const code = input.charCodeAtAt(pos);\n          return (code === CHARCODE_SPACE || code === CHARCODE_CR
|| code === CHARCODE_TAB || code ===
CHARCODE_LF);\n          };\n          // Specialization of $(tok)\n          parserInput.$re = tok => {\n          if (parserInput.i >
currentPos) {\n          current = current.slice(parserInput.i - currentPos);\n          currentPos = parserInput.i;\n
}\n          const m = tok.exec(current);\n          if (!m) {\n          return null;\n          }\n          }\n
skipWhitespace(m[0].length);\n          if (typeof m === 'string') {\n          return m;\n          }\n          return m.length
=== 1 ? m[0] : m;\n          };\n          parserInput.$char = tok => {\n          if (input.charAt(parserInput.i) !== tok) {\n
return null;\n          }\n          skipWhitespace(1);\n          return tok;\n          };\n          parserInput.$str = tok => {\n          const
tokLength = tok.length;\n          // https://jsperf.com/string-startswith/21\n          for (let i = 0; i < tokLength; i++) {\n
  if (input.charAt(parserInput.i + i) !== tok.charAt(i)) {\n          return null;\n          }\n          }\n          }\n
skipWhitespace(tokLength);\n          return tok;\n          };\n          parserInput.$quoted = loc => {\n          const pos = loc
|| parserInput.i;\n          const startChar = input.charAt(pos);\n          if (startChar !== "\"" && startChar !== "'") {\n
return;\n          }\n          const length = input.length;\n          const currentPosition = pos;\n          for (let i = 1; i +
currentPosition < length; i++) {\n          const nextChar = input.charAt(i + currentPosition);\n          switch
(nextChar) {\n          case '\\\\':\n          i++;\n          continue;\n          case '\\r':\n          case
'\n':\n          break;\n          case startChar:\n          const str = input.substr(currentPosition, i + 1);\n
if (!loc && loc !== 0) {\n          skipWhitespace(i + 1);\n          return str\n          }\n
return [startChar, str];\n          }\n          }\n          return null;\n          };\n          /**\n          * Permissive parsing. Ignores everything
except matching { } [ ] ( ) and quotes\n          * until matching token (outside of blocks)\n          */\n
parserInput.$parseUntil = tok => {\n          let quote = "";\n          let returnVal = null;\n          let inComment = false;\n
let blockDepth = 0;\n          const blockStack = [];\n          const parseGroups = [];\n          const length = input.length;\n
const startPos = parserInput.i;\n          let lastPos = parserInput.i;\n          let i = parserInput.i;\n          let loop = true;\n
let testChar;\n          if (typeof tok === 'string') {\n          testChar = char => char === tok\n          } else {\n
testChar = char => tok.test(char)\n          }\n          do {\n          let prevChar;\n          let nextChar =
input.charAt(i);\n          if (blockDepth === 0 && testChar(nextChar)) {\n          returnVal =
input.substr(lastPos,

```



```

i - lastPos);\n        if (returnVal) {\n            parseGroups.push(returnVal);\n        }\n        else {\n            parseGroups.push(' ');\n        }\n        returnVal = parseGroups;\n        skipWhitespace(i -\nstartPos);\n        loop = false;\n    } else {\n        if (inComment) {\n            if (nextChar === '*'\n&& \n            input.charAt(i + 1) === '/') {\n                i++;\n                blockDepth--;\n                inComment = false;\n            }\n            i++;\n            continue;\n        }\n        switch\n(nextChar) {\n            case '\\\\':\n                i++;\n                nextChar = input.charAt(i);\n                parseGroups.push(input.substr(lastPos, i - lastPos + 1));\n                lastPos = i + 1;\n                break;\n            case '/':\n                if (input.charAt(i + 1) === '*') {\n                    i++;\n                    inComment = true;\n                    blockDepth++;\n                }\n                break;\n            case '\\':\n                case '\"':\n                    quote = parserInput.$quoted(i);\n                    if (quote) {\n                        parseGroups.push(input.substr(lastPos, i - lastPos), quote);\n                        i += quote[1].length - 1;\n                        lastPos = i + 1;\n                    }\n                    else {\n                        skipWhitespace(i -\nstartPos);\n                        returnVal = nextChar;\n                        loop = false;\n                    }\n                }\n                break;\n            case '{':\n                blockStack.push('{');\n                blockDepth++;\n                break;\n            case '':\n                blockStack.push('');\n                blockDepth++;\n                break;\n            case '[':\n                blockStack.push('');\n                blockDepth++;\n                break;\n            case ']':\n                case ')':\n                case ']':\n                const expected = blockStack.pop();\n                if (nextChar === expected) {\n                    blockDepth--;\n                } else {\n                    // move the parser to the error and return expected\n                    skipWhitespace(i - startPos);\n                    returnVal = expected;\n                    loop = false;\n                }\n            }\n            i++;\n            if (i > length) {\n                loop\n                = false;\n            }\n            }\n            prevChar = nextChar;\n        } while (loop);\n        return returnVal ?\nreturnVal : null;\n    }\n    parserInput.autoCommentAbsorb = true;\n    parserInput.commentStore = [];\n    parserInput.finished = false;\n    // Same as $(), but don't change the state of the parser,\n    // just return the\n    match.\n    parserInput.peek = tok => {\n        if (typeof tok === 'string') {\n            // https://jsperf.com/string-\nstartswith/21\n            for (let i = 0; i < tok.length; i++) {\n                if (input.charAt(parserInput.i + i) !==\ntok.charAt(i)) {\n                    return false;\n                }\n            }\n            return true;\n        } else {\n            return\ntok.test(current);\n        }\n    };\n    // Specialization of peek()\n    // TODO remove or change some currentChar\ncalls to peekChar\n    parserInput.peekChar = tok => input.charAt(parserInput.i) === tok;\n    parserInput.currentChar\n    = () => input.charAt(parserInput.i);\n    parserInput.prevChar = () => input.charAt(parserInput.i - 1);\n    parserInput.getInput = () => input;\n    parserInput.peekNotNumeric = () => {\n        const c =\ninput.charCodeAt(parserInput.i);\n        // Is the first char of the dimension 0-9, '.', '+' or '-\n        return (c >\nCHARCODE_9 || c < CHARCODE_PLUS) || c === CHARCODE_FORWARD_SLASH || c ===\nCHARCODE_COMMA;\n    };\n    parserInput.start = (str, chunkInput, failFunction) => {\n        input = str;\n        parserInput.i = j = currentPos = furthest = 0;\n        // chunking apparently makes things quicker (but my tests\n        indicate\n        // it might actually make things slower in node at least)\n        // and it is a non-perfect parse - it can't\n        recognise\n        // unquoted urls, meaning it can't distinguish comments\n        // meaning comments with quotes or\n        {}() in them get 'counted'\n        // and then lead to parse errors.\n        // In addition if the chunking\n        chunks in the wrong place we might\n        // not be able to parse a parser statement in one go\n        // this is\n        officially deprecated but can be switched on via an option\n        // in the case it causes too much performance\n        issues.\n        if (chunkInput) {\n            chunks = chunker(str, failFunction);\n        } else {\n            chunks = [str];\n        }\n        current = chunks[0];\n        skipWhitespace(0);\n    };\n    parserInput.end = () => {\n        let\n        message;\n        const isFinished = parserInput.i >= input.length;\n        if (parserInput.i < furthest) {\n            message = furthestPossibleErrorMessage;\n            parserInput.i = furthest;\n        }\n        return {\n            isFinished,\n            furthest: parserInput.i,\n            furthestPossibleErrorMessage: message,\n            furthestReachedEnd: parserInput.i >= input.length - 1,\n            furthestChar: input[parserInput.i]\n        };\n    };\n    return parserInput;\n};\n", "//

```



is parsed in one sweep. To make the parser fast enough to run in the browser, several optimization had to be made: - Matching and slicing on a huge input is often cause of slowdowns. The solution is to chunkify the input into smaller strings. The chunks are stored in the `chunks` var, `j` holds the current chunk index, and `currentPos` holds the index of the current chunk in relation to `input`. This gives us an almost 4x speed-up. - In many cases, we don't need to match individual tokens; for example, if a value doesn't hold any variables, operations or dynamic references, the parser can effectively 'skip' it, treating it as a literal. An example would be '1px solid #000' - which evaluates to itself, we don't need to know what the individual components are. The drawback, of course is that you don't get the benefits of syntax-checking on the CSS. This gives us a 50% speed-up in the parser, and a smaller speed-up in the code-gen. Token matching is done with the `\$` function, which either takes a terminal string or regexp, or a non-terminal function to call. It

```

also takes care of moving all the indices forwards.
const Parser = function Parser(context, imports, fileInfo)
{
  let parsers;
  const parserInput = getParserInput();
  function error(msg, type) {
    throw new
    LessError({
      index: parserInput.i,
      filename: fileInfo.filename,
      type: type ||
      'Syntax',
      message: msg
    }, imports);
  }
  function expect(arg, msg) {
    // some older browsers return typeof 'function' for RegExp
    const result = (arg instanceof Function) ?
    arg.call(parsers) : parserInput.$re(arg);
    if (result) {
      return result;
    }
    error(msg ||
    (typeof arg === 'string' ? `expected '${arg}' got '${parserInput.currentChar()}` : 'unexpected
    token'));
  }
  // Specialization of expect()
  function expectChar(arg, msg) {
    if
    (parserInput.$char(arg))
    {
      return arg;
    }
    error(msg || `expected '${arg}' got '${parserInput.currentChar()}`);
  }
  function getDebugInfo(index) {
    const filename = fileInfo.filename;
    return {
      lineNumber:
      utils.getLocation(index, parserInput.getInput()).line + 1,
      fileName: filename
    };
  }
  /**
   * Used after initial parsing to create nodes on the fly
   * @param {String} str - string to parse
   * @param {Array} parseList - array of parsers to run input through e.g. ["value", "important"]
   * @param {Number} currentIndex - start number to begin indexing
   * @param {Object} fileInfo - fileInfo to attach to
   * created nodes
   */
  function parseNode(str, parseList, currentIndex, fileInfo, callback) {
    let result;
    const returnNodes = [];
    const parser = parserInput;
    try {
      parser.start(str, false,
      function fail(msg, index) {
        callback({
          message: msg,
          index: index +
          currentIndex
        });
      });
      for (let x = 0, p, i; (p = parseList[x]); x++) {
        i =
        parser.i;
        result = parsers[p]();
        if (result) {
          try {
            result._index = i
            + currentIndex;
            result._fileInfo = fileInfo;
          } catch (e) {}
          returnNodes.push(result);
        }
        else {
          returnNodes.push(null);
        }
      }
      const endInfo = parser.end();
      if (endInfo.isFinished) {
        callback(null,
        returnNodes);
      }
      else {
        callback(true, null);
      }
    } catch (e) {
      throw
      new LessError({
        index: e.index
        + currentIndex,
        message: e.message
      }, imports, fileInfo.filename);
    }
  }
  // The Parser
  // return {
  //   parserInput,
  //   imports,
  //   fileInfo,
  //   parseNode,
  // }
  // Parse an input string into an abstract syntax tree,
  // @param str A string containing 'less' markup
  // @param callback call `callback` when done.
  // @param [additionalData] An optional map which can contains
  // vars - a map (key, value) of variables to apply
  // parse: function (str, callback, additionalData) {
    let root;
    let err = null;
    let globalVars;
    let modifyVars;
    let ignored;
    let
    preText = "";
    // Optionally disable @plugin parsing
    if (additionalData &&
    additionalData.disablePluginRule) {
      parsers.plugin = function() {
        var dir =
        parserInput.$re(/^@plugin?(?!\s+)/);
        if (dir) {
          error('@plugin statements are not allowed when disablePluginRule is set to
          true');
        }
      };
      globalVars = (additionalData &&

```

```

additionalData.globalVars) ? `${Parser.serializeVars(additionalData.globalVars)}\n` : "";
modifyVars =
(additionalData && additionalData.modifyVars) ? `${Parser.serializeVars(additionalData.modifyVars)} ` : "";
if (context.pluginManager) {
  const preProcessors = context.pluginManager.getPreProcessors();
  for (let i = 0; i < preProcessors.length; i++) {
    str = preProcessors[i].process(str, { context,
imports, fileInfo });
  }
  if (globalVars || (additionalData && additionalData.banner))
    preText = ((additionalData && additionalData.banner) ? additionalData.banner : "") + globalVars;
  ignored = imports.contentsIgnoredChars;
  ignored[fileInfo.filename] =
ignored[fileInfo.filename] || 0;
  ignored[fileInfo.filename] += preText.length;
  str =
str.replace(/\r\n?/g, '\n'); // Remove potential UTF Byte Order Mark
  str = preText +
str.replace(/^\\uFEFF/, "") + modifyVars;
  imports.contents[fileInfo.filename] = str; // Start with
the primary rule. // The whole syntax tree is held under a Ruleset node, // with the `root` property
set to true, so no `{}` are // output. The callback is called when the input is parsed.
try {
parserInput.start(str, context.chunkInput, function fail(msg, index) {
  throw new LessError({
    index,
    type: 'Parse',
    message: msg,
    filename:
fileInfo.filename
  }, imports);
});
tree.Node.prototype.parse = this;
root = new tree.Ruleset(null, this.parsers.primary());
tree.Node.prototype.rootNode = root;
root.root = true;
root.firstRoot = true;
root.functionRegistry = functionRegistry.inherit();
} catch (e) {
  return callback(new LessError(e, imports, fileInfo.filename));
}
// If `i` is smaller than the `input.length - 1`, // it means the parser wasn't able to parse the whole
// string, so we've got a parsing error. // We try to extract a \n delimited string, //
showing the line where the parse error occurred. // We split it up into two parts (the part which parsed,
// and the part which didn't), so we can color them
differently.
const endInfo = parserInput.end();
if (!endInfo.isFinished) {
  let message
= endInfo.furthestPossibleErrorMessage;
  if (!message) {
    message = 'Unrecognised
input';
    if (endInfo.furthestChar === ')') {
      message += '. Possibly missing opening
\\{"';
    } else if (endInfo.furthestChar === ')') {
      message += '. Possibly missing
opening \\(';
    } else if (endInfo.furthestReachedEnd) {
      message += '. Possibly
missing something';
    }
  }
  err = new LessError({
    type: 'Parse',
    message,
    index: endInfo.furthest,
    filename: fileInfo.filename
  },
imports);
const finish = e => {
  e = err || e || imports.error;
  if (e) {
    if (!(e instanceof LessError)) {
      e =
new LessError(e, imports, fileInfo.filename);
    }
    return callback(e);
  }
  else {
    return callback(null, root);
  }
};
if (context.processImports !==
false) {
  new visitors.ImportVisitor(imports, finish)
.run(root);
} else {
  return finish();
}
} // Here in, the parsing rules/functions // The basic
structure of the syntax tree generated is as follows: // Ruleset -> Declaration -> Value -> Expression
-> Entity // Here's some Less code: // .class { // color: #fff; //
border: 1px solid
#000; // width: @w + 4px; // > .child { ... } // } // And here's what the parse
tree might look like: // Ruleset (Selector '.class', [ // Declaration ("color", Value
([Expression [Color #fff]])) // Declaration ("border", Value ([Expression [Dimension 1px][Keyword
"solid"]][Color #000]])) // Declaration ("width", Value ([Expression [Operation "+" ][Variable
"@w"]][Dimension 4px]])) // Ruleset (Selector [Element '>', '.child'], [...]) // ]) //
In general, most rules will try to parse a token with the `re()` function, and if the return // value is truly, will
return a new node, of the relevant type. Sometimes, we need to check // first, before parsing, that's when we
use `peek()`. // parsers: parsers = { // // The `primary` rule
is the *entry* and *exit* point of the parser. // The rules here can appear at any level of the parse tree.
// // The recursive nature of the grammar is an interplay between the `block` // rule, which

```

```

represents `{ ... }`, the `ruleset` rule, and this `primary` rule, // as represented by this simplified grammar:\n
    /\n    // primary (ruleset | declaration)+\n    // ruleset selector+ block\n    // block\n
    '{ primary }'\n    /\n    // Only at one point is the primary rule not called from the\n    // block rule: at\n
    the root level.\n    /\n    primary: function () {\n    const mixin = this.mixin;\n    let root =\n
    [];\n    let node;\n    while (true) {\n    while (true) {\n    node =\n
    this.comment();\n    if (!node) { break;\n
    }\n    root.push(node);\n    }\n    // always process comments before deciding if\n
    finished\n    if (parserInput.finished) {\n    break;\n    }\n    if\n
    (parserInput.peek('')) {\n    break;\n    }\n    node = this.extendRule();\n
    if (node) {\n    root = root.concat(node);\n    continue;\n    }\n    node\n
    = mixin.definition() || this.declaration() || mixin.call(false, false) || this.ruleset() || this.variableCall()\n
    || this.entities.call() || this.atrule();\n    if (node) {\n    root.push(node);\n    } else {\n
    let foundSemiColon = false;\n    while (parserInput.$char(';')) {\n
    foundSemiColon = true;\n    }\n    if (!foundSemiColon) {\n    break;\n
    }\n    }\n    }\n    return root;\n    },\n    // comments are collected by\n
    the main parsing mechanism and then assigned to nodes\n    // where the current structure allows it\n
    comment: function () {\n    if (parserInput.commentStore.length) {\n    const comment =\n
    parserInput.commentStore.shift();\n    return new(tree.Comment)(comment.text,\n
    comment.isLineComment, comment.index, fileInfo);\n    },\n    },\n    // Entities are\n
    tokens which can be found inside an Expression\n    // entities: {\n    mixinLookup: function()\n
    {\n    return parsers.mixin.call(true, true);\n    },\n    //\n
    // A string, which supports escaping \" and \"\n    // \"milky way\" he\\'s the one!\n
    //\n    quoted: function (forceEscaped) {\n    let str;\n    const index = parserInput.i;\n
    let isEscaped = false;\n    parserInput.save();\n    if (parserInput.$char('~')) {\n
    isEscaped = true;\n    } else if (forceEscaped) {\n    parserInput.restore();\n
    return;\n    }\n    str = parserInput.$quoted();\n    if (!str) {\n
    parserInput.restore();\n    return;\n    }\n    parserInput.forget();\n
    return new(tree.Quoted)(str.charAt(0), str.substr(1, str.length - 2), isEscaped, index, fileInfo);\n    },\n
    //\n    // A catch-all word, such as:\n    // black border-collapse\n    //\n
    keyword: function () {\n    const k = parserInput.$char('%') || parserInput.$re(/^[[?:[\w-]]|\\\\(?:[A-  

Fa-f0-9]{1,6} ?[[^A-Fa-f0-9]])+\\]?/);\n    if (k) {\n    return tree.Color.fromKeyword(k) ||  

new(tree.Keyword)(k);\n    },\n    },\n    // A function call\n    //\n
    // rgb(255, 0, 255)\n    // The arguments are parsed with the `entities.arguments` parser.\n
    //\n    call: function () {\n    let name;\n    let args;\n    let func;\n
    const index = parserInput.i;\n    // http://jsperf.com/case-insensitive-regex-vs-strtolower-then-  

regex/18\n
    if (parserInput.peek(/^url\\((i) { return;\n    }\n
    parserInput.save();\n    name = parserInput.$re(/^([\w-]+|~|progid:[\w\.\.]+)\\(\\)/);\n    if  

    (!name) {\n    parserInput.forget();\n    return;\n    }\n    name =  

    name[1];\n    func = this.customFuncCall(name);\n    if (func) {\n    args =  

    func.parse();\n    if (args && func.stop) {\n    parserInput.forget();\n
    return args;\n    }\n    }\n    args = this.arguments(args);\n    if  

    (!parserInput.$char('')) {\n    parserInput.restore('Could not parse call arguments or missing \\()\\');\n
    return;\n    }\n
    parserInput.forget();\n    return new(tree.Call)(name, args, index, fileInfo);\n    },\n
    //\n    // Parsing rules for functions with non-standard args, e.g.:\n    //\n
    boolean(not(2 > 1))\n    // This is a quick prototype, to be modified/improved when\n
    // more custom-parsed funcs come (e.g. `selector(...)`)\n    //\n    customFuncCall: function

```

```

(name) {\n          /* Ideally the table is to be moved out of here for faster perf.\n                    but it's quite\n                    tricky since it relies on all these `parsers`\n                    and `expect` available only here */\n                    return {\n                    alpha: f(parsers.ieAlpha, true),\n                    boolean: f(condition),\n                    'if':\n                    f(condition)\n                    }\n                }{\n                name.toLowerCase();\n                function f(parse, stop) {\n                return {\n                parse, // parsing function\n                stop // when true - stop after parse() and return its result,\n                // otherwise continue for plain args\n                };\n                }\n                \n                function\n                condition() {\n                return [expect(parsers.condition, 'expected condition')];\n                }\n            },\n            arguments: function (prevArgs) {\n            let argsComma = prevArgs || [];\n            const\n            argsSemiColon = [];\n            let isSemiColonSeparated;\n            let value;\n            parserInput.save();\n            while (true) {\n            if (prevArgs) {\n            prevArgs =\n            false;\n            } else {\n            value = parsers.detachedRuleset() || this.assignment() || parsers.expression();\n            if\n            (!value) {\n            break;\n            }\n            if (value.value &&\n            value.value.length === 1) {\n            value = value.value[0];\n            }\n            argsComma.push(value);\n            \n            if (parserInput.$char(',') {\n            continue;\n            }\n            if (parserInput.$char(';') || isSemiColonSeparated) {\n            isSemiColonSeparated = true;\n            value = (argsComma.length < 1) ? argsComma[0]\n            : new tree.Value(argsComma);\n            argsSemiColon.push(value);\n            argsComma =\n            [];\n            }\n            parserInput.forget();\n            return isSemiColonSeparated ? argsSemiColon :\n            argsComma;\n            },\n            literal: function () {\n            return this.dimension() ||\n            this.color() ||\n            this.quoted() ||\n            this.unicodeDescriptor();\n            },\n            \n            // Assignments are argument entities for calls.\n            // They are present in ie filter properties as shown below.\n            \n            // filter: progid:DXImageTransform.Microsoft.Alpha( *opacity=50* )\n            \n            assignment: function () {\n            let key;\n            let value;\n            parserInput.save();\n            key = parserInput.$re(/^\w+(?=\s?=)/i);\n            if (!key) {\n            parserInput.restore();\n            }\n            \n            return;\n            }\n            if (!parserInput.$char('=')) {\n            parserInput.restore();\n            }\n            return;\n            }\n            value = parsers.entity();\n            if (value) {\n            parserInput.forget();\n            return new(tree.Assignment)(key, value);\n            } else {\n            parserInput.restore();\n            }\n            },\n            \n            // Parse url() tokens\n            \n            // We use a specific rule for urls, because they don't really behave like\n            // standard function calls. The\n            difference is that the argument doesn't have\n            // to be enclosed within a string, so it can't be parsed as an\n            Expression.\n            \n            // url: function () {\n            let value;\n            const index =\n            parserInput.i;\n            \n            parserInput.autoCommentAbsorb = false;\n            if (!parserInput.$str('url(')) {\n            parserInput.autoCommentAbsorb = true;\n            return;\n            }\n            value =\n            this.quoted() || this.variable() || this.property() ||\n            parserInput.$re(/^(?:[\\w\\s\\-\\(\\)\\!@#$%^&*~`|{};:~'"/>

```

```

!parserInput.prevChar().match(/^\\s/) {\n                                // this may be a VariableCall lookup\n
const result = parsers.variableCall(name);\n                                if (result) {\n                                parserInput.forget();\n
    return result;\n                                }\n                                parserInput.forget();\n
    return new(tree.Variable)(name,\n
index, fileInfo);\n                                }\n                                parserInput.restore();\n                                },\n                                // A variable entity\n
using the protective { } e.g. @ {var}\n                                variableCurly: function () {\n                                let curly;\n
const index = parserInput.i;\n                                if (parserInput.currentChar() === '@' && (curly =\n
parserInput.$re(/^@\\{([\\w-]+)\\}/)) {\n                                return new(tree.Variable)('@${curly[1]}', index,\n
fileInfo);\n                                }\n                                },\n                                //\n                                // A Property accessor, such as `color`, in\n
//\n                                // background-color: $color\n                                //\n                                property: function () {\n                                let name;\n
    const index = parserInput.i;\n                                if (parserInput.currentChar() === '$' && (name =\n
parserInput.$re(/^\\$([\\w-]+)\\)) {\n                                return new(tree.Property)(name,\n
index, fileInfo);\n                                },\n                                },\n                                // A property entity using the protective { } e.g.\n
${prop}\n                                propertyCurly: function () {\n                                let curly;\n                                const index =\n
parserInput.i;\n                                if (parserInput.currentChar() === '$' && (curly = parserInput.$re(/^\\$\\{([\\w-]\n
]+)\\}/)) {\n                                return new(tree.Property)('${curly[1]}', index, fileInfo);\n                                }\n                                },\n                                //\n                                // A Hexadecimal color\n                                //\n                                // #4F3C2F\n                                //\n                                //\n
`rgb` and `hsl` colors are parsed through the `entities.call` parser.\n                                //\n                                color: function () {\n
    let rgb;\n                                parserInput.save();\n                                if (parserInput.currentChar() === '#' && (rgb =\n
parserInput.$re(/^#[A-Fa-f0-9]{8}|[A-Fa-f0-9]{6}|[A-Fa-f0-9]{3,4})([\\w.#\\|\\|]?/))\n
{\n                                if (!rgb[2]) {\n                                parserInput.forget();\n                                return\n
new(tree.Color)(rgb[1], undefined, rgb[0]);\n                                }\n                                }\n                                parserInput.restore();\n
    },\n                                colorKeyword: function () {\n                                parserInput.save();\n                                const\n
autoCommentAbsorb = parserInput.autoCommentAbsorb;\n                                parserInput.autoCommentAbsorb = false;\n
    const k = parserInput.$re(/^[_A-Za-z-][_A-Za-z0-9-]+/);\n                                parserInput.autoCommentAbsorb\n
= autoCommentAbsorb;\n                                if (!k) {\n                                parserInput.forget();\n                                return;\n
    }\n                                parserInput.restore();\n                                const color = tree.Color.fromKeyword(k);\n                                if\n
(color) {\n
    parserInput.$str(k);\n                                return color;\n                                }\n                                },\n                                //\n                                // A\n
Dimension, that is, a number and a unit\n                                //\n                                // 0.5em 95%\n                                //\n                                dimension:\n
function () {\n                                if (parserInput.peekNotNumeric()) {\n                                return;\n                                }\n
    const value = parserInput.$re(/^([+]?\\d*\\.?\\d+)(%|[a-z_]+)?/i);\n                                if (value) {\n                                return\n
new(tree.Dimension)(value[1], value[2]);\n                                }\n                                },\n                                //\n                                // A unicode\n
descriptor, as is used in unicode-range\n                                //\n                                // U+0?? or U+00A1-00A9\n                                //\n
unicodeDescriptor: function () {\n                                let ud;\n                                ud = parserInput.$re(/^U\\+[0-9a-fA-F?]+(\\|\n
[0-9a-fA-F?]+)?/);\n
    if (ud) {\n                                return new(tree.UnicodeDescriptor)(ud[0]);\n                                }\n                                },\n                                //\n                                // JavaScript code to be evaluated\n                                //\n                                // `window.location.href`\n
//\n                                javascript: function () {\n                                let js;\n                                const index = parserInput.i;\n
parserInput.save();\n                                const escape = parserInput.$char('~');\n                                const jsQuote =\n
parserInput.$char('^');\n                                if (!jsQuote) {\n                                parserInput.restore();\n                                return;\n
    }\n                                }\n                                js = parserInput.$re(/^\\^[^~^']*$/);\n                                if (js) {\n
parserInput.forget();\n                                return new(tree.JavaScript)(js.substr(0, js.length - 1), Boolean(escape), index,\n
fileInfo);\n
    }\n                                }\n                                parserInput.restore('invalid javascript definition');\n                                }\n                                },\n                                //\n                                //\n
The variable part of a variable definition. Used in the `rule` parser\n                                //\n                                // @fink:\n                                //\n
variable: function () {\n                                let name;\n                                if (parserInput.currentChar() === '@' && (name =\n
parserInput.$re(/^@([\\w-]+)\\s*/)) {\n                                return name[1];\n                                }\n                                },\n                                //\n                                // Call a variable value to

```

```

retrieve a detached ruleset\n      // or a value from a detached ruleset's rules.\n      /\n      // @fink();\n      // @fink;\n      // color: @fink[@color];\n      /\n      variableCall: function (parsedName) {\n      let lookups;\n      const i = parserInput.i;\n      const inValue = !!parsedName;\n      let name =\n      parsedName;\n      parserInput.save();\n      if (name || (parserInput.currentChar() === '@'\n      && (name = parserInput.$re(/^(@[\\w-]\n      ]+)(\\(\\(\\s*\\))/?)))) {\n      lookups = this.mixin.ruleLookups();\n      if (!lookups && ((inValue\n      && parserInput.$str('(') !== '(') || (name[2] !== '('))) {\n      parserInput.restore('Missing \\[...]' lookup\n      in variable call');\n      return;\n      }\n      if (!inValue) {\n      name =\n      name[1];\n      }\n      const call = new tree.VariableCall(name, i, fileInfo);\n      if\n      (!inValue && parsers.end()) {\n      parserInput.forget();\n      return call;\n      }\n      else {\n      parserInput.forget();\n      return new tree.NamespaceValue(call, lookups, i,\n      fileInfo);\n      }\n      }\n      parserInput.restore();\n      },\n      /\n      // extend syntax - used to extend\n      selectors\n      /\n      extend: function(isRule) {\n      let elements;\n      let e;\n      const\n      index = parserInput.i;\n      let option;\n      let extendList;\n      let extend;\n      if\n      (!parserInput.$str(isRule ? '&:extend(' : ':extend(')) {\n      return;\n      }\n      do {\n      option = null;\n      elements = null;\n      while (!(option = parserInput.$re(/^(all)(?=[\\s*(\\|,))/?))\n      {\n      e = this.element();\n      if (!e) {\n      break;\n      }\n      if (elements) {\n      elements.push(e);\n      } else {\n      elements = [ e ];\n      }\n      }\n      option = option && option[1];\n      if\n      (!elements) {\n      error('Missing target selector for :extend().');\n      }\n      extend =\n      new(tree.Extend)(new(tree.Selector)(elements), option, index, fileInfo);\n      if (extendList) {\n      extendList.push(extend);\n      } else {\n      extendList = [ extend ];\n      }\n      }\n      } while (parserInput.$char(',')\n      expect(/^(\\|,)?);\n      if (isRule) {\n      expect(/^(;)?);\n      }\n      return extendList;\n      },\n      /\n      // extendRule - used in a rule to extend all the\n      parent selectors\n      /\n      extendRule: function() {\n      return this.extend(true);\n      },\n      /\n      // Mixins\n      /\n      mixin: {\n      /\n      // A Mixin call, with an optional\n      argument list\n      /\n      // #mixins > .square(#fff);\n      // #mixins.square(#fff);\n      // .rounded(4px, black);\n      // .button;\n      /\n      // We can lookup / return a value using\n      the lookup syntax:\n      /\n      // color: #mixin.square(#fff)[@color];\n      /\n      // The\n      `while` loop is there because mixins can be\n      // namespaced, but we only support the child and\n      descendant\n      // selector for now.\n      /\n      call: function (inValue, getLookup) {\n      const s = parserInput.currentChar();\n      let important = false;\n      let lookups;\n      const index = parserInput.i;\n      let elements;\n      let args;\n      let hasParens;\n      if (s !== '.' && s !== '#') {\n      return;\n      }\n      parserInput.save(); // stop us absorbing part of an invalid selector\n      elements\n      = this.elements();\n      if (elements) {\n      if (parserInput.$char('(') {\n      args\n      = this.args(true).args;\n      expectChar(')');\n      hasParens = true;\n      }\n      if (getLookup !== false) {\n      lookups = this.ruleLookups();\n      }\n      if (getLookup === true && !lookups) {\n      parserInput.restore();\n      return;\n      }\n      }\n      if (inValue && !lookups && !hasParens) {\n      // This isn't\n      a valid in-value mixin call\n      parserInput.restore();\n      return;\n      }\n      if (!inValue && parsers.important()) {\n      important = true;\n      }\n      if (inValue || parsers.end()) {\n      parserInput.forget();\n      const mixin =\n      new(tree.mixin.Call)(elements, args, index, fileInfo, !lookups && important);\n      if (lookups) {\n      return new tree.NamespaceValue(mixin, lookups);\n      }\n      else {\n      return mixin;\n      }\n      }\n      }\n      parserInput.restore();\n      },\n      /**\n      * Matching elements for mixins\n      * (Start

```



```

with
. or # and can have >)\n          *\n          elements: function() {\n          let elements;\n          let e;\n          let c;\n          let elem;\n          let elemIndex;\n          const re = /^[#.](?:[\\w-]]|\\\\(?:[A-Za-f0-9]{1,6} ?|^A-Za-f0-9))+/;\n          while (true) {\n          parserInput.i;\n          e = parserInput.$re(re);\n          \n          if (!e) {\n          break;\n          }\n          elem = new(tree.Element)(c, e, false, elemIndex, fileInfo);\n          if (elements) {\n          elements.push(elem);\n          } else {\n          elements = [\n          elem ];\n          }\n          c = parserInput.$char('>');\n          }\n          return elements;\n          },\n          args: function (isCall) {\n          const entities = parsers.entities;\n          const\n          returner = { args:null, variadic: false }; \n          let expressions = [];\n          const argsSemiColon = [];\n          const argsComma = [];\n          let isSemiColonSeparated;\n          let\n          expressionContainsNamed;\n          let name;\n          let nameLoop;\n          let value;\n          let arg;\n          let expand;\n          let hasSep = true;\n          parserInput.save();\n          while (true) {\n          if (isCall) {\n          arg = parsers.detachedRuleset() ||\n          parsers.expression();\n          } else {\n          parserInput.commentStore.length = 0;\n          if (parserInput.$str('...')) {\n          returner.variadic = true;\n          if (parserInput.$char(';') && !isSemiColonSeparated) {\n          isSemiColonSeparated = true;\n          }\n          (isSemiColonSeparated ? argsSemiColon : argsComma)\n          .push({ variadic: true });\n          break;\n          }\n          arg = entities.variable() || entities.property() || entities.literal()\n          || entities.keyword() || this.call(true);\n          }\n          if (!arg || !hasSep) {\n          break;\n          }\n          nameLoop = null;\n          if (arg.throwAwayComments) {\n          arg.throwAwayComments();\n          }\n          value = arg;\n          let val =\n          null;\n          if (isCall) {\n          // Variable\n          if (arg.value && arg.value.length === 1)\n          {\n          val = arg.value[0];\n          }\n          } else {\n          val =\n          arg;\n          }\n          if (val && (val instanceof tree.Variable || val instanceof tree.Property)) {\n          if (parserInput.$char(':')) {\n          if (expressions.length > 0) {\n          if (isSemiColonSeparated) {\n          error('Cannot mix ; and , as delimiter types');\n          }\n          expressionContainsNamed = true;\n          }\n          value = parsers.detachedRuleset() || parsers.expression();\n          if (!value) {\n          if (isCall) {\n          error('could not understand value for named\n          argument');\n          } else {\n          parserInput.restore();\n          }\n          returner.args = [];\n          return returner;\n          }\n          nameLoop = (name = val.name);\n          } else if (parserInput.$str('...')) {\n          if (!isCall) {\n          returner.variadic = true;\n          if (parserInput.$char(';') &&\n          !isSemiColonSeparated) {\n          isSemiColonSeparated = true;\n          }\n          (isSemiColonSeparated ? argsSemiColon : argsComma)\n          .push({ name: arg.name, variadic: true });\n          break;\n          } else\n          {\n          expand = true;\n          }\n          } else if (!isCall) {\n          name = nameLoop = val.name;\n          value = null;\n          }\n          }\n          if (value) {\n          expressions.push(value);\n          }\n          argsComma.push({ name:nameLoop, value, expand });\n          if (parserInput.$char(',') {\n          hasSep = true;\n          continue;\n          }\n          hasSep = parserInput.$char(',') ===\n          ';'\n          if (hasSep || isSemiColonSeparated) {\n          if (expressionContainsNamed)\n          {\n          error('Cannot mix ; and , as delimiter types');\n          }\n          isSemiColonSeparated = true;\n          if (expressions.length > 1) {\n          value =\n          new(tree.Value)(expressions);\n          }\n          argsSemiColon.push({ name, value, expand

```

```

});\n\n        name = null;\n        expressions = [];\nexpressionContainsNamed = false;\n        }\n        }\n        parserInput.forget();\n        returner.args = isSemiColonSeparated ? argsSemiColon : argsComma;\n        return returner;\n},\n        /\n        // A Mixin definition, with a list of parameters\n        /\n        // .rounded\n(@radius: 2px, @color) {\n        //\n        ...}\n        // }\n        /\n        // Until we have a finer grained state-machine, we have to\n        // do a look-ahead, to make sure we don't have a mixin call.\n        // See the `rule` function for more\n        information.\n        /\n        // We start by matching `rounded`, and then proceed on to\n        // the\n        argument list, which has optional default values.\n        // We store the parameters in `params`, with a `value`\n        key,\n        // if there is a value, such as in the case of `@radius`.\n        /\n        // Once we've got our\n        params list, and a closing `}`, we parse\n        // the `{...}` block.\n        /\n        definition: function ()\n{\n        let name;\n        let params = [];\n        let match;\n        let ruleset;\n        let cond;\n        let variadic\n        = false;\n        if ((parserInput.currentChar() !== '.' && parserInput.currentChar() !== '#') ||\n        parserInput.peek(/^[\s]*$/)) {\n        return;\n        }\n        parserInput.save();\n        match = parserInput.$re(/^(#[\s]*(?:[\w-]|\(\(?:[A-Za-f0-9]{1,6} ?(?:[A-Za-f0-9])+\)\s*\(\)/))\s*(/);\n        if\n        (match) {\n        name = match[1];\n        const argInfo = this.args(false);\n        params = argInfo.args;\n        variadic = argInfo.variadic;\n        // .mixincall("@{a}");\n        // looks a bit like a mixin definition.\n        // also\n        // .mixincall(@a: {rule:\n        set;});\n        // so we have to be nice and restore\n        if (!parserInput.$char('')) {\n        parserInput.restore('Missing\n        closing \\)\\)');\n        return;\n        }\n        parserInput.commentStore.length =\n        0;\n        if (parserInput.$str('when')) { // Guard\n        cond = expect(parsers.conditions,\n        'expected condition');\n        }\n        ruleset = parsers.block();\n        if (ruleset) {\n        parserInput.forget();\n        return new(tree.mixin.Definition)(name, params, ruleset,\n        cond, variadic);\n        } else {\n        parserInput.restore();\n        }\n        } else {\n        parserInput.restore();\n        },\n        },\n        ruleLookups:\n        function() {\n        let rule;\n        let args;\n        const lookups = [];\n        if (parserInput.currentChar() !== '[') {\n        return;\n        }\n        while (true) {\n        parserInput.save();\n        args = null;\n        rule = this.lookupValue();\n        if (!rule && rule !== '') {\n        parserInput.restore();\n        break;\n        }\n        lookups.push(rule);\n        parserInput.forget();\n        }\n        if (lookups.length >\n        0) {\n        return lookups;\n        },\n        },\n        lookupValue: function() {\n        parserInput.save();\n        if (!parserInput.$char '[') {\n        parserInput.restore();\n        return;\n        }\n        if (name || name === '') {\n        parserInput.forget();\n        return name;\n        }\n        }\n        parserInput.restore();\n        },\n        },\n        /\n        // Entities are the\n        smallest recognized token,\n        // and can be found inside a rule's value.\n        /\n        entity: function ()\n{\n        const entities = this.entities;\n        return this.comment() || entities.literal() || entities.variable() ||\n        entities.url() ||\n        entities.property() || entities.call() || entities.keyword() || this.mixin.call(true) ||\n        entities.javascript();\n        },\n        /\n        // A Declaration terminator.\n        Note that we use `peek()` to check for `;`,\n        // because the `block` rule will be expecting it, but we still need\n        to make sure\n        // it's there, if `;` was omitted.\n        /\n        end: function () {\n        return\n        parserInput.$char(';') || parserInput.peek('}');\n        },\n        /\n        // IE's alpha function\n        /\n        // alpha(opacity=88)\n        /\n        ieAlpha: function () {\n        let value;\n        //\n        http://jsperf.com/case-insensitive-regex-vs-strtolower-then-regex/18\n        if (!parserInput.$re(/^(opacity=i) )\n        return; }\n        value = parserInput.$re(/^(d+);)\n        if (!value) {\n        value =

```

```

expect(parsers.entities.variable, 'Could not parse alpha');\n          value = `@{${value.name.slice(1)}}`; \n
  }\n          expectChar('');\n          return new tree.Quoted(", `alpha(opacity=${value})`);\n
  },\n          //\n          // A Selector Element\n          //\n          // div\n          // + h1\n          //
#socks\n          // input[type="text"]\n          //\n          // Elements are the building blocks for Selectors,\n
// they are made out of a `Combinator` (see combinator rule),\n          // and an element name, such as a tag a class,\n
or `*`.\n          //\n          element: function () {\n          let e;\n          let c;\n          let v;\n          const
index = parserInput.i;\n          c = this.combinator();\n          e = parserInput.$re(/^(?:\d+\|\|\d+\|\|\d+)%/)
\n          parserInput.$re(/^(?:[#]?[*])(?:[\w-][^\x00-\x9f]\\\\\\\\(?:[A-Fa-f0-9]{1,6} ?[^\A-Fa-f0-9]))+\/) \n\n
          parserInput.$char('*') || parserInput.$char('&') || this.attribute() \n\n
parserInput.$re(/^\\([^\&@]+\\)/)
  || parserInput.$re(/^\\.[#:]?(?=@)/) \n\n          this.entities.variableCurly();\n          if (!e) {\n
parserInput.save();\n          if (parserInput.$char('(')) {\n          if ((v = this.selector(false)) &&
parserInput.$char(')')) {\n          e = new(tree.Paren)(v);\n          parserInput.forget();\n
          } else {\n          parserInput.restore('Missing closing \\)\n\n');\n          } else
{\n          parserInput.forget();\n          }\n          }\n          if (e) { return new(tree.Element)(c,
e, e instanceof tree.Variable, index, fileInfo); }\n          },\n          //\n          // Combinators combine elements
together, in a Selector.\n          //\n          // Because our parser isn't white-space sensitive, special care\n          //
has to be taken,
when parsing the descendant combinator, ` `,\n          // as it's an empty space. We have to check the previous
character\n          // in the input, to see if it's a ` ` character. More info on how\n          // we deal with this in
*combinator.js*.\n          //\n          combinator: function () {\n          let c = parserInput.currentChar();\n
          if (c === '/') {\n          parserInput.save();\n          const slashedCombinator = parserInput.$re(/^\\[a-
z]+\\\/i); \n          if (slashedCombinator) {\n          parserInput.forget();\n          return
new(tree.Combinator)(slashedCombinator);\n          }\n          parserInput.restore();\n          }\n
          if (c === '>' || c === '+' || c === '~' || c === '|' || c === '^') {\n          parserInput.i++; \n          if (c ===
'^' && parserInput.currentChar() === '^') {\n          c = '^';\n          parserInput.i++; \n          }\n          while (parserInput.isWhitespace()) {\n
parserInput.i++; }\n          return new(tree.Combinator)(c);\n          } else if (parserInput.isWhitespace(-1))
{\n          return new(tree.Combinator)(' '); \n          } else {\n          return
new(tree.Combinator)(null);\n          }\n          },\n          //\n          // A CSS Selector\n          // with less
extensions e.g. the ability to extend and guard\n          //\n          // .class > div + h1\n          // li a:hover\n
//\n          // Selectors are made out of one or more Elements, see above.\n          //\n          selector: function
(isLess) {\n          const index = parserInput.i;\n          let elements;\n          let extendList;\n          let
c;\n          let e;\n          let allExtends;\n
          let when;\n          let condition;\n          isLess = isLess !== false;\n          while ((isLess && (extendList
= this.extendList)) || (isLess && (when = parserInput.$str('when'))) || (e = this.element())) {\n          if (when) {\n
          condition = expect(this.conditions, 'expected condition');\n          } else if (condition) {\n
          error('CSS guard can only be used at the end of selector');\n          } else if (extendList) {\n
if (allExtends) {\n          allExtends = allExtends.concat(extendList);\n          } else {\n
          allExtends = extendList;\n          }\n          } else {\n          if (allExtends) {\n
error('Extend can only be used at the end of selector'); }\n          c = parserInput.currentChar();\n
          if (elements) {\n          elements.push(e);\n          } else {\n          elements = [ e ];\n          }\n
          e = null;\n          }\n          if (c === '{' || c === '}' || c === ';' || c === ':' || c === ')') {\n
break;\n          }\n          }\n          if (elements) { return new(tree.Selector)(elements, allExtends,
condition, index, fileInfo); }\n          if (allExtends) { error('Extend must be used to extend a selector, it cannot be
used on its own'); }\n          },\n          selectors: function () {\n          let s;\n          let selectors;\n
while (true) {\n          s = this.selector();\n          if (!s) {\n          break;\n          }\n

```

```

    if (selectors) {\n
      selectors.push(s);\n
    } else {\n
      selectors
    }\n
    = [ s ];\n
    parserInput.commentStore.length = 0;\n
    if (s.condition &&\n
    selectors.length > 1) {\n
      error("Guards are only currently allowed on a single selector.");\n
    }\n
    if (!parserInput.$char(',')) { break; }\n
    if (s.condition) {\n
      error("Guards\n
    are only currently allowed on a single selector.");\n
    }\n
    parserInput.commentStore.length =\n
    0;\n
    }\n
    return selectors;\n
  },\n
  attribute: function () {\n
    if\n
    (!parserInput.$char('=')) { return; }\n
    const entities = this.entities;\n
    let key;\n
    let val;\n
    let op;\n
    //\n
    // case-insensitive flag\n
    // e.g. [attr operator value i]\n
    //\n
    let\n
    cif;\n
    if (!(key = entities.variableCurly())) {\n
      key = expect(/^(?:[_A-Za-z0-9-\n
    \\*]*\\)?(?:[_A-Za-z0-9-]\\\\\\\\.+)/);\n
    }\n
    op = parserInput.$re(/^([~*]$)?=);\n
    if (op)\n
    {\n
      val = entities.quoted() || parserInput.$re(/^([0-9]+%)/) || parserInput.$re(/^([\\w-]+)/) ||\n
    entities.variableCurly();\n
    if (val) {\n
      cif = parserInput.$re(/^([iIsS])/);\n
    }\n
    }\n
    expectChar('');\n
    return new(tree.Attribute)(key, op, val, cif);\n
  },\n
  //\n
  // The `block` rule is used by `ruleset` and `mixin.definition`. It's a wrapper around the\n
  `primary` rule, with added `{}`.\n
  //\n
  block: function () {\n
    let content;\n
    if\n
    (parserInput.$char('{') && (content = this.primary()) && parserInput.$char('}')) {\n
      return content;\n
    }\n
    },\n
    blockRuleset: function() {\n
      let block =\n
    this.block();\n
    if (block) {\n
      block = new tree.RuleSet(null, block);\n
    }\n
    return block;\n
  },\n
  detachedRuleset: function() {\n
    let argInfo;\n
    let params;\n
    let variadic;\n
    parserInput.save();\n
    if (parserInput.$re(/^#[#]\/)\/) {\n
      /**\n
    * DR args currently only implemented for each() function, and not\n
    * yet settable as `@dr:\n
    #(@arg) {}`\n
    * This should be done when DRs are merged with mixins.\n
    * See:\n
    https://github.com/less/less-meta/issues/16\n
    */\n
    argInfo = this.mixin.args(false);\n
    params = argInfo.args;\n
    variadic = argInfo.variadic;\n
    if (!parserInput.$char('')) {\n
      parserInput.restore();\n
      return;\n
    }\n
    }\n
    const blockRuleset = this.blockRuleset();\n
    if\n
    (blockRuleset) {\n
      parserInput.forget();\n
      if (params) {\n
        return new\n
    tree.mixin.Definition(null, params, blockRuleset, null, variadic);\n
      }\n
      return new\n
    tree.DetachedRuleset(blockRuleset);\n
    }\n
    parserInput.restore();\n
  },\n
  //\n
  // div, .class, body > p { ... }\n
  //\n
  ruleset: function () {\n
    let selectors;\n
    let rules;\n
    let debugInfo;\n
    parserInput.save();\n
    if (context.dumpLineNumbers) {\n
      debugInfo = getDebugInfo(parserInput.i);\n
    }\n
    }\n
    selectors = this.selectors();\n
    if (selectors && (rules = this.block())) {\n
      parserInput.forget();\n
      const ruleset = new(tree.RuleSet)(selectors, rules, context.strictImports);\n
      if\n
      (context.dumpLineNumbers) {\n
        ruleset.debugInfo = debugInfo;\n
      }\n
      return ruleset;\n
    } else {\n
      parserInput.restore();\n
    }\n
    },\n
    declaration:\n
    function () {\n
      let name;\n
      let value;\n
      const index = parserInput.i;\n
      let\n
    hasDR;\n
      const c = parserInput.currentChar();\n
      let important;\n
      let merge;\n
      let isVariable;\n
      if (c === '.' || c === '#' || c === '&' || c === ':') { return; }\n
      }\n
      parserInput.save();\n
      name = this.variable() || this.ruleProperty();\n
      if (name) {\n
        isVariable = typeof name\n
    === 'string';\n
        if (isVariable) {\n
          value = this.detachedRuleset();\n
          if\n
          (value) {\n
            hasDR = true;\n
          }\n
        }\n
      }\n
      parserInput.commentStore.length = 0;\n
      if (!value) {\n
        // a name returned by\n
    this.ruleProperty() is always an array of the form:\n
    // [string-1, ..., string-n, \"\"] or [string-1, ..., string-n, \"+\"]\n
    // where each item is a tree.Keyword or tree.Variable\n
        merge =\n
    !isVariable && name.length > 1 && name.pop().value;\n
        // Custom property values get permissive

```

```

parsing\n          if (name[0].value && name[0].value.slice(0, 2) === '--') {\n
                    value = this.permissiveValue();\n                      }\n                      // Try to store values as anonymous\n
                    // If we need the value later we'll re-parse it in ruleset.parseValue\n                      else {\n
value = this.anonymousValue();\n                      }\n                      if (value) {\n
parserInput.forget();\n                      // anonymous values absorb the end ';' which is required for them to work\n
                    return new(tree.Declaration)(name, value, false, merge, index, fileInfo);\n                      }\n\n
                    if (!value) {\n                      value = this.value();\n                      }\n                      if (value) {\n
important = this.important();\n                      } else if (isVariable) {\n                      // As a last resort, try
permissiveValue\n
                    value = this.permissiveValue();\n                      }\n                      }\n\n                      if (value &&
(this.end() || hasDR)) {\n                      parserInput.forget();\n                      return new(tree.Declaration)(name,
value, important, merge, index, fileInfo);\n                      }\n                      else {\n                      parserInput.restore();\n
                    }\n                      } else {\n                      parserInput.restore();\n                      }\n                      },\n
anonymousValue: function () {\n                      const index = parserInput.i;\n                      const match =
parserInput.$re(/^([\^#@\\$+\\|\"*\"(;{}-]*);/);\n                      if (match) {\n                      return
new(tree.Anonymous)(match[1], index);\n                      }\n                      },\n                      /**\n                      * Used for custom
properties, at-rules, and variables (as fallback)\n                      * Parses almost anything inside
of { } [] () \" \" blocks\n                      * until it reaches outer-most tokens.\n                      * \n                      * First, it will try to parse
comments and entities to reach\n                      * the end. This is mostly like the Expression parser except no\n                      *
math is allowed.\n                      */\n                      permissiveValue: function (untilTokens) {\n                      let i;\n                      let e;\n
                    let done;\n                      let value;\n                      const tok = untilTokens || ';';\n                      const index =
parserInput.i;\n                      const result = [];\n                      function testCurrentChar() {\n                      const char =
parserInput.currentChar();\n                      if (typeof tok === 'string') {\n                      return char === tok;\n
                    } else {\n                      return tok.test(char);\n                      }\n                      }\n                      if (testCurrentChar()) {\n
                    return;\n
                    }\n                      value = [];\n                      do {\n                      e = this.comment();\n                      if (e) {\n
                    value.push(e);\n                      continue;\n                      }\n                      e = this.entity();\n                      if (e) {\n
                    value.push(e);\n                      }\n                      } while (e);\n                      done = testCurrentChar();\n                      if
(value.length > 0) {\n                      value = new(tree.Expression)(value);\n                      if (done) {\n
                    return value;\n                      }\n                      else {\n                      result.push(value);\n                      }\n                      //
                    Preserve space before $parseUntil as it will not\n                      if (parserInput.prevChar() === ' ') {\n
                    result.push(new tree.Anonymous(' ', index));\n                      }\n                      }\n                      parserInput.save();\n
                    value = parserInput.$parseUntil(tok);\n                      if (value) {\n                      if (typeof value === 'string')\n
                    {\n                      error(`Expected '${value}', 'Parse');\n                      }\n                      if (value.length === 1 &&
                    value[0] === ' ') {\n                      parserInput.forget();\n                      return new tree.Anonymous(' ', index);\n
                    }\n                      let item;\n                      for (i = 0; i < value.length; i++) {\n                      item = value[i];\n
                    if (Array.isArray(item)) {\n                      // Treat actual quotes as normal quoted values\n
                    result.push(new tree.Quoted(item[0], item[1], true, index, fileInfo));\n                      }\n                      else {\n
                    if (i === value.length - 1) {\n                      item = item.trim();\n                      }\n
                    // Treat like quoted values, but replace vars like unquoted expressions\n                      const
                    quote = new tree.Quoted(`\"`, item, true, index, fileInfo);\n                      quote.variableRegex = /@([\w-]+)/g;\n
                    quote.propRegex = /\$([\w-]+)/g;\n                      result.push(quote);\n                      }\n
                    }\n                      parserInput.forget();\n                      return new tree.Expression(result, true);\n                      }\n
                    parserInput.restore();\n                      },\n                      //\n                      // An @import atrule\n                      //\n                      // @import
                    \"lib\";\n                      //\n                      // Depending on our environment, importing is done differently:\n                      // In the
                    browser, it's an XHR request, in Node, it would be a\n                      // file-system operation. The function used for
                    importing is\n                      // stored in `import`, which we pass

```

```

to the Import constructor.\n      /\n      'import': function () {\n          let path;\n          let features;\n          const index = parserInput.i;\n          const dir = parserInput.$re(/^@import\s+/);\n          if (dir) {\n              const options = (dir ? this.importOptions() : null) || {};\n              if ((path = this.entities.quoted() ||\n                  this.entities.url())) {\n                  features = this.mediaFeatures();\n                  if (!parserInput.$char(';')) {\n                      parserInput.i = index;\n                      error('missing semi-colon or unrecognised media features\non import');\n                  }\n                  features = features && new(tree.Value)(features);\n                  return new(tree.Import)(path, features, options, index, fileInfo);\n              }\n              else {\n                  parserInput.i =\n                      index;\n                      error('malformed import statement');\n                  }\n              },\n              importOptions: function() {\n                  let o;\n                  const options = {};\n                  let optionName;\n                  let value;\n                  // list of options, surrounded by parens\n                  if (!parserInput.$char('(')) { return null; }\n                  do {\n                      o = this.importOption();\n                      if (o) {\n                          optionName = o;\n                          value = true;\n                          switch (optionName) {\n                              case 'css':\n                                  optionName = 'less';\n                                  value = false;\n                                  break;\n                              case 'once':\n                                  optionName = 'multiple';\n                                  value = false;\n                                  break;\n                              }\n                              options[optionName] = value;\n                              if (!parserInput.$char(','))\n                                  { break; }\n                          } while (o);\n                          expectChar(',')\n                          return options;\n                      },\n                      importOption: function() {\n                          const opt =\n                              parserInput.$re(/^(less|css|multiple|once|inline|reference|optional)/);\n                          if (opt) {\n                              return\n                                  opt[1];\n                              },\n                              mediaFeature: function () {\n                                  const entities = this.entities;\n                                  const nodes = [];\n                                  let e;\n                                  let p;\n                                  parserInput.save();\n                                  do {\n                                      e\n                                      = entities.keyword() || entities.variable() || entities.mixinLookup();\n                                      if (e) {\n                                          nodes.push(e);\n                                          } else if (parserInput.$char('(')) {\n                                              p = this.property();\n                                              e = this.value();\n                                              if (parserInput.$char('')) {\n                                                  if (p && e) {\n                                                      nodes.push(new(tree.Paren)(new(tree.Declaration)(p, e, null, null,\nparserInput.i, fileInfo, true)));\n                                                  } else if (e) {\n                                                      nodes.push(new(tree.Paren)(e));\n                                                  } else {\n                                                      error('badly formed media feature\ndefinition');\n                                                  }\n                                                  }\n                                                  } while (e);\n                                                  parserInput.forget();\n                                                  if (nodes.length >\n0) {\n                                  return new(tree.Expression)(nodes);\n                              }\n                              },\n                              mediaFeatures: function ()\n                                  {\n                                      const entities\n                                      = this.entities;\n                                      const features = [];\n                                      let e;\n                                      do {\n                                          e =\n                                          this.mediaFeature();\n                                          if (e) {\n                                              features.push(e);\n                                              if\n                                              (!parserInput.$char(',')) { break; }\n                                          } else {\n                                              e = entities.variable() ||\n                                              entities.mixinLookup();\n                                              if (e) {\n                                                  features.push(e);\n                                                  if\n                                                  (!parserInput.$char(',')) { break; }\n                                                  }\n                                                  } while (e);\n                                                  return\n                                                  features.length > 0 ? features : null;\n                                                  },\n                                                  media: function () {\n                                                      let features;\n                                                      let\n                                                      rules;\n                                                      let media;\n                                                      let debugInfo;\n                                                      const index = parserInput.i;\n                                                      if\n                                                      (context.dumpLineNumbers) {\n                                                          debugInfo = getDebugInfo(index);\n                                                          }\n                                                          parserInput.save();\n                                                          if (parserInput.$str('@media')) {\n                                                              features =\n                                                              this.mediaFeatures();\n                                                              rules = this.block();\n                                                              if (!rules) {\n                                                                  error('media\ndefinitions require block statements after any features');\n                                                              }\n                                                              parserInput.forget();\n                                                              media = new(tree.Media)(rules, features, index, fileInfo);\n                                                              media.debugInfo = debugInfo;\n                                                              }\n                                                              return media;\n                                                              },\n                                                              parserInput.restore();\n                                                              },\n                                                              /\n                                                              // A @plugin directive, used to import plugins\ndynamically.\n                                                              /\n                                                              // @plugin (args) "lib";\n                                                              /\n                                                              plugin: function () {\n                                                                  let\n                                                                  path;\n
```

```

let args;\n          let options;\n          const index = parserInput.i;\n          const dir =
parserInput.$re(/^@plugin\\s+\/); \n          if (dir) {\n          args = this.pluginArgs(); \n          if
(args) {\n          options = {\n          pluginArgs: args,\n          isPlugin: true\n
}; \n          } \n          else {\n          options = { isPlugin: true }; \n          } \n          }
if ((path = this.entities.quoted() || this.entities.url())) {\n          if (!parserInput.$char(';')) {\n
parserInput.i = index;\n          error('missing semi-colon on @plugin'); \n          } \n          }
return new(tree.Import)(path, null, options, index, fileInfo);\n          } \n          else {\n
parserInput.i = index;\n          error('malformed @plugin statement'); \n          } \n          } \n
}, \n          pluginArgs: function() {\n          // list of options, surrounded by parens \n
parserInput.save(); \n          if (!parserInput.$char('(')) {\n          parserInput.restore(); \n          return
null; \n          } \n          const args = parserInput.$re(/^\\s*([^\n;]+)\\s*\/); \n          if (args[1]) {\n
parserInput.forget(); \n          return args[1].trim(); \n          } \n          else { \n
parserInput.restore(); \n          return null; \n          } \n          }, \n          // \n          // A CSS AtRule \n
// \n          // @charset "utf-8"; \n          // \n          atrule: function () {\n          const index =
parserInput.i;\n          let name;\n
          let value;\n          let rules;\n          let nonVendorSpecificName;\n          let hasIdentifier;\n
          let hasExpression;\n          let hasUnknown;\n          let hasBlock = true;\n          let isRooted =
true; \n          if (parserInput.currentChar() !== '@') { return; } \n          value = this['import']() ||
this.plugin() || this.media(); \n          if (value) {\n          return value; \n          } \n          }
parserInput.save(); \n          name = parserInput.$re(/^@[a-z-]+\/); \n          if (!name) { return; } \n          }
nonVendorSpecificName = name; \n          if (name.charAt(1) == '-' && name.indexOf('-', 2) > 0) {\n
nonVendorSpecificName = `@${name.slice(name.indexOf('-', 2) + 1)}`; \n          } \n          } \n          switch
(nonVendorSpecificName) {\n          case '@charset': \n          hasIdentifier
= true; \n          hasBlock = false; \n          break; \n          case '@namespace': \n
hasExpression = true; \n          hasBlock = false; \n          break; \n          case '@keyframes': \n
case '@counter-style': \n          hasIdentifier = true; \n          break; \n          case
'@document': \n          case '@supports': \n          hasUnknown = true; \n          isRooted =
false; \n          break; \n          default: \n          hasUnknown = true; \n          break; \n          }
} \n          parserInput.commentStore.length = 0; \n          if (hasIdentifier) {\n          value =
this.entity(); \n          if (!value) {\n          error(`expected ${name} identifier`); \n          } \n          }
} else if (hasExpression) {\n          value = this.expression(); \n          if (!value) {\n
error(`expected ${name} expression`); \n          } \n          } else if (hasUnknown) {\n
value = this.permissiveValue(/^[{;}/]); \n          hasBlock = (parserInput.currentChar() === '{'); \n          if
(!value) {\n          if (!hasBlock && parserInput.currentChar() !== ';') {\n          error(`${name}
rule is missing block or ending semi-colon`); \n          } \n          } \n          } else if (!value.value)
{\n          value = null; \n          } \n          } \n          } \n          if (hasBlock) {\n          rules =
this.blockRuleset(); \n          } \n          } \n          if (rules || (!hasBlock && value && parserInput.$char(';'))) {\n
parserInput.forget(); \n
          return new(tree.AtRule)(name, value, rules, index, fileInfo, \n          context.dumpLineNumbers
? getDebugInfo(index) : null, \n          isRooted \n          ); \n          } \n          } \n          }
parserInput.restore('at-rule options not recognised'); \n          }, \n          // \n          // A Value is a comma-
delimited list of Expressions \n          // \n          // font-family: Baskerville, Georgia, serif; \n          // \n          //
In a Rule, a Value represents everything after the `:` \n          // and before the `;` \n          // \n          // value:
function () {\n          let e;\n          const expressions = [];\n          const index = parserInput.i;\n          }
do {\n          e = this.expression(); \n          if (e) {\n          expressions.push(e); \n          } \n          }
if (!parserInput.$char(';')) { break; } \n          } \n          } while (e); \n          if (expressions.length > 0) {\n
return
new(tree.Value)(expressions, index); \n          } \n          }, \n          important: function () {\n          if

```

```

(parserInput.currentChar() === '!') {\n          return parserInput.$re(/^! *important/);\n        }\n    },\n    sub: function () {\n        let a;\n        let e;\n        parserInput.save();\n        if\n    (parserInput.$char('(')) {\n        a = this.addition();\n        if (a && parserInput.$char('(')) {\n            parserInput.forget();\n            e = new(tree.Expression)([a]);\n            e.parens = true;\n            return e;\n        }\n        parserInput.restore('Expected \\('\\)\\)');\n        return;\n    }\n    parserInput.restore();\n\n    },\n    multiplication: function () {\n        let m;\n        let a;\n        let op;\n        let\n    operation;\n        let isSpaced;\n        m = this.operand();\n        if (m) {\n            isSpaced =\n    parserInput.isWhitespace(-1);\n            while (true) {\n                if (parserInput.peek(/^\\|\\|/*\\|\\|/)) {\n                    break;\n                }\n                parserInput.save();\n                op = parserInput.$char('/')\n    || parserInput.$char('*') || parserInput.$str('/');\n                if (!op) {\n                    parserInput.forget();\n                    break;\n                }\n                a = this.operand();\n                if (!a) {\n                    parserInput.restore();\n                    break;\n                }\n                parserInput.forget();\n                m.parensInOp = true;\n                a.parensInOp = true;\n                operation = new(tree.Operation)(op,\n    [operation || m, a], isSpaced);\n                isSpaced = parserInput.isWhitespace(-1);\n            }\n            return operation || m;\n        }\n    },\n    addition: function () {\n        let m;\n        let a;\n        let op;\n        let operation;\n        let isSpaced;\n        m = this.multiplication();\n        if\n    (m) {\n            isSpaced = parserInput.isWhitespace(-1);\n            while (true) {\n                op =\n    parserInput.$re(/^\\|\\|/*\\|\\|/ || (!isSpaced && (parserInput.$char('+') || parserInput.$char('-')));\n                if\n    (!op) {\n                    break;\n                }\n                a = this.multiplication();\n                if (!a)\n    {\n                    break;\n                }\n                m.parensInOp = true;\n                a.parensInOp = true;\n                operation = new(tree.Operation)(op, [operation || m, a], isSpaced);\n                isSpaced = parserInput.isWhitespace(-1);\n            }\n            return operation || m;\n        }\n    },\n    conditions: function () {\n        let a;\n        let b;\n        const index = parserInput.i;\n        let condition;\n        a = this.condition(true);\n        if (a) {\n            while (true) {\n                if (!parserInput.peek(/^,\\|s*(not\\|s*)?\\|\\|/ || !parserInput.$char(',')) {\n                    break;\n                }\n                b = this.condition(true);\n                if (!b) {\n                    break;\n                }\n                condition = new(tree.Condition)('or', condition || a, b, index);\n            }\n            return condition || a;\n        }\n    },\n    condition: function (needsParens) {\n        let\n    result;\n        let logical;\n        let next;\n        function or() {\n            return\n    parserInput.$str('or');\n        }\n        result = this.conditionAnd(needsParens);\n        if (!result) {\n            return ;\n        }\n        logical = or();\n        if (logical) {\n            next =\n    this.condition(needsParens);\n            if (next) {\n                result = new(tree.Condition)(logical, result,\n    next);\n            } else {\n                return ;\n            }\n        }\n        return result;\n    },\n    conditionAnd: function (needsParens) {\n        let\n    result;\n        let logical;\n        let\n    next;\n        const self\n    = this;\n        function insideCondition() {\n            const cond = self.negatedCondition(needsParens) ||\n    self.parenthesisCondition(needsParens);\n            if (!cond && !needsParens) {\n                return\n    self.atomicCondition(needsParens);\n            }\n            return cond;\n        }\n        function\n    and() {\n            return parserInput.$str('and');\n        }\n        result = insideCondition();\n        if (!result) {\n            return ;\n        }\n        logical = and();\n        if (logical) {\n            next =\n    this.conditionAnd(needsParens);\n            if (next) {\n                result =\n    new(tree.Condition)(logical, result, next);\n            } else {\n                return ;\n            }\n        }\n        return result;\n    },\n    negatedCondition:\n    function (needsParens) {\n        if (parserInput.$str('not')) {\n            const result =\n    this.parenthesisCondition(needsParens);\n            if (result) {\n                result.negate = !result.negate;\n            }\n        }\n        return result;\n    },\n    parenthesisCondition: function (needsParens)\n    {\n        function tryConditionFollowedByParenthesis(me) {\n            let body;\n
```



```

parserInput.save();\n          body = me.condition(needsParens);\n          if (!body) {\nparserInput.restore();\n          return ;\n          }\n          if (!parserInput.$char('')) {\nparserInput.restore();\n          return ;\n          }\n          parserInput.forget();\nreturn body;\n    }\n    let body;\n    parserInput.save();\n    if (!parserInput.$str('(')) {\nparserInput.restore();\n    return ;\n    }\n    body =\ntryConditionFollowedByParenthesis(this);\n    if (body) {\n    parserInput.forget();\nreturn body;\n    }\n    body = this.atomicCondition(needsParens);\n    if (!body) {\nparserInput.restore();\n    return ;\n    }\n    if (!parserInput.$char('')) {\nparserInput.restore(' expected ') got '${parserInput.currentChar()}';\n    return ;\n    }\nparserInput.forget();\n    return body;\n  },\n  atomicCondition: function (needsParens) {\n    const entities = this.entities;\n    const index = parserInput.i;\n    let a;\n    let b;\n    let c;\n    let op;\n    function cond() {\nreturn this.addition() || entities.keyword() || entities.quoted() || entities.mixinLookup();\n    }\n    cond\n= cond.bind(this);\n    a = cond();\n    if (a) {\n    if (parserInput.$char('>')) {\n    if (parserInput.$char('=')) {\n      op = '>=';\n    } else {\n      op = '>';\n    }\n    } else {\n    if (parserInput.$char('<')) {\n      if (parserInput.$char('='))\n      {\n        op = '<=';\n      } else {\n        op = '<';\n      }\n    }\n    else {\n    if (parserInput.$char('=')) {\n      if (parserInput.$char('>'))\n      {\n        op = '=>';\n      } else if (parserInput.$char('<')) {\n        op = '=<';\n      }\n    } else {\n      op = '=';\n    }\n    }\n    }\n    if (op) {\nb = cond();\n    if (b) {\n      c = new(tree.Condition)(op, a, b, index, false);\n    } else {\n      error('expected expression');\n    }\n    } else {\n      c =\nnew(tree.Condition)('=', a, new(tree.Keyword)('true'), index, false);\n    }\n    return c;\n  }\n  },\n  // An operand is anything that can be part of an operation,\n  // such as a\n  Color, or a Variable\n  //\n  operand: function () {\n    const entities = this.entities;\n    let negate;\n    if (parserInput.peek(/^-[\\$\\(\\)/]) {\n    negate = parserInput.$char('-');\n    }\n    let o = this.sub() || entities.dimension() ||\nentities.color() || entities.variable() ||\nentities.property() || entities.call() ||\nentities.quoted(true) || entities.colorKeyword() ||\nentities.mixinLookup();\n    if (negate) {\no.parensInOp = true;\n    o = new(tree.Negative)(o);\n    }\n    return o;\n  },\n  // Expressions either represent mathematical operations,\n  // or white-space delimited\n  Entities.\n  //\n  // 1px solid black\n  // @var * 2\n  //\n  expression: function () {\n    const entities = [];\n    let e;\n    let delim;\n    const index = parserInput.i;\n    do\n    {\n      e = this.comment();\n      if (e) {\n        entities.push(e);\n      }\n      continue;\n    } while (e = this.addition() || this.entity());\n    if (e instanceof\n    tree.Comment) {\n      e = null;\n    }\n    if (e) {\n      entities.push(e);\n      // operations do not allow keyword \"^\" dimension (e.g. small/20px) so we support that here\n      if (!parserInput.peek(/^\\[\\/*\\]/)) {\n        delim = parserInput.$char('/');\n        if\n        (delim) {\n          entities.push(new(tree.Anonymous)(delim, index));\n        }\n      }\n    }\n    } while (e);\n    if (entities.length > 0) {\n      return\n      new(tree.Expression)(entities);\n    }\n    },\n    property: function () {\n      const name =\n      parserInput.$re(/^\\(\\*?-?[a-zA-Z0-9-]+\\)s*/);\n      if (name) {\n        return name[1];\n      }\n    },\n    ruleProperty: function () {\n      let name = [];\n      const index = [];\n      let s;\n      let k;\n      parserInput.save();\n      const simpleProperty = parserInput.$re(/^\\[a-zA-Z0-9-\n      ]+\\)s*/);\n      if (simpleProperty) {\n        name = [new(tree.Keyword)(simpleProperty[1])];\n      }\n    }\n  }\n}

```

```

    parserInput.forget();\n                return name;\n                }\n\n                function match(re) {\n
const i = parserInput.i;\n                const
chunk = parserInput.$re(re);\n                if (chunk) {\n                index.push(i);\n                return
name.push(chunk[1]);\n                }\n                }\n\n                match(/^(\\|*?)/);\n                while (true) {\n
    if (!match(/^(?:(\\w-+)|(?:[\\@\\$][\\|\\w-+\\|}))) {\n                break;\n                }\n                }\n\n
    if ((name.length > 1) && match(/^(?:\\|+_\\|+)?\\|s*:/)) {\n                parserInput.forget();\n                }\n                // at
last, we have the complete match now. move forward,\n                // convert name particles to tree objects and
return;\n                if (name[0] === '|') {\n                name.shift();\n                index.shift();\n
}\n                for (k = 0; k < name.length; k++) {\n                s = name[k];\n                name[k] =
(s.charAt(0) !== '@' && s.charAt(0)
!=='$') ?\n                new(tree.Keyword)(s) :\n                (s.charAt(0) === '@' ?\n
new(tree.Variable)(`@${s.slice(2, -1)}`, index[k], fileInfo) :\n                new(tree.Property)(`${s.slice(2, -
1)}`, index[k], fileInfo));\n                }\n                return name;\n                }\n                parserInput.restore();\n
}\n                }\n                };\n\nParser.serializeVars = vars => {\n    let s = '';\n    for (const name in vars) {\n        if
(Object.hasOwnProperty.call(vars, name)) {\n            const value = vars[name];\n            s += `{{(name[0] === '@')
? ': '@' + name}: ${value}${(String(value).slice(-1) === ';' ? '' : ';')}}`;\n        }\n    }\n    return s;\n};\n\nexport
default Parser;\n", "import Anonymous from './tree/anonymous';\nimport Keyword from
'./tree/keyword';\n\nfunction boolean(condition) {\n    return condition ? Keyword.True :
Keyword.False;\n}\n\n/**\n
* Functions with evalArgs set to false are sent context\n * as the first argument.\n */\n\nfunction If(context, condition,
trueValue, falseValue) {\n    return condition.eval(context) ? trueValue.eval(context) : (falseValue ?
falseValue.eval(context) : new Anonymous);\n}\n\nif.evalArgs = false;\n\nfunction isdefined(context, variable) {\n
try {\n    variable.eval(context);\n    return Keyword.True;\n    } catch (e) {\n    return Keyword.False;\n
}\n}\n\nisdefined.evalArgs = false;\n\nexport default { isdefined, boolean, 'if': If;\n}, "import Dimension from
'./tree/dimension';\nimport Color from './tree/color';\nimport Quoted from './tree/quoted';\nimport Anonymous
from './tree/anonymous';\nimport Expression from './tree/expression';\nimport Operation from
'./tree/operation';\n\nlet colorFunctions;\n\nfunction clamp(val) {\n    return Math.min(1, Math.max(0,
val));\n}\n\nfunction hsla(origColor, hsl) {\n    const color = colorFunctions.hsla(hsl.h,
hsl.s, hsl.l, hsl.a);\n    if (color) {\n        if (origColor.value && \n        /^(rgb|hsl)/.test(origColor.value)) {\n
color.value = origColor.value;\n        } else {\n            color.value = 'rgb';\n        }\n        return color;\n
}\n}\n\nfunction toHSL(color) {\n    if (color.toHSL) {\n        return color.toHSL();\n    } else {\n        throw new
Error('Argument cannot be evaluated to a color');\n    }\n}\n\nfunction toHSV(color) {\n    if (color.toHSV) {\n
return color.toHSV();\n    } else {\n        throw new Error('Argument cannot be evaluated to a color');\n
}\n}\n\nfunction number(n) {\n    if (n instanceof Dimension) {\n        return parseFloat(n.unit.is('%') ? n.value / 100
: n.value);\n    } else if (typeof n === 'number') {\n        return n;\n    } else {\n        throw {\n            type:
'Argument',\n            message: 'color functions take numbers as parameters'\n        };\n    }\n}\n\nfunction scaled(n,
size) {\n    if (n instanceof
Dimension && n.unit.is('%')) {\n        return parseFloat(n.value * size / 100);\n    } else {\n        return number(n);\n
}\n}\n\ncolorFunctions = {\n    rgb: function (r, g, b) {\n        let a = 1\n        /**\n         * Comma-less syntax\n         *
e.g. rgb(0 128 255 / 50%)\n         */\n        if (r instanceof Expression) {\n            const val = r.value\n            r =
val[0]\n            g = val[1]\n            b = val[2]\n            /**\n             * @todo - should this be normalized in\n
* function caller? Or parsed differently?\n             */\n            if (b instanceof Operation) {\n                const op =
b\n                b = op.operands[0]\n                a = op.operands[1]\n            }\n            const color =
colorFunctions.rgba(r, g, b, a);\n            if (color) {\n                color.value = 'rgb';\n                return color;\n            }\n
}\n\n    rgba: function (r, g, b, a) {\n        try {\n            if (r instanceof
Color) {\n                if (g) {\n                    a = number(g);\n                } else {\n                    a = r.alpha;\n
}\n                return new Color(r.rgb, a, 'rgba');\n            }\n            const rgb = [r, g, b].map(c => scaled(c, 255));\n
a = number(a);\n            return new Color(rgb, a, 'rgba');\n        }\n        catch (e) {\n            },\n            hsl: function (h, s,

```

```

l) {\n    let a = 1\n    if (h instanceof Expression) {\n        const val = h.value\n        h = val[0]\n        s = val[1]\n        l = val[2]\n        if (l instanceof Operation) {\n            const op = l\n            l = op.operands[0]\n            a = op.operands[1]\n        }\n    }\n    const color = colorFunctions.hsla(h, s, l, a);\n    if (color) {\n        color.value = 'hsl';\n        return color;\n    }\n},\n hsla: function (h, s, l, a) {\n    try {\n        if (h instanceof Color) {\n            if (s) {\n                a = number(s);\n            } else {\n                a = h.alpha;\n            }\n            return new Color(h.rgb, a, 'hsla');\n        }\n        let m1;\n        let m2;\n        function hue(h) {\n            h = h < 0 ? h + 1 : (h > 1 ? h - 1 : h);\n            if (h * 6 < 1) {\n                return m1 + (m2 - m1) * h * 6;\n            } else if (h * 2 < 1) {\n                return m2;\n            } else if (h * 3 < 2) {\n                return m1 + (m2 - m1) * (2 / 3 - h) * 6;\n            } else {\n                return m1;\n            }\n        }\n        h = (number(h) % 360) / 360;\n        s = clamp(number(s));\n        l = clamp(number(l));\n        a = clamp(number(a));\n        m2 = 1 <= 0.5 ? 1 * (s + 1) : 1 + s - 1 * s;\n        m1 = 1 * 2 - m2;\n        const rgb = [\n            hue(h + 1 / 3) * 255,\n            hue(h) * 255,\n            hue(h - 1 / 3) * 255\n        ];\n        a = number(a);\n        return new Color(rgb, a, 'hsla');\n    }\n    catch (e) {\n    },\n    hsv: function(h, s, v) {\n        return colorFunctions.hsva(h, s, v, 1.0);\n    },\n    hsva: function(h, s, v, a) {\n        h = ((number(h) % 360) / 360) * 360;\n        s = number(s); v = number(v); a = number(a);\n        let i;\n        let f;\n        i = Math.floor((h / 60) % 6);\n        f = (h / 60) - i;\n        const vs = [v,\n            v * (1 - s),\n            v * (1 - f * s),\n            v * (1 - (1 - f) * s)];\n        const perm = [[0, 3, 1],\n            [2, 0, 1],\n            [1, 0, 3],\n            [1, 2, 0],\n            [3, 1, 0],\n            [0, 1, 2]];\n        return colorFunctions.rgba(vs[perm[i][0]] * 255,\n            vs[perm[i][1]] * 255,\n            vs[perm[i][2]] * 255,\n            a);\n    },\n    hue: function (color) {\n        return new Dimension(toHSL(color).h);\n    },\n    saturation: function (color) {\n        return new Dimension(toHSL(color).s * 100, '%');\n    },\n    lightness: function (color) {\n        return new Dimension(toHSL(color).l * 100, '%');\n    },\n    hsvhue: function(color) {\n        return new Dimension(toHSV(color).h);\n    },\n    hsvsaturation: function (color) {\n        return new Dimension(toHSV(color).s * 100, '%');\n    },\n    hsvvalue: function (color) {\n        return new Dimension(toHSV(color).v * 100, '%');\n    },\n    red: function (color) {\n        return new Dimension(color.rgb[0]);\n    },\n    green: function (color) {\n        return new Dimension(color.rgb[1]);\n    },\n    blue: function (color) {\n        return new Dimension(color.rgb[2]);\n    },\n    alpha: function (color) {\n        return new Dimension(toHSL(color).a);\n    },\n    luma: function (color) {\n        return new Dimension(color.luma() * color.alpha * 100, '%');\n    },\n    luminance: function (color) {\n        const luminance =\n            (0.2126 * color.rgb[0] / 255) +\n            (0.7152 * color.rgb[1] / 255) +\n            (0.0722 * color.rgb[2] / 255);\n        return new Dimension(luminance * color.alpha * 100, '%');\n    },\n    saturate: function (color, amount, method) {\n        // filter: saturate(3.2);\n        // should be kept as is, so check for color\n        if (!color.rgb) {\n            return null;\n        }\n        const hsl = toHSL(color);\n        if (typeof method !== 'undefined' && method.value === 'relative') {\n            hsl.s += hsl.s * amount.value / 100;\n        } else {\n            hsl.s += amount.value / 100;\n        }\n        hsl.s = clamp(hsl.s);\n        return hsla(color, hsl);\n    },\n    desaturate: function (color, amount, method) {\n        const hsl = toHSL(color);\n        if (typeof method !== 'undefined' && method.value === 'relative') {\n            hsl.s -= hsl.s * amount.value / 100;\n        } else {\n            hsl.s -= amount.value / 100;\n        }\n        hsl.s = clamp(hsl.s);\n        return hsla(color, hsl);\n    },\n    lighten: function (color, amount, method) {\n        const hsl = toHSL(color);\n        if (typeof method !== 'undefined' && method.value === 'relative') {\n            hsl.l += hsl.l * amount.value / 100;\n        } else {\n            hsl.l += amount.value / 100;\n        }\n        hsl.l = clamp(hsl.l);\n        return hsla(color, hsl);\n    },\n    darken: function (color, amount, method) {\n        const hsl = toHSL(color);\n        if (typeof method !== 'undefined' && method.value === 'relative') {\n            hsl.l -= hsl.l * amount.value / 100;\n        } else {\n            hsl.l -= amount.value / 100;\n        }\n        hsl.l = clamp(hsl.l);\n        return hsla(color, hsl);\n    },\n    fadein: function (color, amount, method) {\n        const hsl = toHSL(color);\n    }

```

```

    if (typeof method !== 'undefined' && method.value === 'relative') {\n        hsl.a += hsl.a * amount.value /
100;\n    }\n    else {\n        hsl.a += amount.value / 100;\n    }\n    hsl.a = clamp(hsl.a);\n    return
hsla(color, hsl);\n  },\n  fadeout: function (color, amount, method) {\n    const hsl = toHSL(color);\n\n    if
(typeof method !== 'undefined' && method.value === 'relative') {\n        hsl.a -= hsl.a * amount.value / 100;\n
    }\n    else {\n        hsl.a -= amount.value / 100;\n    }\n    hsl.a = clamp(hsl.a);\n    return hsla(color,
hsl);\n  },\n  fade: function (color, amount) {\n    const hsl = toHSL(color);\n\n    hsl.a = amount.value /
100;\n    hsl.a = clamp(hsl.a);\n    return hsla(color, hsl);\n  },\n  spin: function (color, amount) {\n    const
hsl = toHSL(color);\n    const hue = (hsl.h + amount.value) % 360;\n\n    hsl.h = hue < 0 ?
360 + hue : hue;\n\n    return hsla(color, hsl);\n  },\n  //\n  // Copyright (c) 2006-2009 Hampton Catlin, Natalie
Weizenbaum, and Chris Eppstein\n  // http://sass-lang.com\n  //\n  mix: function (color1, color2, weight) {\n
if (!weight) {\n    weight = new Dimension(50);\n  }\n  const p = weight.value / 100.0;\n  const w =
p * 2 - 1;\n  const a = toHSL(color1).a - toHSL(color2).a;\n\n  const w1 = (((w * a === -1) ? w : (w + a) / (1 +
w * a)) + 1) / 2.0;\n  const w2 = 1 - w1;\n\n  const rgb = [color1.rgb[0] * w1 + color2.rgb[0] * w2,\n
color1.rgb[1] * w1 + color2.rgb[1] * w2,\n    color1.rgb[2] * w1 + color2.rgb[2] * w2];\n\n  const alpha =
color1.alpha * p + color2.alpha * (1 - p);\n\n  return new Color(rgb, alpha);\n  },\n  greyscale: function (color)
{\n    return colorFunctions.desaturate(color, new Dimension(100));\n  },\n  contrast: function (color, dark,
light, threshold)
{\n    // filter: contrast(3.2);\n    // should be kept as is, so check for color\n    if (!color.rgb) {\n        return
null;\n    }\n    if (typeof light === 'undefined') {\n        light = colorFunctions.rgb(255, 255, 255, 1.0);\n
    }\n    if (typeof dark === 'undefined') {\n        dark = colorFunctions.rgb(0, 0, 0, 1.0);\n    }\n    // Figure
out which is actually light and dark:\n    if (dark.luma() > light.luma()) {\n        const t = light;\n        light =
dark;\n        dark = t;\n    }\n    if (typeof threshold === 'undefined') {\n        threshold = 0.43;\n    } else
{\n        threshold = number(threshold);\n    }\n    if (color.luma() < threshold) {\n        return light;\n    }
else {\n        return dark;\n    }\n  },\n  // Changes made in 2.7.0 - Reverted in 3.0.0\n  // contrast: function
(color, color1, color2, threshold) {\n    // // Return
which of `color1` and `color2` has the greatest contrast with `color`\n    // // according to the standard WCAG
contrast ratio calculation.\n    // // http://www.w3.org/TR/WCAG20/#contrast-ratiodef\n    // // The threshold
param is no longer used, in line with SASS.\n    // // filter: contrast(3.2);\n    // // should be kept as is, so check
for color\n    // if (!color.rgb) {\n    //     return null;\n    // }\n    // if (typeof color1 === 'undefined') {\n    //
// color1 = colorFunctions.rgb(0, 0, 0, 1.0);\n    // }\n    // if (typeof color2 === 'undefined') {\n    //
// color2 = colorFunctions.rgb(255, 255, 255, 1.0);\n    // }\n    // var contrast1, contrast2;\n    // var luma =
color.luma();\n    // var luma1 = color1.luma();\n    // var luma2 = color2.luma();\n    // // Calculate contrast
ratios for each color\n    // if (luma > luma1) {\n    //     contrast1 = (luma + 0.05) / (luma1 + 0.05);\n    // }
else {\n    //     contrast1 = (luma1 + 0.05) / (luma + 0.05);\n    // }\n    // if (luma > luma2) {\n    //
// contrast2 = (luma + 0.05) / (luma2 + 0.05);\n    // } else {\n    //     contrast2 = (luma2 + 0.05) / (luma +
0.05);\n    // }\n    // if (contrast1 > contrast2) {\n    //     return color1;\n    // } else {\n    //     return
color2;\n    // }\n  },\n  argb: function (color) {\n    return new Anonymous(color.toARGB());\n  },\n  color:
function(c) {\n    if ((c instanceof Quoted) &&\n        (/^#[[A-Fa-f0-9]{8}|[A-Fa-f0-9]{6}|[A-Fa-f0-9]{3,4}]$/i.test(c.value))) {\n        const val = c.value.slice(1);\n        return new Color(val, undefined,
`#${val}`);\n    }\n    if ((c instanceof Color) || (c = Color.fromKeyword(c.value))) {\n        c.value =
undefined;\n        return c;\n    }\n    throw {\n        type: 'Argument',\n        message: 'argument
must be a color keyword or 3|4|6|8 digit hex e.g. #FFF'\n    };\n  },\n  tint: function(color, amount) {\n
return colorFunctions.mix(colorFunctions.rgb(255, 255, 255), color, amount);\n  },\n  shade: function(color,
amount) {\n    return colorFunctions.mix(colorFunctions.rgb(0, 0, 0), color, amount);\n  };\n}\n\nexport default
colorFunctions;\n", "import Color from '../tree/color';\n\n// Color Blending\n// ref:
http://www.w3.org/TR/compositing-1\n\nfunction colorBlend(mode, color1, color2) {\n    const ab = color1.alpha;\n
// result\n    let // backdrop\n        cb;\n\n    const as = color2.alpha;\n\n    let // source\n        cs;\n\n    let ar;\n
let cr;\n    const r = [];\n\n    ar = as + ab * (1 - as);\n    for (let i = 0; i < 3; i++) {\n        cb = color1.rgb[i] / 255;\n

```

```

cs = color2.rgb[i] / 255;\n    cr = mode(cb, cs);\n    if (ar) {\n        cr = (as * cs + ab * (cb -\n        as * (cb + cs - cr))) / ar;\n    }\n    r[i] = cr * 255;\n }\n\nreturn new Color(r, ar);\n}\n\nconst colorBlendModeFunctions = {\n  multiply:\n  function(cb, cs) {\n    return cb * cs;\n  },\n  screen: function(cb, cs) {\n    return cb + cs - cb * cs;\n  },\n  overlay: function(cb, cs) {\n    cb *= 2;\n    return (cb <= 1) ?\n      colorBlendModeFunctions.multiply(cb,\n      cs) :\n      colorBlendModeFunctions.screen(cb - 1, cs);\n  },\n  softlight: function(cb, cs) {\n    let d = 1;\n    let e = cb;\n    if (cs > 0.5) {\n      e = 1;\n      d = (cb > 0.25) ? Math.sqrt(cb)\n      : ((16 * cb - 12)\n      * cb + 4) * cb;\n    }\n    return cb - (1 - 2 * cs) * e * (d - cb);\n  },\n  hardlight: function(cb, cs) {\n    return colorBlendModeFunctions.overlay(cs, cb);\n  },\n  difference: function(cb, cs) {\n    return Math.abs(cb -\n    cs);\n  },\n  exclusion: function(cb, cs) {\n    return cb + cs - 2 * cb * cs;\n  },\n}\n\n// non-w3c functions:\n  average: function(cb, cs) {\n    return (cb + cs) / 2;\n  },\n  negation: function(cb, cs)\n  {\n    return 1 - Math.abs(cb + cs - 1);\n  }\n};\n\nfor (const f in colorBlendModeFunctions) {\n  if\n  (colorBlendModeFunctions.hasOwnProperty(f)) {\n    colorBlend[f] = colorBlend.bind(null,\n    colorBlendModeFunctions[f]);\n  }\n}\n\nexport default colorBlend;\n", "import Comment from\n'../tree/comment';\nimport Node from '../tree/node';\nimport Dimension from '../tree/dimension';\nimport Declaration\nfrom '../tree/declaration';\nimport Expression from '../tree/expression';\nimport Ruleset from '../tree/ruleset';\nimport\nSelector from '../tree/selector';\nimport Element from '../tree/element';\nimport Quote from '../tree/quoted';\nimport\nValue from '../tree/value';\n\nconst getItemsFromNode = node => {\n  // handle non-array values as an array of\n  length 1\n  // return 'undefined' if index is invalid\n  const items = Array.isArray(node.value) ?\n  node.value : Array(node);\n  return items;\n};\n\nexport default {\n  _SELF: function(n) {\n    return n;\n  },\n  '~': function(...expr) {\n    if (expr.length === 1) {\n      return expr[0];\n    }\n    return new\n  Value(expr);\n  },\n  extract: function(values, index) {\n    // (1-based index)\n    index = index.value - 1;\n    return getItemsFromNode(values)[index];\n  },\n  length: function(values) {\n    return new\n  Dimension(getItemsFromNode(values).length);\n  },\n  /**\n   * Creates a Less list of incremental values.\n   * Modeled after Lodash's range function, also exists natively in PHP\n   * @param {Dimension} [start=1]\n   * @param {Dimension} end - e.g. 10 or 10px - unit is added to output\n   * @param {Dimension} [step=1]\n   */\n  range: function(start, end, step) {\n    let from;\n    let to;\n    let stepValue = 1;\n    const list = [];\n\n    if (end) {\n      to = end;\n      from = start.value;\n      if (step) {\n        stepValue = step.value;\n      }\n    }\n    else {\n      from = 1;\n      to = start;\n    }\n\n    for (let i = from; i <= to.value; i += stepValue)\n    {\n      list.push(new Dimension(i, to.unit));\n    }\n\n    return new Expression(list);\n  },\n  each:\n  function(list, rs) {\n    const rules = [];\n    let newRules;\n    let iterator;\n\n    const tryEval = val => {\n      if (val instanceof Node) {\n        return val.eval(this.context);\n      }\n      return val;\n    };\n\n    if (list.value && !(list instanceof Quote)) {\n      if (Array.isArray(list.value)) {\n        iterator =\n        list.value.map(tryEval);\n      } else {\n        iterator = [tryEval(list.value)];\n      } else if\n      (list.ruleset) {\n        iterator = tryEval(list.ruleset).rules;\n      } else if (list.rules) {\n        iterator = list.rules.map(tryEval);\n      } else if (Array.isArray(list)) {\n        iterator = list.map(tryEval);\n      } else {\n        iterator = [tryEval(list)];\n      }\n\n      let valueName =\n      '@value';\n      let keyName = '@key';\n      let indexName = '@index';\n\n      if (rs.params) {\n        valueName = rs.params[0] && rs.params[0].name;\n        keyName = rs.params[1] && rs.params[1].name;\n        indexName = rs.params[2] && rs.params[2].name;\n        rs = rs.rules;\n      } else {\n        rs = rs.ruleset;\n      }\n\n      for (let i = 0; i < iterator.length; i++) {\n        let key;\n        let value;\n        const item =\n        iterator[i];\n\n        if (item instanceof Declaration) {\n          key = typeof item.name === 'string' ? item.name :\n          item.name[0].value;\n          value = item.value;\n        } else {\n          key = new\n          Dimension(i + 1);\n          value = item;\n        }\n\n        if (item instanceof Comment) {\n          continue;\n        }\n\n        newRules = rs.rules.slice(0);\n\n        if (valueName) {\n          newRules.push(new Declaration(valueName,\n          value,\n          false, false, this.index,\n          this.currentFileInfo));\n        }\n\n        if (indexName) {\n          newRules.push(new

```

```

Declaration(indexName,\n          new Dimension(i + 1),\n          false, false, this.index,\nthis.currentFileInfo));\n      }\n      if (keyName) {\n          newRules.push(new Declaration(keyName,\n          key,\n          false, false, this.index, this.currentFileInfo));\n      }\n      rules.push(new\nRuleset([ new(Selector)([ new Element("\\", '&') ] ),\n          newRules,\n          rs.strictImports,\nrs.visibilityInfo()\n      ));\n      }\n      return new Ruleset([ new(Selector)([ new Element("\\", '&') ] ),\n          rules,\nrs.strictImports,\n          rs.visibilityInfo()\n      ).eval(this.context);\n      }\n      }\n      ", "import Dimension from\n'../tree/dimension';\n\nconst MathHelper = (fn, unit, n) => {\n      if (!(n instanceof Dimension)) {\n          throw { type:\n'Argument', message: 'argument must be a number' };\n      }\n      if (unit == null) {\n          unit = n.unit;\n      } else {\n          n = n.unify();\n      }\n      return new Dimension(fn(parseFloat(n.value)), unit);\n      }\n\nexport default\nMathHelper;\n", "import mathHelper from './math-helper.js';\n\nconst mathFunctions = {\n      // name, unit\n      ceil:\nnull,\n      floor: null,\n      sqrt: null,\n      abs: null,\n      tan: "\n      sin: "\n      cos: "\n      atan: 'rad',\n      asin: 'rad',\n      acos: 'rad'\n      }\n\nfor (const f in mathFunctions) {\n      if (mathFunctions.hasOwnProperty(f)) {\n          mathFunctions[f]\n          = mathHelper.bind(null, Math[f], mathFunctions[f]);\n      }\n      }\n\nmathFunctions.round = (n, f) => {\n      const\nfraction = typeof f === 'undefined' ? 0 : f.value;\n      return mathHelper(num => num.toFixed(fraction), null,\n      n);\n      }\n\nexport default mathFunctions;\n", "import Dimension from './tree/dimension';\n\nimport Anonymous from\n'../tree/anonymous';\n\nimport mathHelper from './math-helper.js';\n\nconst minMax = function (isMin, args) {\n      args = Array.prototype.slice.call(args);\n      switch (args.length) {\n          case 0: throw { type: 'Argument', message:\n'one or more arguments required' };\n      }\n      let i; // key is the unit.toString() for unified Dimension values,\n      let\n      j;\n      let current;\n      let currentUnified;\n      let referenceUnified;\n      let unit;\n      let unitStatic;\n      let unitClone;\n\n      const // elems only contains original argument values.\n          order = [];\n      const values = {};\n      // value is the\n      index into the order array.\n      for (i = 0; i < args.length;\n      i++) {\n          current = args[i];\n          if (!(current instanceof Dimension)) {\n              if (Array.isArray(args[i].value))\n              {\n                  Array.prototype.push.apply(args, Array.prototype.slice.call(args[i].value));\n              }\n              continue;\n          }\n          currentUnified = current.unit.toString() === " && unitClone !== undefined ? new\n          Dimension(current.value, unitClone).unify() : current.unify();\n          unit = currentUnified.unit.toString() === " &&\n          unitStatic !== undefined ? unitStatic : currentUnified.unit.toString();\n          unitStatic = unit !== " && unitStatic\n          === undefined || unit !== " && order[0].unify().unit.toString() === " ? unit : unitStatic;\n          unitClone = unit !== "\n          && unitClone === undefined ? current.unit.toString() : unitClone;\n          j = values[""] !== undefined && unit !== "\n          && unit === unitStatic ? values[""] : values[unit];\n          if (j === undefined) {\n              if (unitStatic !== undefined\n              && unit !== unitStatic)\n              {\n                  throw { type: 'Argument', message: 'incompatible types' };\n              }\n              values[unit] =\n              order.length;\n              order.push(current);\n              continue;\n          }\n          referenceUnified =\n              order[j].unit.toString() === " && unitClone !== undefined ? new Dimension(order[j].value, unitClone).unify() :\n              order[j].unify();\n          if (isMin && currentUnified.value < referenceUnified.value ||\n              !isMin &&\n              currentUnified.value > referenceUnified.value) {\n              order[j] = current;\n          }\n      }\n      if (order.length === 1)\n      {\n          return order[0];\n      }\n      args = order.map(function (a) { return a.toCSS(this.context);\n      }).join(this.context.compress ? ', ' : ', ');\n      return new Anonymous(` ${isMin ? 'min' :\n      'max'} (${args})`);\n      }\n\nexport default {\n      min: function(...args) {\n          try {\n              return minMax(true,\n              args);\n          }\n          catch (e) {\n              }\n          },\n      max: function(...args) {\n          try {\n              return minMax(false, args);\n          }\n          catch (e) {\n              }\n          },\n      convert: function (val, unit) {\n          return\n          val.convertTo(unit.value);\n      },\n      pi: function () {\n          return new Dimension(Math.PI);\n      },\n      mod:\nfunction(a, b) {\n          return new Dimension(a.value % b.value, a.unit);\n      },\n      pow: function(x, y) {\n          if\n          (typeof x === 'number' && typeof y === 'number') {\n              x = new Dimension(x);\n              y = new\n              Dimension(y);\n          } else if (!(x instanceof Dimension) || !(y instanceof Dimension)) {\n              throw { type:\n              'Argument', message: 'arguments must be numbers' };\n          }\n          return new Dimension(Math.pow(x.value,\n          y.value), x.unit);\n      },\n      percentage: function (n) {\n          const result = mathHelper(num => num * 100, '%',

```

```

n);\n\n    return result;\n  }\n};\n", "import Quoted from './tree/quoted';\nimport Anonymous from
 './tree/anonymous';\nimport JavaScript from './tree/javascript';\n\nexport default
{\n  e: function (str) {\n    return new Quoted(`", str instanceof JavaScript ? str.evaluated : str.value, true);\n
  },\n  escape: function (str) {\n    return new Anonymous(\n      encodeURI(str.value).replace(/=/g,
'%3D').replace(/:/g, '%3A').replace(/#/g, '%23').replace(/;/g, '%3B')\n      .replace(/\\(/g, '%28').replace(/\\)/g,
'%29'));\n  },\n  replace: function (string, pattern, replacement, flags) {\n    let result = string.value;\n
replacement = (replacement.type === 'Quoted') ?\n      replacement.value : replacement.toCSS();\n    result =
result.replace(new RegExp(pattern.value, flags ? flags.value : ''), replacement);\n    return new
Quoted(string.quote || "", result, string.escaped);\n  },\n  '%': function (string /* arg, arg, ... */) {\n    const args =
Array.prototype.slice.call(arguments, 1);\n    let result = string.value;\n    for (let i = 0; i < args.length; i++)
{\n      /* jshint loopfunc:true
*/\n      result = result.replace(/%[sda]/i, token => {\n        const value = ((args[i].type === 'Quoted') &&\n
token.match(/s/i)) ? args[i].value : args[i].toCSS();\n        return token.match(/[A-Z]$/) ?
encodeURIComponent(value) : value;\n      });\n    }\n    result = result.replace(/%%/g, '%');\n    return
new Quoted(string.quote || "", result, string.escaped);\n  }\n};\n", "import Keyword from './tree/keyword';\nimport
DetachedRuleset from './tree/detached-ruleset';\nimport Dimension from './tree/dimension';\nimport Color from
 './tree/color';\nimport Quoted from './tree/quoted';\nimport Anonymous from './tree/anonymous';\nimport URL
from './tree/url';\nimport Operation from './tree/operation';\n\nconst isa = (n, Type) => (n instanceof Type) ?
Keyword.True : Keyword.False;\nconst isunit = (n, unit) => {\n  if (unit === undefined) {\n    throw { type:
'Argument', message: 'missing the required second
argument to isunit.' };
\n  }\n  unit = typeof unit.value === 'string' ? unit.value : unit;\n  if (typeof unit !==
'string') {\n    throw { type: 'Argument', message: 'Second argument to isunit should be a unit or a string.' };
\n  }\n  return (n instanceof Dimension) && n.unit.is(unit) ? Keyword.True : Keyword.False;\n};\n\nexport default {\n
  isruleset: function (n) {\n    return isa(n, DetachedRuleset);\n  },\n  iscolor: function (n) {\n    return isa(n,
Color);\n  },\n  isnumber: function (n) {\n    return isa(n, Dimension);\n  },\n  isstring: function (n) {\n
return isa(n, Quoted);\n  },\n  iskeyword: function (n) {\n    return isa(n, Keyword);\n  },\n  isurl: function (n)
{\n    return isa(n, URL);\n  },\n  ispixel: function (n) {\n    return isunit(n, 'px');\n  },\n  ispercentage:
function (n) {\n    return isunit(n, '%');\n  },\n  isem: function (n) {\n    return isunit(n, 'em');\n  },\n
  isunit,\n  unit: function (val, unit) {\n    if (!(val instanceof Dimension)) {\n      throw { type: 'Argument',\n
message: `the first argument to unit must be a number${val instanceof Operation ? '. Have you forgotten
parenthesis?' : ''}` };\n    }\n    if (unit) {\n      if (unit instanceof Keyword) {\n        unit = unit.value;\n
      } else {\n        unit = unit.toCSS();\n      }\n    } else {\n      unit = "";\n    }\n    return new
Dimension(val.value, unit);\n  },\n  'get-unit': function (n) {\n    return new Anonymous(n.unit);\n  }\n};\n", "import functionRegistry from './function-registry';\nimport functionCaller from './function-
caller';\nimport boolean from './boolean';\nimport defaultFunc from './default';\nimport color from
 './color';\nimport colorBlending from './color-blending';\nimport dataUri from './data-uri';\nimport list from
 './list';\nimport math from './math';\nimport
number from './number';\nimport string from './string';\nimport svg from './svg';\nimport types from
 './types';\n\nexport default environment => {\n  const functions = { functionRegistry, functionCaller };
\n  // register functions\n  functionRegistry.addMultiple(boolean);\n  functionRegistry.add('default',
defaultFunc.eval.bind(defaultFunc));\n  functionRegistry.addMultiple(color);\n
functionRegistry.addMultiple(colorBlending);\n  functionRegistry.addMultiple(dataUri(environment));\n
functionRegistry.addMultiple(list);\n  functionRegistry.addMultiple(math);\n
functionRegistry.addMultiple(number);\n  functionRegistry.addMultiple(string);\n
functionRegistry.addMultiple(svg(environment));\n  functionRegistry.addMultiple(types);\n\n  return
functions;\n};\n", "import Quoted from './tree/quoted';\nimport URL from './tree/url';\nimport * as utils from
 './utils';\nimport logger from './logger';\n\nexport default environment => {\n  \n  const fallback

```

```

= (functionThis, node) => new URL(node, functionThis.index,
functionThis.currentFileInfo).eval(functionThis.context); \n\n return { 'data-uri': function(mimetypeNode,
filePathNode) {\n\n if (!filePathNode) {\n\n filePathNode = mimetypeNode;\n\n mimetypeNode =
null;\n\n }\n\n let mimetype = mimetypeNode && mimetypeNode.value;\n\n let filePath =
filePathNode.value;\n\n const currentFileInfo = this.currentFileInfo;\n\n const currentDirectory =
currentFileInfo.rewriteUrls ?\n\n currentFileInfo.currentDirectory : currentFileInfo.entryPath;\n\n const
fragmentStart = filePath.indexOf('#);\n\n let fragment = '';\n\n if (fragmentStart !== -1) {\n\n fragment =
filePath.slice(fragmentStart);\n\n filePath = filePath.slice(0, fragmentStart);\n\n }\n\n const context =
utils.clone(this.context);\n\n context.rawBuffer = true;\n\n const fileManager =
environment.getFileManager(filePath,
currentDirectory, context, environment, true);\n\n if (!fileManager) {\n\n return fallback(this,
filePathNode);\n\n }\n\n let useBase64 = false;\n\n // detect the mimetype if not given\n\n if
(!mimetypeNode) {\n\n mimetype = environment.mimeLookup(filePath);\n\n if (mimetype ===
'image/svg+xml') {\n\n useBase64 = false;\n\n } else {\n\n // use base 64 unless it's an ASCII or
UTF-8 format\n\n const charset = environment.charsetLookup(mimetype);\n\n useBase64 = ['US-
ASCII', 'UTF-8'].indexOf(charset) < 0;\n\n }\n\n if (useBase64) { mimetype += ';base64'; }\n\n }\n
else {\n\n useBase64 = /;base64$/ .test(mimetype);\n\n }\n\n const fileSync =
fileManager.loadFileSync(filePath, currentDirectory, context, environment);\n\n if (!fileSync.contents) {\n
logger.warn(' Skipped data-uri embedding of
${filePath} because file not found');\n\n return fallback(this, filePathNode || mimetypeNode);\n\n }\n\n let
buf = fileSync.contents;\n\n if (useBase64 && !environment.encodeBase64) {\n\n return fallback(this,
filePathNode);\n\n }\n\n buf = useBase64 ? environment.encodeBase64(buf) :
encodeURIComponent(buf);\n\n const uri = `data:${mimetype},${buf}${fragment}`;\n\n return new
URL(new Quoted(`"${uri}"`, uri, false, this.index, this.currentFileInfo), this.index, this.currentFileInfo);\n
}};\n\n";\n\n"import Dimension from './tree/dimension';\n\nimport Color from './tree/color';\n\nimport Expression from
 './tree/expression';\n\nimport Quoted from './tree/quoted';\n\nimport URL from './tree/url';\n\n\nexport default
environment => {\n\n return { 'svg-gradient': function(direction) {\n\n let stops;\n\n let gradientDirectionSvg;\n\n
let gradientType = 'linear';\n\n let rectangleDimension = 'x="0" y="0" width="1"
height="1";\n\n const renderEnv = {compress: false};\n\n let returner;\n\n const directionValue =
direction.toCSS(renderEnv);\n\n let i;\n\n let color;\n\n let position;\n\n let positionValue;\n\n let
alpha;\n\n function throwArgumentDescriptor() {\n\n throw { type: 'Argument',\n\n message: 'svg-
gradient expects direction, start_color [start_position], [color position],..., ' +\n\n
' end_color
[end_position] or direction, color list' }; \n\n }\n\n if (arguments.length === 2) {\n\n if
(arguments[1].value.length < 2) {\n\n throwArgumentDescriptor();\n\n }\n\n stops =
arguments[1].value;\n\n } else if (arguments.length < 3) {\n\n throwArgumentDescriptor();\n\n } else {\n
stops = Array.prototype.slice.call(arguments, 1);\n\n }\n\n switch (directionValue) {\n\n case 'to
bottom':\n\n gradientDirectionSvg = 'x1="0%" y1="0%" x2="0%" y2="100%";\n\n break;\n\n case 'to
right':\n\n gradientDirectionSvg = 'x1="0%" y1="0%" x2="100%" y2="0%";\n\n break;\n\n case 'to bottom right':\n\n
gradientDirectionSvg = 'x1="0%" y1="0%" x2="100%" y2="100%";\n\n break;\n\n case 'to top right':\n\n
gradientDirectionSvg = 'x1="0%" y1="100%" x2="100%"
y2="0%";\n\n break;\n\n case 'ellipse':\n\n case 'ellipse at center':\n\n gradientType =
'radial';\n\n gradientDirectionSvg = 'cx="50%" cy="50%" r="75%";\n\n rectangleDimension =
'x="-50" y="-50" width="101" height="101";\n\n break;\n\n default:\n\n throw { type:
'Argument', message: 'svg-gradient direction must be \\to bottom\\, \\to right\\,' +\n\n
' \\to bottom
right\\, \\to top right\\ or \\ellipse at center\\' }; \n\n }\n\n returner = `<svg
xmlns="http://www.w3.org/2000/svg" viewBox="0 0 1 1"><${gradientType}Gradient id="g"
${gradientDirectionSvg}>`\n\n for (i = 0; i < stops.length; i += 1) {\n\n if (stops[i] instanceof Expression)

```



```

    {\n          color = stops[i].value[0];\n          position = stops[i].value[1];\n        } else {\n          color = stops[i];\n          position = undefined;\n        }\n        if (!(color instanceof Color) || (!(i === 0 || i + 1 === stops.length) && position === undefined) && !(position instanceof Dimension))) {\n          throwArgumentDescriptor();\n        }\n        positionValue = position ? position.toCSS(renderEnv) : i === 0 ? '0%' : '100%';\n        alpha = color.alpha;\n        returner += `<stop offset="\${positionValue}" stop-color="\${color.toRGB()}"\${alpha < 1 ? ` stop-opacity="\${alpha}"` : ""}`;\n      "/>`;}\n      returner += `</\${gradientType}Gradient><rect \${rectangleDimension} fill="url(#g)"`;\n    /></svg>`;}\n    returner = encodeURIComponent(returner);\n    return new URL(new Quoted(`\${returner}`), returner, false, this.index, this.currentFileInfo, this.index, this.currentFileInfo);\n  }};\n};\n", "import contexts from './contexts';\nimport visitor from './visitors';\nimport tree from './tree';\n\nexport default function(root, options) {\n  options = options || {};\n  let evaldRoot;\n  let variables = options.variables;\n  const evalEnv = new contexts.Eval(options);\n\n  // Allows setting variables with a hash, so:\n  // ` { color: new tree.Color('#f01') }` will become:\n  // new tree.Declaration('@color',\n  // new tree.Value([\n  // new tree.Expression([\n  // new tree.Color('#f01')\n  // ])\n  // ])\n  // )\n\n  if (typeof variables === 'object' && !Array.isArray(variables)) {\n    variables = Object.keys(variables).map(function (k) {\n      let value = variables[k];\n      if (!(value instanceof tree.Value)) {\n        if (!(value instanceof tree.Expression)) {\n          value = new tree.Expression([value]);\n        }\n        value = new tree.Value([value]);\n      }\n      return new tree.Declaration(`@\${k}`, value, false, null, 0);\n    });\n    evalEnv.frames = [new tree.Ruleset(null, variables)];\n  }\n\n  const visitors = [\n    new visitor.JoinSelectorVisitor(),\n    new visitor.MarkVisibleSelectorsVisitor(true),\n    new visitor.ExtendVisitor(),\n    new visitor.ToCSSVisitor({compress: Boolean(options.compress)})\n  ];\n\n  const preEvalVisitors = [];\n  let v;\n  let visitorIterator;\n\n  /**\n   * first() / get() allows visitors to be added while visiting\n   * \n   * @todo Add scoping for visitors just like functions for @plugin; right now they're global\n   * \n   * if (options.pluginManager) {\n   *   visitorIterator = options.pluginManager.visitor();\n   *   for (var i = 0; i < 2; i++) {\n   *     visitorIterator.first();\n   *     while ((v = visitorIterator.get())) {\n   *       if (v.isPreEvalVisitor) {\n   *         if (i === 0 || preEvalVisitors.indexOf(v) === -1) {\n   *           preEvalVisitors.push(v);\n   *         }\n   *         v.run(root);\n   *       }\n   *       else {\n   *         if (i === 0 || visitors.indexOf(v) === -1) {\n   *           if (v.isPreVisitor) {\n   *             visitors.unshift(v);\n   *           }\n   *           else {\n   *             visitors.push(v);\n   *           }\n   *         }\n   *       }\n   *     }\n   *   }\n   * }\n\n  evaldRoot = root.eval(evalEnv);\n\n  for (var i = 0; i < visitors.length; i++) {\n    visitors[i].run(evaldRoot);\n  }\n\n  // Run any remaining visitors added after eval pass\n  if (options.pluginManager) {\n    visitorIterator.first();\n    while ((v = visitorIterator.get())) {\n      if (visitors.indexOf(v) === -1 && preEvalVisitors.indexOf(v) === -1) {\n        v.run(evaldRoot);\n      }\n    }\n  }\n\n  return evaldRoot;\n};\n", /**\n * Plugin Manager\n *\n * class PluginManager {\n *   constructor(less) {\n *     this.less = less;\n *     this.visitors = [];\n *     this.preProcessors = [];\n *     this.postProcessors = [];\n *     this.installedPlugins = [];\n *     this.fileManagers = [];\n *     this.iterator = -1;\n *     this.pluginCache = {};\n *     this.Loader = new less.PluginLoader(less);\n *   }\n\n *   /**\n *    * Adds all the plugins in the array\n *    * @param {Array} plugins\n *    * \n *    addPlugins(plugins) {\n *      if (plugins) {\n *        for (let i = 0; i < plugins.length; i++) {\n *          this.addPlugin(plugins[i]);\n *        }\n *      }\n *    }\n\n *    /**\n *    * @param plugin\n *    * @param {String} filename\n *    * \n *    addPlugin(plugin, filename, functionRegistry) {\n *      this.installedPlugins.push(plugin);\n *      if (filename) {\n *        this.pluginCache[filename] = plugin;\n *      }\n *      if (plugin.install) {\n *        plugin.install(this.less, this, functionRegistry || this.less.functions.functionRegistry);\n *      }\n *    }\n\n *    /**\n *    * @param filename\n *    * \n *    get(filename) {\n *      return this.pluginCache[filename];\n *    }\n\n *    /**\n *    * Adds a visitor. The visitor object has options on itself to determine\n *    * when it should run.\n *    * @param visitor\n *    * \n *    addVisitor(visitor) {\n *      this.visitors.push(visitor);\n *    }\n\n *    /**\n *    * Adds a pre processor object\n *    * @param {object} preProcessor\n
```

```
* @param { number } priority
- guidelines 1 = before import, 1000 = import, 2000 = after import\n  */\n  addPreProcessor(preProcessor,
priority) {\n    let indexToInsertAt;\n    for (indexToInsertAt = 0; indexToInsertAt < this.preProcessors.length;
indexToInsertAt++) {\n      if (this.preProcessors[indexToInsertAt].priority >= priority) {\n        break;\n      }\n    }\n    this.preProcessors.splice(indexToInsertAt, 0, {preProcessor, priority});\n  }\n\n  /**\n   *
Adds a post processor object\n   * @param { object } postProcessor\n   * @param { number } priority - guidelines 1
= before compression, 1000 = compression, 2000 = after compression\n   */\n  addPostProcessor(postProcessor,
priority) {\n    let indexToInsertAt;\n    for (indexToInsertAt = 0; indexToInsertAt < this.postProcessors.length;
indexToInsertAt++) {\n      if (this.postProcessors[indexToInsertAt].priority >= priority) {\n        break;\n      }\n    }\n\n    this.postProcessors.splice(indexToInsertAt, 0, {postProcessor, priority});\n  }\n\n  /**\n   *\n   * @param
manager\n   */\n  addFileManager(manager) {\n    this.fileManagers.push(manager);\n  }\n\n  /**\n   *\n   * @returns { Array }\n   * @private\n   */\n  getPreProcessors() {\n    const preProcessors = [];\n    for (let i
= 0; i < this.preProcessors.length; i++) {\n      preProcessors.push(this.preProcessors[i].preProcessor);\n    }\n\n    return preProcessors;\n  }\n\n  /**\n   *\n   * @returns { Array }\n   * @private\n   */\n  getPostProcessors() {\n    const postProcessors = [];\n    for (let i = 0; i < this.postProcessors.length; i++) {\n
      postProcessors.push(this.postProcessors[i].postProcessor);\n    }\n\n    return postProcessors;\n  }\n\n  /**\n   *\n   * @returns { Array }\n   * @private\n   */\n  getVisitors() {\n    return this.visitors;\n  }\n\n  visitor()\n  {\n\n    const self = this;\n    return {\n      first: function() {\n        self.iterator = -1;\n        return
self.visitors[self.iterator];\n      },\n      get: function() {\n        self.iterator += 1;\n        return
self.visitors[self.iterator];\n      },\n    };\n  }\n\n  /**\n   *\n   * @returns { Array }\n   * @private\n   */\n  getFileManagers() {\n    return this.fileManagers;\n  }\n}\n\nlet pm;\nconst PluginManagerFactory =
function(less, newFactory) {\n  if (newFactory || !pm) {\n    pm = new PluginManager(less);\n  }\n  return
pm;\n};\n\nexport default PluginManagerFactory;\n", "use strict";\n\nfunction parseNodeVersion(version) {\n  var match = version.match(/^v(\\d{1,2})\\.?(\\d{1,2})\\.?(\\d{1,2})?(?:-[0-9A-Za-z-]+)?(?:\\+([0-9A-Za-z-]+))?$/); //
eslint-disable-line max-len\n  if (!match) {\n    throw new Error('Unable to parse: ' + version);\n  }\n\n  var res = {\n    major:
parseInt(match[1], 10),\n    minor: parseInt(match[2], 10),\n    patch: parseInt(match[3], 10),\n    pre: match[4] || "",\n    build: match[5] || "",\n  };\n\n  return res;\n}\n\nmodule.exports = parseNodeVersion;\n", "/* global window,
XMLHttpRequest\n*/\nimport AbstractFileManager from './less/environment/abstract-file-manager.js';\n\nlet
options;\nlet logger;\nlet fileCache = {};\n\n// TODOS - move log somewhere. pathDiff and doing something
similar in node. use pathDiff in the other browser file for the initial load\nconst FileManager = function()\n{\n  FileManager.prototype = Object.assign(new AbstractFileManager(), {\n    alwaysMakePathsAbsolute() {\n      return true;\n    },\n    join(basePath, laterPath) {\n      if (!basePath) {\n        return laterPath;\n      }\n      return this.extractUrlParts(laterPath, basePath).path;\n    },\n    doXHR(url, type, callback, errback) {\n      const
xhr = new XMLHttpRequest();\n      const async = options.isFileProtocol\n        ? options.fileAsync : true;\n\n      if (typeof xhr.overrideMimeType === 'function') {\n
xhr.overrideMimeType('text/css');\n      }\n      logger.debug('XHR: Getting '$url$');\n      xhr.open('GET', url,
async);\n      xhr.setRequestHeader('Accept', type || 'text/x-less, text/css; q=0.9, */*; q=0.5');\n      xhr.send(null);\n\n      function handleResponse(xhr, callback, errback) {\n        if (xhr.status >= 200 &&
xhr.status < 300) {\n          callback(xhr.responseText,\n            xhr.getResponseHeader('Last-Modified'));\n        }\n        else if (typeof errback === 'function') {\n          errback(xhr.status, url);\n        }\n      }\n\n      if
(options.isFileProtocol && !options.fileAsync) {\n        if (xhr.status === 0 || (xhr.status >= 200 && xhr.status <
300)) {\n          callback(xhr.responseText);\n        }\n        else {\n          errback(xhr.status, url);\n        }\n      }\n    }\n  })\n\n  xhr.onreadystatechange = () => {\n    if (xhr.readyState === 4) {\n      handleResponse(xhr,
callback, errback);\n    }\n  };\n\n} else {\n  handleResponse(xhr, callback, errback);\n}
```

```

}\n },\n\n supports() {\n   return true;\n },\n\n clearFileCache() {\n   fileCache = {};\n },\n\n loadFile(filename, currentDirectory, options, environment) {\n   // TODO: Add prefix support like less-node?\n   // What about multiple paths?\n   if (currentDirectory && !this.isPathAbsolute(filename)) {\n     filename = currentDirectory + filename;\n   }\n   filename = options.ext ? this.tryAppendExtension(filename, options.ext) : filename;\n   options = options || {};\n   // sheet may be set to the stylesheet for the initial load or a collection of properties including\n   // some context variables for imports\n   const hrefParts = this.extractUrlParts(filename, window.location.href);\n   const href = hrefParts.url;\n   const self = this;\n   \n   return new Promise((resolve, reject) => {\n     if (options.useFileCache && fileCache[href]) {\n       try {\n         const lessText = fileCache[href];\n         return resolve({ contents: lessText, filename: href, webInfo: { lastModified: new Date() }});\n       } catch (e) {\n         return reject({ filename: href, message: `Error loading file ${href} error was ${e.message}` });\n       }\n     }\n     self.doXHR(href, options.mime, function doXHRCallback(data, lastModified) {\n       // per file cache\n       fileCache[href] = data;\n       \n       // Use remote copy (re-parse)\n       resolve({ contents: data, filename: href, webInfo: { lastModified }});\n     }, function doXHRError(status, url) {\n       reject({ type: 'File', message: `'$ {url}' wasn't found (${status})`, href });\n     });\n   });\n}\n\nexport default (opts, log) => {\n  options = opts;\n  logger = log;\n  return FileManager;\n}\n\n", "import Environment from './environment/environment';\nimport data from './data';\nimport tree from './tree';\nimport AbstractFileManager from './environment/abstract-file-manager';\nimport AbstractPluginLoader from './environment/abstract-plugin-loader';\nimport visitors from './visitors';\nimport Parser from './parser/parser';\nimport functions from './functions';\nimport contexts from './contexts';\nimport LessError from './less-error';\nimport transformTree from './transform-tree';\nimport * as utils from './utils';\nimport PluginManager from './plugin-manager';\nimport logger from './logger';\nimport SourceMapOutput from './source-map-output';\nimport SourceMapBuilder from './source-map-builder';\nimport ParseTree from './parse-tree';\nimport ImportManager from './import-manager';\nimport Parse from './parse';\nimport Render from './render';\nimport { version } from '../package.json';\nimport parseVersion from 'parse-node-version';\n\nexport default function(environment, fileManagers) {\n  let sourceMapOutput, sourceMapBuilder, parseTree, importManager;\n  \n  environment = new Environment(environment, fileManagers);\n  sourceMapOutput = SourceMapOutput(environment);\n  sourceMapBuilder = SourceMapBuilder(sourceMapOutput, environment);\n  parseTree = ParseTree(sourceMapBuilder);\n  importManager = ImportManager(environment);\n  \n  const render = Render(environment, parseTree, importManager);\n  const parse = Parse(environment, parseTree, importManager);\n  \n  const v = parseVersion(`v${version}`);\n  const initial = {\n    version: [v.major, v.minor, v.patch],\n    data,\n    tree,\n    Environment,\n    AbstractFileManager,\n    AbstractPluginLoader,\n    environment,\n    visitors,\n    Parser,\n    functions: functions(environment),\n    contexts,\n    SourceMapOutput: sourceMapOutput,\n    SourceMapBuilder: sourceMapBuilder,\n    ParseTree: parseTree,\n    ImportManager: importManager,\n    render,\n    parse,\n    LessError,\n    transformTree,\n    utils,\n    PluginManager,\n    logger\n  };\n  \n  // Create a public API\n  const ctor = function(t) {\n    return function() {\n      const obj = Object.create(t.prototype);\n      t.apply(obj, Array.prototype.slice.call(arguments, 0));\n      return obj;\n    };\n  };\n  \n  let t;\n  const api = Object.create(initial);\n  for (const n in initial.tree) {\n    /* eslint guard-for-in: 0 */\n    t = initial.tree[n];\n    if (typeof t === 'function') {\n      api[n.toLowerCase()] = ctor(t);\n    } else {\n      api[n] = Object.create(null);\n      for (const o in t) {\n        /* eslint guard-for-in: 0 */\n        api[n][o.toLowerCase()] = ctor(t[o]);\n      }\n    }\n  }\n  \n  /**\n   * Some of the functions assume a `this` context of the API object,\n   * which causes it to fail when wrapped for ES6\n   imports.\n   *\n   * An assumed `this` should be removed in the future.\n   */\n  initial.parse = initial.parse.bind(api);\n  initial.render = initial.render.bind(api);\n  \n  return api;\n}\n\n", "import LessError from './less-error';\nimport transformTree from './transform-tree';\nimport logger from './logger';\n\nexport default function(SourceMapBuilder) {\n  class ParseTree {\n    constructor(root, imports) {\n      this.root = root;\n    }\n  }\n}

```

```

    this.imports = imports;\n    }\n    toCSS(options) {\n    let evaldRoot;\n    const result = {};\n    let sourceMapBuilder;\n    try {\n    evaldRoot = transformTree(this.root, options);\n    } catch
(e) {\n
    throw new LessError(e, this.imports);\n    }\n    try {\n    const compress =
Boolean(options.compress);\n    if (compress) {\n    logger.warn("The compress option has been
deprecated. ' + \n    'We recommend you use a dedicated css minifier, for instance see less-plugin-clean-
css.);\n    }\n    const toCSSTOptions = {\n    compress,\n    dumpLineNumbers:
options.dumpLineNumbers,\n    strictUnits: Boolean(options.strictUnits),\n    numPrecision:
8};\n    if (options.sourceMap) {\n    sourceMapBuilder = new
SourceMapBuilder(options.sourceMap);\n    result.css = sourceMapBuilder.toCSS(evaldRoot,
toCSSTOptions, this.imports);\n    } else {\n    result.css = evaldRoot.toCSS(toCSSTOptions);\n
    }\n    } catch (e) {\n
    throw new LessError(e, this.imports);\n    }\n    if (options.pluginManager) {\n    const
postProcessors = options.pluginManager.getPostProcessors();\n    for (let i = 0; i < postProcessors.length;
i++) {\n    result.css = postProcessors[i].process(result.css, { sourceMap: sourceMapBuilder, options,
imports: this.imports });\n    }\n    if (options.sourceMap) {\n    result.map =
sourceMapBuilder.getExternalSourceMap();\n    result.imports = [];\n    for (const file in
this.imports.files) {\n    if (this.imports.files.hasOwnProperty(file) && file !== this.imports.rootFilename)
{\n    result.imports.push(file);\n    }\n    }\n    return result;\n    }\n    }\n    return
ParseTree;\n};\n", "export default function (SourceMapOutput, environment) {\n  class SourceMapBuilder {\n
constructor(options)
{\n  this.options = options;\n  }\n  toCSS(rootNode, options, imports) {\n    const
sourceMapOutput = new SourceMapOutput(\n    {\n    contentsIgnoredCharsMap:
imports.contentsIgnoredChars,\n    rootNode,\n    contentsMap: imports.contents,\n
sourceMapFilename: this.options.sourceMapFilename,\n    sourceMapURL:
this.options.sourceMapURL,\n    outputFilename: this.options.sourceMapOutputFilename,\n
sourceMapBasepath: this.options.sourceMapBasepath,\n    sourceMapRootpath:
this.options.sourceMapRootpath,\n    outputSourceFiles: this.options.outputSourceFiles,\n
sourceMapGenerator: this.options.sourceMapGenerator,\n    sourceMapFileInline:
this.options.sourceMapFileInline, \n    disableSourcemapAnnotation:
this.options.disableSourcemapAnnotation\n
    });\n    const css = sourceMapOutput.toCSS(options);\n    this.sourceMap =
sourceMapOutput.sourceMap;\n    this.sourceMapURL = sourceMapOutput.sourceMapURL;\n    if
(this.options.sourceMapInputFilename) {\n    this.sourceMapInputFilename =
sourceMapOutput.normalizeFilename(this.options.sourceMapInputFilename);\n    }\n    if
(this.options.sourceMapBasepath !== undefined && this.sourceMapURL !== undefined) {\n
this.sourceMapURL = sourceMapOutput.removeBasepath(this.sourceMapURL);\n    }\n    return css +
this.getCSSAppendage();\n    }\n    getCSSAppendage() {\n    let sourceMapURL =
this.sourceMapURL;\n    if (this.options.sourceMapFileInline) {\n    if (this.sourceMap === undefined)
{\n    return ";\n    }\n    sourceMapURL =
`data:application/json;base64,${environment.encodeBase64(this.sourceMap)}`;
    }\n    if (this.options.disableSourcemapAnnotation) {\n    return ";\n    }\n    if
(sourceMapURL) {\n    return `/*# sourceMappingURL=${sourceMapURL} */;\n    }\n    return
";\n    }\n    getExternalSourceMap() {\n    return this.sourceMap;\n    }\n    setExternalSourceMap(sourceMap) {\n    this.sourceMap = sourceMap;\n    }\n    isInline() {\n
return this.options.sourceMapFileInline;\n    }\n    getSourceMapURL() {\n    return
this.sourceMapURL;\n    }\n    getOutputFilename() {\n    return
this.options.sourceMapOutputFilename;\n    }\n    getInputFilename() {\n    return

```

```

this.sourceMapInputFilename;\n    }\n }\n\n return SourceMapBuilder;\n};\n", "export default function
(environment) {\n  class SourceMapOutput {\n    constructor(options) {\n      this._css
= [];\n      this._rootNode = options.rootNode;\n      this._contentsMap = options.contentsMap;\n
this._contentsIgnoredCharsMap = options.contentsIgnoredCharsMap;\n      if (options.sourceMapFilename) {\n
      this._sourceMapFilename = options.sourceMapFilename.replace(/\\/g, '/);\n      }\n
this._outputFilename = options.outputFilename;\n      this.sourceMapURL = options.sourceMapURL;\n      if
(options.sourceMapBasepath) {\n      this._sourceMapBasepath = options.sourceMapBasepath.replace(/\\/g,
'/);\n      }\n      if (options.sourceMapRootpath) {\n      this._sourceMapRootpath =
options.sourceMapRootpath.replace(/\\/g, '/);\n      if
(this._sourceMapRootpath.charAt(this._sourceMapRootpath.length - 1) !== '/') {\n
this._sourceMapRootpath += '/;\n      }\n      } else {\n      this._sourceMapRootpath = ";\n
      }\n      this._outputSourceFiles = options.outputSourceFiles;\n      this._sourceMapGeneratorConstructor
= environment.getSourceMapGenerator();\n\n      this._lineNumber = 0;\n      this._column = 0;\n      }\n\n
removeBasepath(path) {\n      if (this._sourceMapBasepath && path.indexOf(this._sourceMapBasepath) ===
0) {\n      path = path.substr(this._sourceMapBasepath.length);\n      if (path.charAt(0) === '\\\\' ||
path.charAt(0) === '/') {\n      path = path.substr(1);\n      }\n      }\n\n      return path;\n
}\n\n      normalizeFilename(filename) {\n      filename = filename.replace(/\\/g, '/);\n      filename =
this.removeBasepath(filename);\n      return (this._sourceMapRootpath || "") + filename;\n      }\n\n
add(chunk, fileInfo, index, mapLines) {\n\n      // ignore adding empty strings\n      if (!chunk) {\n
return;\n      }\n\n      let lines, sourceLines, columns, sourceColumns, i;\n      if (fileInfo &&
fileInfo.filename) {\n      let inputSource = this._contentsMap[fileInfo.filename];\n\n      // remove
vars/banner added to the top of the file\n      if (this._contentsIgnoredCharsMap[fileInfo.filename]) {\n
      // adjust the index\n      index -= this._contentsIgnoredCharsMap[fileInfo.filename];\n      if
(index < 0) { index = 0; }\n      // adjust the source\n      inputSource =
inputSource.slice(this._contentsIgnoredCharsMap[fileInfo.filename]);\n      }\n\n      /** \n      *
ignore empty content, or failsafe\n      * if contents map is incorrect\n      */\n      if (inputSource
=== undefined) {\n      this._css.push(chunk);\n      return;\n      }\n\n      inputSource = inputSource.substr(0, index);\n      sourceLines = inputSource.split("\\n");\n
sourceColumns = sourceLines[sourceLines.length - 1];\n      }\n\n      lines = chunk.split("\\n");\n
columns = lines[lines.length - 1];\n      if (fileInfo && fileInfo.filename) {\n      if (!mapLines) {\n
      this._sourceMapGenerator.addMapping({ generated: { line: this._lineNumber + 1, column: this._column},\n
      original: { line: sourceLines.length, column: sourceColumns.length},\n      source:
this.normalizeFilename(fileInfo.filename)});\n      } else {\n      for (i = 0; i < lines.length; i++) {\n
      this._sourceMapGenerator.addMapping({ generated: { line: this._lineNumber + i + 1, column: i === 0 ?
this._column : 0},\n      original: { line: sourceLines.length + i, column: i === 0 ?
sourceColumns.length
: 0},\n      source: this.normalizeFilename(fileInfo.filename)});\n      }\n      }\n
}\n\n      if (lines.length === 1) {\n      this._column += columns.length;\n      } else {\n
this._lineNumber += lines.length - 1;\n      this._column = columns.length;\n      }\n\n
this._css.push(chunk);\n      }\n\n      isEmpty() {\n      return this._css.length === 0;\n      }\n\n
toCSS(context) {\n      this._sourceMapGenerator = new this._sourceMapGeneratorConstructor({ file:
this._outputFilename, sourceRoot: null });\n      if (this._outputSourceFiles) {\n      for (const filename in
this._contentsMap) {\n      if (this._contentsMap.hasOwnProperty(filename)) {\n      let source =
this._contentsMap[filename];\n      if (this._contentsIgnoredCharsMap[filename]) {\n
      source = source.slice(this._contentsIgnoredCharsMap[filename]);\n      }\n
this._sourceMapGenerator.setSourceContent(this.normalizeFilename(filename), source);\n      }\n
}\n      }\n\n      this._rootNode.genCSS(context, this);\n      if (this._css.length > 0) {\n      let
sourceMapURL;\n      const sourceMapContent = JSON.stringify(this._sourceMapGenerator.toJSON());\n
}

```

```

        if (this.sourceMapURL) {\n            sourceMapURL = this.sourceMapURL;\n        } else if
(this._sourceMapFilename) {\n            sourceMapURL = this._sourceMapFilename;\n        }\n
this.sourceMapURL = sourceMapURL;\n        this.sourceMap = sourceMapContent;\n    }\n\n
return this._css.join(");\n    }\n\n    return SourceMapOutput;\n};\n", "import contexts from
'./contexts';\nimport Parser from
'./parser/parser';\nimport LessError from './less-error';\nimport * as utils from './utils';\nimport logger from
'./logger';\n\nexport default function(environment) {\n    // FileInfo = {\n    // 'rewriteUrls' - option - whether to
adjust URL's to be relative\n    // 'filename' - full resolved filename of current file\n    // 'rootpath' - path to append
to normal URLs for this node\n    // 'currentDirectory' - path to the current file, absolute\n    // 'rootFilename' -
filename of the base file\n    // 'entryPath' - absolute path to the entry file\n    // 'reference' - whether the file should
not be output and only output parts that are referenced\n\n    class ImportManager {\n        constructor(less, context,
rootFileInfo) {\n            this.less = less;\n            this.rootFilename = rootFileInfo.filename;\n            this.paths =
context.paths || []; // Search paths, when importing\n            this.contents = {}; // map - filename to contents
of all the files\n\n            this.contentsIgnoredChars = {}; // map - filename to lines at the beginning of each file to ignore\n
this.mime = context.mime;\n            this.error = null;\n            this.context = context;\n            // Deprecated? Unused
outside of here, could be useful.\n            this.queue = []; // Files which haven't been imported yet\n
this.files = {}; // Holds the imported parse trees.\n        }\n\n        /**\n         * Add an import to be imported\n
         * @param path - the raw path\n         * @param tryAppendExtension - whether to try appending a file extension
(.less or .js if the path has no extension)\n         * @param currentFileInfo - the current file info (used for instance to
work out relative paths)\n         * @param importOptions - import options\n         * @param callback - callback for
when it is imported\n         */\n        push(path, tryAppendExtension, currentFileInfo, importOptions, callback) {\n\n
            const importManager = this, pluginLoader = this.context.pluginManager.Loader;\n\n
this.queue.push(path);\n\n            const fileParsedFunc = function (e, root, fullPath) {\n
importManager.queue.splice(importManager.queue.indexOf(path), 1); // Remove the path from the queue\n\n
            const importedEqualsRoot = fullPath === importManager.rootFilename;\n            if (importOptions.optional
&& e) {\n                callback(null, {rules:[]}, false, null);\n                logger.info(`The file ${fullPath} was
skipped because it was not found and the import was marked optional.`);\n            } else {\n
// Inline imports aren't cached here.\n                // If we start to cache them, please make sure they won't conflict
with non-inline imports of the\n                // same name as they used to do before this comment and the condition
below have been added.\n                if (!importManager.files[fullPath]
&& !importOptions.inline) {\n                    importManager.files[fullPath] = { root, options: importOptions };\n
                }\n                if (e && !importManager.error) { importManager.error = e; }\n                callback(e, root,
importedEqualsRoot, fullPath);\n            }\n        };\n\n        const newFileInfo = {\n            rewriteUrls:
this.context.rewriteUrls,\n            entryPath: currentFileInfo.entryPath,\n            rootpath:
currentFileInfo.rootpath,\n            rootFilename: currentFileInfo.rootFilename\n        };\n\n        const
fileManager = environment.getFileManager(path, currentFileInfo.currentDirectory, this.context, environment);\n\n
        if (!fileManager) {\n            fileParsedFunc({ message: `Could not find a file-manager for ${path}` });\n
return;\n        }\n\n        const loadFileCallback = function(loadedFile) {\n
            let plugin;\n            const resolvedFilename = loadedFile.filename;\n            const contents =
loadedFile.contents.replace(/^(\\uFEFF/, ");\n            // Pass on an updated rootpath if path of imported file is
relative and file\n            // is in a (sub|sup) directory\n            // Examples:\n            // - If path
of imported file is 'module/nav/nav.less' and rootpath is 'less',\n            // then rootpath should become
'less/module/nav/'\n            // - If path of imported file is './mixins.less' and rootpath is 'less',\n            // then
rootpath should become 'less/./'\n            newFileInfo.currentDirectory =
fileManager.getPath(resolvedFilename);\n            if (newFileInfo.rewriteUrls) {\n
newFileInfo.rootpath = fileManager.join(\n                (importManager.context.rootpath || ""),\n

```

```

fileManager.pathDiff(newFileInfo.currentDirectory,
  newFileInfo.entryPath));\n\n          if (!fileManager.isPathAbsolute(newFileInfo.rootpath) &&
fileManager.alwaysMakePathsAbsolute()) {\n\n          newFileInfo.rootpath =
fileManager.join(newFileInfo.entryPath, newFileInfo.rootpath);\n\n          }\n\n          }\n
newFileInfo.filename = resolvedFilename;\n\n          const newEnv = new
contexts.Parse(importManager.context);\n\n          newEnv.processImports = false;\n
importManager.contents[resolvedFilename] = contents;\n\n          if (currentFileInfo.reference ||
importOptions.reference) {\n\n          newFileInfo.reference = true;\n\n          }\n\n          if
(importOptions.isPlugin) {\n\n          plugin = pluginLoader.evalPlugin(contents, newEnv, importManager,
importOptions.pluginArgs, newFileInfo);\n\n          if (plugin instanceof LessError) {\n
fileParsedFunc(plugin, null,
resolvedFilename);\n\n          }\n\n          else {\n\n          fileParsedFunc(null, plugin,
resolvedFilename);\n\n          }\n\n          } else if (importOptions.inline) {\n\n          fileParsedFunc(null,
contents, resolvedFilename);\n\n          } else {\n\n          // import (multiple) parse trees apparently get altered
and can't be cached.\n\n          // TODO: investigate why this is\n\n          if
(importManager.files[resolvedFilename])\n\n          &&
!importManager.files[resolvedFilename].options.multiple\n\n          && !importOptions.multiple) {\n\n
fileParsedFunc(null, importManager.files[resolvedFilename].root, resolvedFilename);\n\n          }\n
else {\n\n          new Parser(newEnv, importManager, newFileInfo).parse(contents, function (e, root) {\n
fileParsedFunc(e, root, resolvedFilename);\n
});\n\n          }\n\n          }\n\n          });\n\n          let loadedFile;\n\n          let promise;\n
const context = utils.clone(this.context);\n\n          if (tryAppendExtension) {\n\n          context.ext =
importOptions.isPlugin ? '.js' : '.less';\n\n          }\n\n          if (importOptions.isPlugin) {\n\n          context.mime =
'application/javascript';\n\n          }\n\n          if (context.syncImport) {\n\n          loadedFile =
pluginLoader.loadPluginSync(path, currentFileInfo.currentDirectory, context, environment, fileManager);\n
} else {\n\n          promise = pluginLoader.loadPlugin(path, currentFileInfo.currentDirectory, context,
environment, fileManager);\n\n          }\n\n          }\n\n          else {\n\n          if (context.syncImport) {\n
loadedFile = fileManager.loadFileSync(path, currentFileInfo.currentDirectory, context, environment);\n
} else {\n\n          promise = fileManager.loadFile(path, currentFileInfo.currentDirectory, context,
environment,\n\n          (err, loadedFile) => {\n\n          if (err) {\n
fileParsedFunc(err);\n\n          }\n\n          } else {\n\n          loadFileCallback(loadedFile);\n
}\n\n          });\n\n          }\n\n          }\n\n          if (loadedFile) {\n\n          if (!loadedFile.filename) {\n
fileParsedFunc(loadedFile);\n\n          }\n\n          } else {\n\n          loadFileCallback(loadedFile);\n\n          }\n
} else if (promise) {\n\n          promise.then(loadFileCallback, fileParsedFunc);\n\n          }\n\n          }\n\n          }\n\n
return ImportManager;\n\n});\n\n","import * as utils from './utils';\n\n\nexport default function(environment, ParseTree,
ImportManager) {\n\n  const render = function
(input, options, callback) {\n\n    if (typeof options === 'function') {\n\n      callback = options;\n\n      options =
utils.copyOptions(this.options, {});\n\n    }\n\n    else {\n\n      options = utils.copyOptions(this.options, options ||
{});\n\n    }\n\n    }\n\n    if (!callback) {\n\n      const self = this;\n\n      return new Promise(function (resolve, reject)
{\n\n        render.call(self, input, options, function(err, output) {\n\n          if (err) {\n
reject(err);\n\n          }\n\n          } else {\n\n          resolve(output);\n\n          }\n\n          });\n\n          });\n\n          }\n
else {\n\n          this.parse(input, options, function(err, root, imports, options) {\n\n          if (err) { return
callback(err); }\n\n          let result;\n\n          try {\n\n          const parseTree = new ParseTree(root,
imports);\n\n          result = parseTree.toCSS(options);\n\n          }\n\n          catch (err) { return callback(err); }\n\n          }\n\n
});\n\n          }\n\n          return render;\n\n});\n\n","import contexts from './contexts';\n\nimport Parser from './parser/parser';\n\nimport
PluginManager from './plugin-manager';\n\nimport LessError from './less-error';\n\nimport * as utils from
'./utils';\n\n\nexport default function(environment, ParseTree, ImportManager) {\n\n  const parse = function (input,

```

```

options, callback) {\n\n    if (typeof options === 'function') {\n        callback = options;\n        options =
utils.copyOptions(this.options, {});\n    } else {\n        options = utils.copyOptions(this.options, options ||
{});\n    }\n\n    if (!callback) {\n        const self = this;\n        return new Promise(function (resolve, reject)
{\n            parse.call(self, input, options, function(err, output) {\n                if (err) {\n
                    reject(err);\n                } else {\n                    resolve(output);\n                }\n            });\n        });\n    } else {\n        let context;\n        let rootFileInfo;\n        const pluginManager = new
PluginManager(this, !options.reUsePluginManager);\n\n        options.pluginManager = pluginManager;\n\n        context = new contexts.Parse(options);\n        if (options.rootFileInfo) {\n            rootFileInfo =
options.rootFileInfo;\n        } else {\n            const filename = options.filename || 'input';\n            const
entryPath = filename.replace(/^[^\\|\\|\\|]*$/, "");\n            rootFileInfo = {\n                filename,\n
rewriteUrls: context.rewriteUrls,\n                rootpath: context.rootpath || "",\n                currentDirectory:
entryPath,\n                entryPath,\n                rootFilename: filename\n            };\n            // add in a missing trailing slash\n            if (rootFileInfo.rootpath &&
rootFileInfo.rootpath.slice(-1) !== '/') {\n                rootFileInfo.rootpath += '/';\n            }\n\n        }\n\n        const imports = new ImportManager(this, context, rootFileInfo);\n        this.importManager = imports;\n\n        // TODO: allow the plugins to be just a list of paths or names\n        // Do an async plugin queue like lessc\n\n        if (options.plugins) {\n            options.plugins.forEach(function(plugin) {\n                let evalResult,
contents;\n                if (plugin.fileContent) {\n                    contents = plugin.fileContent.replace(/^\\uFEFF/,
"");\n                    evalResult = pluginManager.Loader.evalPlugin(contents, context, imports, plugin.options,
plugin.filename);\n                } else {\n                    if (evalResult instanceof LessError) {\n                        return
callback(evalResult);\n                    }\n                }\n            });\n        }\n\n        else {\n            pluginManager.addPlugin(plugin);\n        }\n\n    });\n\n    new Parser(context, imports, rootFileInfo)\n        .parse(input, function (e,
root) {\n            if (e) {\n                return callback(e);\n            }\n            callback(null, root, imports, options);\n        },
options);\n\n    return parse;\n};\n\n", "// TODO: Add tests for browser @plugin\n/* global window
*\n\nimport AbstractPluginLoader from '../less/environment/abstract-plugin-loader.js';\n\n**\n * Browser Plugin
Loader\n *\nconst PluginLoader = function(less) {\n    this.less = less;\n    // Should we shim this.require for
browser? Probably not?\n};\n\nPluginLoader.prototype = Object.assign(new AbstractPluginLoader(), {\n
loadPlugin(filename, basePath, context, environment, fileManager) {\n    return new Promise((fulfill,
reject) => {\n        fileManager.loadFile(filename, basePath, context, environment)\n
.then(fulfill).catch(reject);\n    });\n});\n\nexport default PluginLoader;\n\n", "import * as utils from
'/utils';\nimport browser from './browser';\n\nexport default (window, less, options) => {\n\n    function
errorHTML(e, rootHref) {\n        const id = `less-error-message:${utils.extractId(rootHref || "")}`;\n        const
template = '<li><label>{line}</label><pre class="{class}">{content}</pre></li>';\n        const elem =
window.document.createElement('div');\n        let timer;\n        let content;\n        const errors = [];\n        const
filename = e.filename || rootHref;\n        const filenameNoPath = filename.match(/^[^\\|\\|\\|]+(\\?.*)?$/)[1];\n\n        elem.id = id;\n        elem.className = 'less-error-message';\n\n        content = `<h3>${e.type || 'Syntax'}Error:
${e.message || 'There is an error in your .less file'}` + \n            `</h3><p>in
<a href="{filename}">{filenameNoPath}</a>`;\n\n        const errorline = (e, i, classname) => {\n            if
(e.extract[i] !== undefined) {\n                errors.push(template.replace(/{line}/, (parseInt(e.line, 10) || 0) + (i -
1))\n                    .replace(/{class}/, classname)\n                    .replace(/{content}/, e.extract[i]));\n            }\n        };\n\n        if (e.line) {\n            errorline(e, 0, "");\n            errorline(e, 1, 'line');\n            errorline(e, 2, "");\n\n            content += `on line ${e.line}, column ${e.column + 1}:</p><ul>${errors.join("")}</ul>`;\n        }\n\n        if (e.stack
&& (e.extract || options.logLevel >= 4)) {\n            content += `<br>Stack Trace<br>
/>${e.stack.split("\\n").slice(1).join('<br>')}`;\n        }\n\n        elem.innerHTML = content;\n\n        // CSS for error
messages\n        browser.createCSS(window.document, [
            '.less-error-message ul, .less-error-message li {',\n

```



```

'list-style-type: none;',\n      'margin-right: 15px;',\n      'padding: 4px 0;',\n      'margin: 0;',\n
'}',\n      '.less-error-message label {',\n      'font-size: 12px;',\n      'margin-right: 15px;',\n      'padding: 4px 0;',\n      'color: #cc7777;',\n      '}',\n      '.less-error-message pre {',\n      'color: #dd6666;',\n      'padding: 4px 0;',\n      'margin: 0;',\n      'display: inline-block;',\n      '}',\n      '.less-error-message pre.line {',\n      'color: #ff0000;',\n      '}',\n      '.less-error-message h3 {',\n      'font-size: 20px;',\n      'font-weight: bold;',\n      'padding: 15px 0 5px 0;',\n      'margin: 0;',\n      '}',\n      '.less-error-message a {',\n      'color: #10a',\n      '}',\n      '.less-error-message .error {',\n      'color: red;',\n      'font-weight: bold;',\n      'padding-bottom: 2px;',\n      'border-bottom: 1px dashed red;',\n      '}'\n      ].join('\n'), {
title: 'error-message' });\n\n      elem.style.cssText = [\n      'font-family: Arial, sans-serif',\n      'border: 1px solid #e00',\n      'background-color: #eee',\n      'border-radius: 5px',\n      '-webkit-border-radius: 5px',\n      '-moz-border-radius: 5px',\n      'color: #e00',\n      'padding: 15px',\n      'margin-bottom: 15px'\n      ].join(';');\n\n      if (options.env === 'development') {\n      timer = setInterval(() => {\n      const document = window.document;\n      const body = document.body;\n      if (body) {\n      if (document.getElementById(id)) {\n      body.replaceChild(elem, document.getElementById(id));\n      } else {\n      body.insertBefore(elem, body.firstChild);\n      }\n      clearInterval(timer);\n      }, 10);\n      }\n\n      function removeErrorHTML(path) {\n      const node = window.document.getElementById(`less-error-message:${utils.extractId(path)}`);\n      if (node) {\n      node.parentNode.removeChild(node);\n      }\n\n      function removeErrorConsole(path) {\n      // no action\n      }\n\n      function removeError(path) {\n      if (!options.errorReporting || options.errorReporting === 'html') {\n      removeErrorHTML(path);\n      } else if (options.errorReporting === 'console') {\n      removeErrorConsole(path);\n      } else if (typeof options.errorReporting === 'function') {\n      options.errorReporting('remove', path);\n      }\n      }\n\n      function errorConsole(e, rootHref) {\n      const template = '{line} {content}';\n      const filename = e.filename || rootHref;\n      const errors = [];\n      let content = `${e.type || 'Syntax'}Error: ${e.message || 'There is an error in your .less file'} in ${filename}`;\n      const errorline = (e, i, classname) => {\n      if (e.extract[i] !== undefined) {\n      errors.push(template.replace(/\{line\}/, (parseInt(e.line, 10) || 0) + (i - 1))\n      .replace(/\{class\}/, classname)\n      .replace(/\{content\}/, e.extract[i]));\n      }\n      if (e.line) {\n      errorline(e, 0, "");\n      errorline(e, 1, 'line');\n      errorline(e, 2, "");\n      content += ` on line ${e.line}, column ${e.column + 1}:\\n${errors.join("\\n")}`;\n      }\n      if (e.stack && (e.extract || options.logLevel >= 4)) {\n      content += `\\nStack Trace\\n${e.stack}`;\n      }\n      less.logger.error(content);\n      }\n\n      function error(e, rootHref) {\n      if (!options.errorReporting || options.errorReporting === 'html') {\n      errorHTML(e, rootHref);\n      } else if (options.errorReporting === 'console') {\n      errorConsole(e, rootHref);\n      } else if (typeof options.errorReporting === 'function') {\n      options.errorReporting('add', e, rootHref);\n      }\n      }\n\n      return {\n      add: error,\n      remove: removeError\n      };}\n\n      /**\n      * Kicks off less and compiles any stylesheets\n      * used in the browser distributed version of less\n      * to kick-start less using the browser api\n      */\n\n      global.window, document\n      *import defaultOptions from './less/default-options';\n      *import addDefaultOptions from './add-default-options';\n      *import root from './index';\n\n      const options = defaultOptions();\n      if (window.less) {\n      for (const key in window.less) {\n      if (window.less.hasOwnProperty(key)) {\n      options[key] = window.less[key];\n      }\n      }\n      }\n      addDefaultOptions(window, options);\n      options.plugins = options.plugins || [];\n      if (window.LESS_PLUGINS) {\n      options.plugins = options.plugins.concat(window.LESS_PLUGINS);\n      }\n\n      const less = root(window, options);\n      export default less;\n\n      window.less = less;\n      let css;\n      let head;\n      let style;\n\n      // Always restore page visibility\n      function resolveOrReject(data) {\n      if (data.filename) {\n      console.warn(data);\n      }\n      if (!options.async) {\n      head.removeChild(style);\n      }\n      }\n\n      if (options.onReady) {\n      if (!watch/.test(window.location.hash)) {\n      less.watch();\n      }\n      // Simulate synchronous stylesheet loading by hiding page rendering\n      if (!options.async) {\n      css = 'body { display: none !important }';\n      head = document.head ||

```

```

document.getElementsByTagName('head')[0];\n    style = document.createElement('style');\n\n    style.type =
'text/css';\n    if (style.styleSheet) {\n        style.styleSheet.cssText = css;\n    } else {\n
style.appendChild(document.createTextNode(css));\n    }\n\n    head.appendChild(style);\n
}\n    less.registerStylesheetsImmediately();\n    less.pageLoadFinished = less.refresh(less.env ===
'development').then(resolveOrReject, resolveOrReject);\n}\n\n", "// Export a new default each time\n\nexport default
function() {\n    return {\n        /* Inline Javascript - @plugin still allowed */\n        javascriptEnabled: false,\n\n
/* Outputs a makefile import dependency list to stdout. */\n        depends: false,\n\n        /* (DEPRECATED)
Compress using less built-in compression. */\n        * This does an okay job but does not utilise all the tricks of\n
* dedicated css compression. */\n        compress: false,\n\n        /* Runs the less parser and just reports errors without
any output. */\n        lint: false,\n\n        /* Sets available include paths. */\n        * If the file in an @import rule does
not exist at that exact location, */\n        * less will look for it at the location(s) passed to this option. */\n        * You
might use this for instance
to specify a path to a library which */\n        * you want to be referenced simply and relatively in the less files. */\n
paths: [],\n\n        /* color output in the terminal */\n        color: true,\n\n        /* The strictImports controls whether
the compiler will allow an @import inside of either */\n        * @media blocks or (a later addition) other selector
blocks. */\n        * See: https://github.com/less/less.js/issues/656 */\n        strictImports: false,\n\n        /* Allow
Imports from Insecure HTTPS Hosts */\n        insecure: false,\n\n        /* Allows you to add a path to every
generated import and url in your css. */\n        * This does not affect less import statements that are processed, just
ones */\n        * that are left in the output css. */\n        rootpath: "",\n\n        /* By default URLs are kept as-is, so if you
import a file in a sub-directory */\n        * that references an image, exactly the same URL will be output in the css. */\n
* This option
allows you to re-write URL's in imported files so that the */\n        * URL is always relative to the base imported file
*/\n        rewriteUrls: false,\n\n        /* How to process math */\n        * 0 always - eagerly try to solve all
operations\n        * 1 parens-division - require parens for division \"^\" */\n        * 2 parens | strict - require parens
for all operations\n        * 3 strict-legacy - legacy strict behavior (super-strict)\n        */\n        math: 1,\n\n        /*
Without this option, less attempts to guess at the output unit when it does maths. */\n        strictUnits: false,\n\n
/* Effectively the declaration is put at the top of your base Less file, */\n        * meaning it can be used but it also can
be overridden if this variable */\n        * is defined in the file. */\n        globalVars: null,\n\n        /* As opposed to the
global variable option, this puts the declaration at the */\n        * end of your base file, meaning
it will override anything defined in your Less file. */\n        modifyVars: null,\n\n        /* This option allows you to
specify a argument to go on to every URL. */\n        urlArgs: "\n    };\n";\n\n    "import {addDataAttr} from
'/utils';\n\n    import browser from './browser';\n\n    export default (window, options) => {\n\n        // use options from the
current script tag data attributes\n        addDataAttr(options, browser.currentScript(window));\n\n        if
(options.isFileProtocol === undefined) {\n            options.isFileProtocol = /^(file|(chrome|safari)-
extension)?[resource|qrc|app]:/.test(window.location.protocol);\n        }\n\n        // Load styles asynchronously (default:
false)\n        // This is set to `false` by default, so that the body\n        // doesn't start loading before the stylesheets
are parsed.\n        // Setting this to `true` can result in flickering.\n        // options.async = options.async || false;\n
options.fileAsync = options.fileAsync || false;\n        // Interval between watch
polls\n        options.poll = options.poll || (options.isFileProtocol ? 1000 : 1500);\n\n        options.env = options.env ||
(window.location.hostname === '127.0.0.1' ||\n            window.location.hostname === '0.0.0.0' ||\n
window.location.hostname === 'localhost' ||\n            (window.location.port &&\n                window.location.port.length >
0) ||\n            options.isFileProtocol\n                ? 'development'\n                : 'production');\n\n        const dumpLineNumbers
= !/!dumpLineNumbers:(comments|mediaquery|all)/.exec(window.location.hash);\n        if (dumpLineNumbers) {\n
options.dumpLineNumbers = dumpLineNumbers[1];\n        }\n\n        if (options.useFileCache === undefined) {\n
options.useFileCache = true;\n        }\n\n        if (options.onReady === undefined) {\n            options.onReady = true;\n
        }\n\n        if (options.relativeUrls) {\n            options.rewriteUrls = 'all';\n        }\n\n    };\n\n", "\n\n// index.js\n\n// Should expose the
additional browser functions on to the less object\n\n\nimport

```

```

{addDataAttr} from './utils';\nimport lessRoot from './less';\nimport browser from './browser';\nimport FM from
 './file-manager';\nimport PluginLoader from './plugin-loader';\nimport LogListener from './log-listener';\nimport
 ErrorReporting from './error-reporting';\nimport Cache from './cache';\nimport ImageSize from './image-
size';\n\nexport default (window, options) => {\n  const document = window.document;\n  const less =
lessRoot();\n  less.options = options;\n  const environment = less.environment;\n  const FileManager =
FM(options, less.logger);\n  const fileManager = new FileManager();\n  environment.addFileManager(fileManager);\n  less.FileManager = FileManager;\n  less.PluginLoader =
PluginLoader;\n  \n  LogListener(less, options);\n  const errors = ErrorReporting(window, less, options);\n  const
cache = less.cache = options.cache || Cache(window, options, less.logger);\n  ImageSize(less.environment);\n  \n  //
Setup user functions - Deprecate?\n  if (options.functions) {\n    less.functions.functionRegistry.addMultiple(options.functions);\n  }\n  \n  const
typePattern = /^(text|(x-)?less$/;\n  \n  function clone(obj) {\n    const cloned = {};\n    for (const prop in obj)
{\n      if (obj.hasOwnProperty(prop)) {\n        cloned[prop] = obj[prop];\n      }\n    }\n    return
cloned;\n  }\n  \n  // only really needed for phantom\n  function bind(func, thisArg) {\n    const curryArgs =
Array.prototype.slice.call(arguments, 2);\n    return function() {\n      const args =
curryArgs.concat(Array.prototype.slice.call(arguments, 0));\n      return func.apply(thisArg, args);\n    };\n  }\n  \n  function loadStyles(modifyVars) {\n    const styles = document.getElementsByTagName('style');\n    let
style;\n    for (let i = 0; i < styles.length; i++) {\n      style = styles[i];\n      if
(style.type.match(typePattern)) {\n        const instanceOptions = clone(options);\n        instanceOptions.modifyVars = modifyVars;\n        const lessText = style.innerHTML || '';\n        instanceOptions.filename = document.location.href.replace(/#.*$/,
'');\n        /* jshint loopfunc:true */\n        // use closure to store current style\n        less.render(lessText, instanceOptions,\n          bind((style, e, result) => {\n            if (e) {\n              errors.add(e, 'inline');\n            } else {\n              style.type = 'text/css';\n              if
(style.styleSheet) {\n                style.styleSheet.cssText = result.css;\n              } else {\n                style.innerHTML = result.css;\n              }\n            }, null, style));\n          }\n        }\n      }\n    }\n    function
loadStyleSheet(sheet, callback, reload, remaining, modifyVars) {\n      const instanceOptions = clone(options);\n      addDataAttr(instanceOptions, sheet);\n      instanceOptions.mime = sheet.type;\n      if (modifyVars) {\n        instanceOptions.modifyVars = modifyVars;\n      }\n      function loadInitialFileCallback(loadedFile) {\n        const data = loadedFile.contents;\n        const path = loadedFile.filename;\n        const webInfo =
loadedFile.webInfo;\n        const newFileInfo = {\n          currentDirectory: fileManager.getPath(path),\n          filename: path,\n          rootFilename: path,\n          rewriteUrls: instanceOptions.rewriteUrls\n        };\n        newFileInfo.entryPath = newFileInfo.currentDirectory;\n        newFileInfo.rootpath =
instanceOptions.rootpath || newFileInfo.currentDirectory;\n        if (webInfo) {\n          webInfo.remaining =
remaining;\n          const css = cache.getCSS(path, webInfo, instanceOptions.modifyVars);\n          if (!reload && css) {\n            webInfo.local = true;\n            callback(null, css, data, sheet, webInfo, path);\n            return;\n          }\n        }\n        // TODO add tests around how this behaves when reloading\n        errors.remove(path);\n        instanceOptions.rootFileInfo = newFileInfo;\n        less.render(data,
instanceOptions, (e, result) => {\n          if (e) {\n            e.href = path;\n            callback(e);\n          } else {\n            cache.setCSS(sheet.href, webInfo.lastModified, instanceOptions.modifyVars, result.css);\n            callback(null, result.css, data, sheet, webInfo, path);\n          }\n        });\n        }\n      }\n    }\n    fileManager.loadFile(sheet.href, null, instanceOptions, environment)\n      .then(loadedFile => {\n        loadInitialFileCallback(loadedFile);\n      }).catch(err => {\n        console.log(err);\n        callback(err);\n      });\n    }\n    function loadStyleSheets(callback, reload, modifyVars) {\n      for (let i = 0;
i < less.sheets.length; i++) {\n        loadStyleSheet(less.sheets[i], callback, reload, less.sheets.length - (i + 1),
modifyVars);\n      }\n    }\n    function initRunningMode() {\n      if (less.env === 'development') {\n

```

```

less.watchTimer = setInterval(() => {\n      if (less.watchMode) {\n
fileManager.clearFileCache();\n      loadStyleSheets((e, css, _, sheet, webInfo) => {\n      if (e
{\n      errors.add(e, e.href || sheet.href);\n      } else if (css) {\n
browser.createCSS(window.document, css, sheet);\n      }\n      });\n      }\n
}, options.poll);\n  }\n  }\n\n // Watch mode\n //\n less.watch = function () {\n  if
(!less.watchMode) {\n    less.env = 'development';\n    initRunningMode();\n  }\n  this.watchMode
= true;\n  return true;\n  };\n\n less.unwatch = function () {\n  clearInterval(less.watchTimer);\n  this.watchMode =
false;\n  return false;\n  };\n\n //\n // Synchronously get all <link> tags with the 'rel' attribute set to\n //
\"stylesheet/less\".\n //\n less.registerStylesheetsImmediately = () => {\n  const links =
document.getElementsByTagName('link');\n  less.sheets = [];\n\n  for (let i = 0; i < links.length; i++) {\n
  if (links[i].rel === 'stylesheet/less' || (links[i].rel.match(/stylesheet/) &&\n
(links[i].type.match(typePattern)))) {\n    less.sheets.push(links[i]);\n  }\n  }\n  };\n\n //\n //
Asynchronously get all <link> tags with
the 'rel' attribute set to\n // \"stylesheet/less\", returning a Promise.\n //\n less.registerStylesheets = () => new
Promise((resolve, reject) => {\n  less.registerStylesheetsImmediately();\n  resolve();\n  });\n\n //\n //
With this function, it's possible to alter variables and re-render\n // CSS without reloading less-files\n //\n
less.modifyVars = record => less.refresh(true, record, false);\n  less.refresh = (reload, modifyVars,
clearFileCache) => {\n  if ((reload || clearFileCache) && clearFileCache !== false) {\n
fileManager.clearFileCache();\n  }\n  return new Promise((resolve, reject) => {\n    let startTime;\n
let endTime;\n    let totalMilliseconds;\n    let remainingSheets;\n    startTime = endTime = new
Date();\n\n    // Set counter for remaining unprocessed sheets\n    remainingSheets = less.sheets.length;\n\n
    if (remainingSheets ===
0) {\n\n      endTime = new Date();\n      totalMilliseconds = endTime - startTime;\n
less.logger.info('Less has finished and no sheets were loaded.);\n      resolve({\n      startTime,\n
endTime,\n      totalMilliseconds,\n      sheets: less.sheets.length\n      });\n\n    }
else {\n      // Relies on less.sheets array, callback seems to be guaranteed to be called for every element of the
array\n      loadStyleSheets((e, css, _, sheet, webInfo) => {\n      if (e) {\n      errors.add(e,
e.href || sheet.href);\n      reject(e);\n      return;\n      }\n      if (webInfo.local)
{\n      less.logger.info(`Loading ${sheet.href} from cache.`);\n      } else {\n
less.logger.info(`Rendered ${sheet.href}
successfully.`);\n      }\n      browser.createCSS(window.document, css, sheet);\n
less.logger.info(`CSS for ${sheet.href} generated in ${new Date() - endTime}ms`);\n      // Count
completed sheet\n      remainingSheets--;\n\n      // Check if the last remaining sheet was processed
and then call the promise\n      if (remainingSheets === 0) {\n      totalMilliseconds = new Date()
- startTime;\n      less.logger.info(`Less has finished. CSS generated in ${totalMilliseconds}ms`);\n
      resolve({\n      startTime,\n      endTime,\n      totalMilliseconds,\n
sheets: less.sheets.length\n      });\n      }\n      endTime = new Date();\n
}, reload, modifyVars);\n    }\n\n    loadStyles(modifyVars);\n  });\n  };\n  less.refreshStyles = loadStyles;\n  return less;\n};\n\n", "export
default (less, options) => {\n  const logLevel_debug = 4;\n  const logLevel_info = 3;\n  const logLevel_warn =
2;\n  const logLevel_error = 1;\n\n  // The amount of logging in the javascript console.\n  // 3 - Debug,
information and errors\n  // 2 - Information and errors\n  // 1 - Errors\n  // 0 - None\n  // Defaults to 2\n
options.logLevel = typeof options.logLevel !== 'undefined' ? options.logLevel : (options.env === 'development' ?
logLevel_info : logLevel_error);\n\n  if (!options.loggers) {\n    options.loggers = [{\n      debug:
function(msg) {\n      if (options.logLevel >= logLevel_debug) {\n      console.log(msg);\n
}\n      },\n      info: function(msg) {\n      if (options.logLevel >= logLevel_info) {\n
console.log(msg);\n

```



heat", "white", "whitesmoke", "yellow", "yellowgreen", "m", "cm", "mm", "in", "px", "pt", "pc", "duration", "s", "ms", "angle", "rad", "Math", "PI", "deg", "grad", "turn", "colors", "unitConversions", "parent", "visibilityBlocks", "undefined", "nodeVisible", "rootNode", "parsed", "Object", "Node", "fileInfo", "getIndex", "nodes", "set", "node", "Array", "isArray", "forEach", "\_index", "\_fileInfo", "context", "strs", "genCSS", "add", "chunk", "index", "isEmpty", "join", "output", "value", "visitor", "visit", "op", "a", "b", "precision", "numPrecision", "Number", "toFixed", "compare", "Color", "rgb", "originalForm", "self", "match", "map", "c", "parseInt", "alpha", "split", "clamp", "v", "max", "min", "toHex", "round", "toString", "prototype", "assign", "luma", "r", "g", "pow", "toCSS", "doNotCompress", "color", "colorFunction", "compress", "args", "fround", "indexOf", "toHSL", "h", "l", "toRGB", "splitcolor", "operate", "other", "\_operate", "d", "toHSV", "toARGB", "x", "fromKeyword", "keyword", "key", "toLowerCase", "slice", "Paren", "eval", "\_noSpaceCombinators", "|", "Combinator", "emptyOrWhitespace", "trim", "spaceOrEmpty", "Element", "combinator", "isVariable", "currentFileInfo", "visibilityInfo", "copyVisibilityInfo", "setParent", "accept", "clone", "firstSelector", "charAt", "ALWAYS", "PARENTS\_DIVISION", "PARENTS", "RewriteUrls", "getType", "payload", "call", "copy", "target", "constructor", "getPrototypeOf", "il", "arguments", "k", "j", "jl", "\_\_spreadArrays", "getOwnPropertyNames", "getOwnPropertySymbols", "reduce", "carry", "props", "includes", "newVal", "originalObject", "includeNonenumerable", "propType", "propertyIsEnumerable", "defineProperty", "enumerable", "writable", "configurable", "assignProp", "nonenumerable", "getLocation", "inputStream", "n", "line", "column", "copyArray", "arr", "obj", "cloned", "prop", "defaults", "obj1", "obj2", "newObj", "\_defaults", "defaults\_1", "copyOptions", "opts", "strictMath", "math", "Constants.Math", "relativeUrls", "rewriteUrls", "Constants.RewriteUrls", "flattenArray", "result", "length\_1", "anonymousFunc", "LessError", "fileContentMap", "currentFilename", "message", "stack", "input", "contents", "loc", "utils.getLocation", "col", "callLine", "lines", "found", "func", "Function", "lineAdjust", "callExtract", "extract", "create", "F", "stylize", "str", "errorTxt", "substr", "Selector", "elements", "extendList", "condition", "evaldCondition", "getElements", "mixinElements\_", "visitArray", "createDerived", "newSelector", "mediaEmpty", "els", "parseNode", "err", "imports", "createEmptySelectors", "el", "sels", "olen", "len", "mixinElements", "shift", "isJustParentSelector", "extend", "getIsOutput", "Value", "Keyword", "True", "False", "Anonymous", "mapLines", "rulesetLike", "allowRoot", "isRulesetLike", "Boolean", "MATH", "Declaration", "name", "important", "merge", "inline", "variable", "asComment", "ctx", "debugInfo", "lineNumber", "fileName", "asMediaQuery", "filenameWithProtocol", "test", "lineSeparator", "dumpLineNumbers", "lastRule", "prevMath", "evaldValue", "mathBypass", "evalName", "importantScope", "importantResult", "pop", "makeImportant", "Comment", "isLineComment", "getDebugInfo", "isSilent", "isCompressed", "contexts", "copyFromOriginal", "original", "destination", "propertiesToCopy", "parseCopyProperties", "Parse", "paths", "evalCopyProperties", "isPathRelative", "path", "isPathLocalRelative", "Eval", "frames", "enterCalc", "calcStack", "inCalc", "exitCalc", "inParenthesis", "parensStack", "outOfParenthesis", "mathOn", "isMathOn", "pathRequiresRewrite", "rewritePath", "rootpath", "newPath", "normalizePath", "segment", "segments", "reverse", "makeRegistry", "base", "\_data", "addMultiple", "keys", "\_this", "get", "getLocalFunctions", "inherit", "defaultFunc", "value\_", "error\_", "reset", "Ruleset", "selectors", "rules", "strictImports", "\_lookups", "\_variables", "\_properties", "isRuleset", "selCnt", "selector", "hasVariable", "hasOnePassingSelector", "toParseSelectors", "utils.flattenArray", "rule", "subRule", "utils.copyArray", "ruleset", "originalRuleset", "root", "firstRoot", "allowImports", "functionRegistry", "globalFunctionRegistry", "ctxFrames", "unshift", "ctxSelectors", "evalImports", "rsRules", "evalFirst", "mediaBlockCount", "mediaBlocks", "filter", "apply", "resetCache", "bubbleSelectors", "importRules", "matchArgs", "matchCondition", "lastSelector", "\_rulesets", "variables", "hash", "vars", "name\_1", "properties", "name\_2", "decl", "parseValue", "property", "lastDeclaration", "toParse", "transformDeclaration", "nodes\_1", "rulesets", "filtRules", "prependRule", "find", "foundMixins", "ruleNodes", "tabLevel", "sep", "tabRuleStr", "tabSetStr", "charsetNodeIndex", "importNodeIndex", "isCharset", "pathCnt", "pathSubCnt", "currentLastRule", "isVisible", "joinSelectors", "joinSelector", "createParenthesis", "elementsToPak", "originalElement", "replacementParen", "insideParent", "createSelector", "containedElement", "element", "addReplacementIntoPath", "beginningPath", "addPath", "replacedElement", "originalSelector", "newSelectorPath", "newJoinedSelector", "parentEl", "restOfPath", "addAllReplacementsIntoPath", "addPaths", "mergeElementsOnToSelectors", "sel", "deriveSelector", "deriveFrom", "newPaths", "replaceParentSelector", "inSelector", "currentElements", "newSelectors", "selectorsMultiplied", "maybeSelector", "hadParentSelector", "nestedSelector", "replaced", "nestedPaths", "replacedNewSelectors", "concatenated", "AtRule", "isRooted", "outputRuleset", "mediaPathBackup", "mediaBlocksBackup", "mediaPath", "ruleCnt", "DetachedRuleset", "callEval", "Unit", "numerator", "denominator", "backupUnit", "sort", "strictUnits", "returnStr", "is", "unitString", "toUpperCase", "isLength

","RegExp","isSingular","callback","usedUnits","group","mapUnit","groupName","atomicUnit","cancel","counter","count","Dimension","unit","parseFloat","isNaN","toColor","strValue","String","convertTo","unify","numericCompare","conversions","targetUnit","applyUnit","derivedConversions","Operation","operands","isSpaced","Expression","noSpacing","returnValue","parens","doubleParen","parensInOp","throwAwayComments","functionCaller","evalArgs","commentFilter","item","subNodes","to","from","pack","ar","Call","calc","currentMathContext","funcCaller","FunctionCaller","isValid","columnNumber","Variable","evaluating","frame","fun","Property","mergeRules","less","visitors","ToCSSVisitor","\_mergeRules","vArr","Attribute","cif","Quoted","content","escaped","quote","variableRegex","propRegex","containsVariables","that","iterativeReplace","regex","replacementFnc","evaluatedValue","URL","val","isEvald","urlArgs","Media","features","evalTop","evalNested","multiMedia","permute","fragment","rest","Import","css","pathValue","getPath","isPlugin","reference","isVariableImport","evalForImport","evalPath","doEval","blocksVisibility","addVisibilityBlock","registry","skip","importedFilename","newImport","JsEvalNode","evaluateJavaScript","expression","evalContext","javascriptEnabled","jsify","toJS","JavaScript","string","Assignment","Condition","negate","lvalue","rvalue","UnicodeDescriptor","Negative","Extend","option","object\_id","next\_id","parent\_ids","allowBefore","allowAfter","findSelfSelectors","selectorElements","selfElements","selfSelectors","VariableCall","detachedRuleset","NamespaceValue","ruleCall","lookups","substring","Definition","params","variadic","arity","optionalParameters","required","p","evalParams","mixinEnv","evaldArguments","varargs","arg","isNamedFound","argIndex","argsLength","evalCall","\_arguments","mixinFrames","allArgsCnt","requiredArgsCnt","MixinCall","mixins","mixin","mixinPath","argValue","f","isRecursive","isOneFound","candidate","defaultResult","noArgumentsFilter","candidates","conditionResult","calcDefGroup","namespace","expand","MixinDefinition","format","newRules","\_setVisibilityToReplacement","replacement","AbstractFileManager","lastIndexOf","ext","tryAppendExtension","basePath","laterPath","url","baseUrl","urlDirectories","baseUrlDirectories","urlParts","extractUrlParts","baseUrlParts","diff","hostPart","directories","urlPartsRegex","returner","rawDirectories","rawPath","fileUrl","require","AbstractPluginLoader","pluginOptions","pluginObj","localModule","shortname","FileManager","trySetOptions","use","exports","loader","tree","validatePlugin","minVersion","compareVersion","addPlugin","plugin","setOptions","version","versionToString","aVersion","bVersion","versionString","plugins","printUsage","\_visitArgs","visitDeeper","\_hasIndexed","\_noop","implementation","\_implementation","\_visitInCache","\_visitOutCache","indexNodeTypes","ticker","child","typeIndex","Visitor","nodeTypeIndex","fnName","impl","funcOut","visitArgs","newNode","isReplacing","cnt","nonReplacing","out","evald","flatten","nestedCnt","nestedItem","onSequencerEmpty","variableImports","\_onSequencerEmpty","\_currentDepth","ImportSequencer","importSequencer","importItem","isReady","tryRun","variableImport","ImportVisitor","importer","finish","\_visitor","\_importer","\_finish","importCount","onceFileDetectionMap","recursionDetector","\_sequencer","run","isFinished","visitImport","importNode","inlineCSS","importParent","addVariableImport","processImportNode","evaldImportNode","multiple","importMultiple","tryAppendLessExtension","onImported","sequencedOnImported","addImport","importedAtRoot","fullPath","importVisitor","isOptional","optional","duplicateImport","oldContext","visitDeclaration","declNode","visitDeclarationOut","visitAtRule","atRuleNode","visitAtRuleOut","visitMixinDefinition","mixinDefinitionNode","visitMixinDefinitionOut","visitRuleset","rulesetNode","visitRulesetOut","visitMedia","mediaNode","visitMediaOut","visible","SetTreeVisibilityVisitor","ensureVisibility","ensureInvisibility","allExtendsStack","ExtendFinderVisitor","allExtends","allSelectorsExtendList","extendOnEveryPath","selectorPath","selExtendList","allSelectorsExtend","foundExtends","firstExtendOnThisSelectorPath","ProcessExtendsVisitor","extendFinder","extendIndices","doExtendChaining","newRoot","checkExtendsForNonMatched","indices","hasFoundMatches","extendsList","extendsListTarget","iterationCount","extendIndex","targetExtendIndex","matches","targetExtend","newExtend","extendsToAdd","extendVisitor","findMatch","selfSelector","extendSelector","extendChainCount","selectorOne","selectorTwo","ruleNode","selectorNode","pathIndex","selectorsToAdd","extendedSelectors","haystackSelectorPath","haystackSelectorIndex","hackstackSelector","hackstackElementIndex","haystackElement","targetCombinator","potentialMatch","needleElements","potentialMatches","matched","initialCombinator","isElementValuesEqual","finished","endPathIndex","endPathElementIndex","elementValue1","elementValue2","replacementSelector","matchIndex","firstElement","newElements","currentSelectorPathIndex","currentSelectorPathElementIndex","currentValue","derived","newAllExtends","lastIndex","JoinSelectorVisitor","\_context","CSSVisitorUtils","bodyRules","owner","thing","originalRules","containsSilentNonBlockedChild","comp

iledRulesBody", "keepOnlyVisibleChilds", "removeVisibilityBlock", "hasVisibleSelector", "utils", "mixinNode", "visitExtend", "extendNode", "visitComment", "commentNode", "resolveVisibility", "visitAtRuleWithBody", "visitAtRuleWithoutBody", "visitAnonymous", "anonymousNode", "nodeRules", "hasFakeRuleset", "getBodyRules", "charset", "comment", "checkValidNodes", "isRoot", "\_compileRulesetPaths", "nodeRuleCnt", "\_removeDuplicateRules", "isVisibleRuleset", "ruleList", "ruleCache", "ruleCSS", "groups", "groupsArr", "result\_1", "space\_1", "comma\_1", "MarkVisibleSelectorsVisitor", "ExtendVisitor", "furthest", "furthestPossibleErrorMessage", "chunks", "current", "currentPos", "saveStack", "parserInput", "skipWhitespace", "nextChar", "oldi", "oldj", "curr", "endIndex", "mem", "inp", "charCodeAt", "autoCommentAbsorb", "nextNewLine", "text", "commentStore", "nextStarSlash", "save", "restore", "possibleErrorMessage", "state", "forget", "isWhitespace", "offset", "pos", "code", "\$re", "tok", "exec", "\$char", "\$str", "tokLength", "\$quoted", "startChar", "currentPosition", "\$parseUntil", "testChar", "returnVal", "inComment", "blockDepth", "blockStack", "parseGroups", "startPos", "lastPos", "loop", "char", "expected", "peek", "peekChar", "currentChar", "prevChar", "getInput", "peekNotNumeric", "start", "chunkInput", "failFunction", "fail", "lastOpening", "lastOpeningParen", "lastMultiComment", "lastMultiCommentEndBrace", "chunkerCurrentIndex", "currentChunkStartIndex", "cc", "cc2", "level", "parenLevel", "emitFrom", "emitChunk", "force", "fromCharCode", "chunker", "end", "furthestReachedEnd", "furthestChar", "Parser", "parsers", "getParserInput", "expect", "expectChar", "parseList", "currentIndex", "returnNodes", "parser", "additionalData", "globalVars", "modifyVars", "ignored", "preText", "disablePluginRule", "serializeVars", "preProcessors", "getPreProcessors", "process", "banner", "contentsIgnoredChars", "primary", "endInfo", "processImports", "extendRule", "definition", "declaration", "variableCall", "entities", "atrule", "foundSemiColon", "mixinLookup", "quoted", "forceEscaped", "isEscaped", "customFuncCall", "stop", "ieAlpha", "boolean", "if", "prevArgs", "isSemiColonSeparated", "argsComma", "argsSemiColon", "assignment", "literal", "dimension", "unicodeDescriptor", "entity", "ch", "variableCurly", "curly", "propertyCurly", "colorKeyword", "ud", "javascript", "js", "escape", "parsedName", "inValue", "ruleLookups", "isRule", "getLookup", "hasParens", "elem", "elemIndex", "re", "isCall", "expressionContainsNamed", "nameLoop", "expressions", "hasSep", "cond", "argInfo", "conditions", "block", "lookupValue", "attribute", "slashedCombinator", "isLess", "when", "blockRuleset", "hasDR", "ruleProperty", "permissiveValue", "anonymousValue", "untilTokens", "done", "testCurrentChar", "import", "dir", "importOptions", "mediaFeatures", "o", "optionName", "importOption", "mediaFeature", "pluginArgs", "nonVendorSpecificName", "hasIdentifier", "hasExpression", "hasUnknown", "hasBlock", "sub", "addition", "multiplication", "operation", "operand", "needsParens", "logical", "next", "conditionAnd", "negatedCondition", "parenthesisCondition", "atomicCondition", "body", "me", "tryConditionFollowedByParenthesis", "delim", "simpleProperty", "If", "trueValue", "falseValue", "isdefined", "colorFunctions", "hsla", "origColor", "hsl", "number", "rgba", "size", "m1\_1", "m2\_1", "hue", "hsv", "hsva", "vs", "floor", "perm", "saturation", "lightness", "hsvhue", "hsvsaturation", "hsvvalue", "luminance", "saturate", "amount", "method", "desaturate", "lighten", "darken", "fadein", "fadeout", "fade", "spin", "mix", "color1", "color2", "weight", "w", "w1", "w2", "greyscale", "contrast", "dark", "light", "threshold", "t", "argb", "tint", "shade", "colorBlend", "mode", "cb", "cs", "cr", "ab", "as", "colorBlendModeFunctions", "multiply", "screen", "overlay", "softlight", "sqrt", "hardlight", "difference", "abs", "exclusion", "average", "negation", "getItemsFromNode", "\_SELF", "~", "\_i", "expr", "values", "range", "step", "stepValue", "list", "each", "rs", "iterator", "tryEval", "Quote", "valueName", "keyName", "indexName", "MathHelper", "fn", "mathFunctions", "ceil", "sin", "cos", "atan", "asin", "acos", "mathHelper", "fraction", "num", "minMax", "isMin", "currentUnified", "referenceUnified", "unitStatic", "unitClone", "order", "convert", "pi", "mod", "y", "percentage", "evaluated", "encodeURI", "pattern", "flags", "%", "token", "encodeURIComponent", "isa", "Type", "isunit", "isruleset", "iscolor", "isnumber", "isstring", "iskeyword", "isurl", "ispixel", "ispercentage", "isem", "get-unit", "colorBlending", "fallback", "functionThis", "data-uri", "mimetypeNode", "filePathNode", "mimetype", "filePath", "entryPath", "fragmentStart", "utils.clone", "rawBuffer", "getFileManager", "useBase64", "mimeLookup", "charsetLookup", "fileSync", "loadFileSync", "buf", "encodeBase64", "uri", "dataUri", "svg-gradient", "direction", "stops", "gradientDirectionSvg", "position", "positionValue", "gradientType", "rectangleDimension", "renderEnv", "directionValue", "throwArgumentDescriptor", "types", "evaldRoot", "evalEnv", "visitorIterator", "preEvalVisitors", "first", "isPreEvalVisitor", "isPreVisitor", "pm", "postProcessors", "installedPlugins", "pluginCache", "Loader", "PluginLoader", "PluginManager", "install", "preProcessor", "priority", "indexToInsertAt", "postProcessor", "manager", "PluginManagerFactory", "newFactory", "major", "minor", "patch", "pre", "build", "sourceMapOutput", "sourceMapBuilder", "parseTree", "importManager", "SourceMapBuilder", "ParseTree", "transformTree", "toCSOptions", "sourceM



ap","getPostProcessors","file","getExternalSourceMap","files","rootFilename","SourceMapOutput","contentsIgnore  
dCharsMap","contentsMap","sourceMapFilename","sourceMapURL","outputFilename","sourceMapOutputFilenam  
e","sourceMapBasepath","sourceMapRootpath","outputSourceFiles","sourceMapGenerator","sourceMapFileInline",  
"disableSourceMapAnnotation","sourceMapInputFilename","normalizeFilename","removeBasepath","getCSSAppe  
ndage","\_css","\_rootNode","\_contentsMap","\_contentsIgnoredCharsMap","\_sourceMapFilename","\_outputFilenam  
e","\_sourceMapBasepath","\_sourceMapRootpath","\_outputSourceFiles","\_sourceMapGeneratorConstructor","getSo  
urceMapGenerator","\_lineNumber","\_column","sourceLines","columns","sourceColumns","inputSource","\_source  
MapGenerator","addMapping","generated","source","sourceRoot","setSourceContent","sourceMapContent","stringi  
fy","toJSON","rootFileInfo","mime","queue","ImportManager","pluginLoader","fileParsedFunc","importedEqualsR  
oot","newFileInfo","loadedFile","promise","loadFileCallback","resolvedFilename","pathDiff","isPathAbsolute","al  
waysMakePathsAbsolute","newEnv","evalPlugin","syncImport","loadPluginSync","loadPlugin","loadFile","then","r  
ender","utils.copyOptions","self\_1","Promise","resolve","reject","Render","context\_1","pluginManager\_1","reUseP  
luginManager","imports\_1","evalResult","fileContent","parseVersion","initial","data","ctor","api","fileCache","doX  
HR","errback","xhr","XMLHttpRequest","async","isFileProtocol","fileAsync","handleResponse","status","response  
Text","getResponseHeader","overrideMimeType","open","setRequestHeader","send","onreadystatechange","readyS  
tate","supports","clearFileCache","location","useFileCache","lessText","webInfo","lastModified","Date","log","fulfi  
ll","catch","rootHref","errorReporting","errors","errorline","classname","logLevel","errorConsole","timer","filenam  
eNoPath","className","innerHTML","browser","style","env","setInterval","replaceChild","clearInterval","errorHT  
ML","remove","removeErrorHTML","depends","lint","insecure","protocol","poll","hostname","port","onReady","a  
ddDefaultOptions","LESS\_PLUGINS","lessRoot","FM","addFileManager","loggers","console","LogListener","Err  
orReporting","cache","localStorage","setCSS","setItem","getCSS","getItem","timestamp","valueOf","Cache","imag  
eSize","imageFunctions","image-size","image-width","image-  
height","ImageSize","typePattern","thisArg","curryArgs","loadStyles","instanceOptions","loadStyleSheet","reload",  
"remaining","local","loadInitialFileCallback","loadStyleSheets","sheets","watch","watchMode","watchTimer","unw  
atch","registerStylesheetsImmediately","links","rel","registerStylesheets","record","refresh","startTime","endTime",  
"totalMilliseconds","remainingSheets","refreshStyles","resolveOrReject","pageLoadFinished"],"mappings":":;::;::;::;8  
OACgBA,EAAUC,GACtB,OAAOA,EAAC,KACtBA,QAAQ,sBAaU,B,IACtCA,QAAQ,uBAaW,B,IACtCA,QAAQ,MAA  
O,IACfA,QAAQ,eAAgB,IACxBA,QAAQ,aAAc,KACtBA,QAAQ,MAAO,cAGRC,EAAYC,EAASC,GACjC,GAA  
KA,EACL,IAAK,IAAMC,KAAOD,EAAIE,QACIB,GAAIF,EAAIE,QAAQC,eAAeF,GAC3B,GAAY,QAARA,GA  
AyB,oBAARA,GAAqC,aAARA,GAA8B,mBAARA,EACpEF,EAAQE,GAAOD,EAAIE,QAAQD,QAE3B,IACIF,  
EAAQE,GAAOG,KAAKC,MAAML,EAAIE,QAAQD,IAE1C,MAAOK,WCjBR,SAaUC,EAAUC,EAAQC,GAEn  
C,IAAMb,EAAOa,EAAMb,MAAQ,GAGrBc,EAAC,SAAQD,EAAME,OAASC,EAAGbB,IAAG5CiB,EAaE,N,EA  
ASO,eAAeJ,GACzCK,GAAmB,EAGjBC,EAAYT,EAASU,cAAc,SACzCD,EAAUE,aAAa,OAAQ,YAC3BT,EAA  
MU,OACNH,EAAUE,aAAa,QAAS,EAAMU,OAE1CH,EAAUN,GAACA,EAEVM,EAAUI,aACXJ,EAAUK,YA  
AYd,EAASe,eAAed,IAAG9CO,EAAqC,OAAjBF,GAAyBA,EAAaU,WAAWC,OAAS,GAACKR,EAAUO,WAAWC,  
OAAS,GAC7GX,EAAaY,WAAWC,YAAcV,EAAUS,WAAWC,WAGnE,IAAMC,EAAOpB,EAASqB,qBAAqB,Q  
AAQ,GAInD,GAAqB,OAAjBf,IAA8C,IAArBE,EAA4B,CACrD,IAAMc,EAASpB,GAASA,EAAMqB,aAAe,KAC  
zCD,EACAA,EAAOE,WAAWC,aAAaB,EAAWa,GAE1CF,EAACKN,YAAYL,GAUzB,GAPIH,IAAqC,IAArBE,  
GACbBF,EAAaK,B,WAAWE,YAAypB,GAMpCG,EAAUI,WACV,IACIJ,EAAUI,WAAWc,QAAU1B,EACjC,M  
AAO2B,GACL,MAAM,IAAIC,MAAM,6CAIb,SAASC,GACpB,IAEUC,EAFJ/B,EAAW8B,EAAO9B,SACxB,OA  
AOA,EAASgC,gBACND,EAAU/B,EAASqB,qBAAqB,WAC/BU,EAAQd,OAAS,MC7D7B,CACXgB,MAAO,SA  
ASC,GACZC,KAAKC,WAAW,QAASF,IAE7BG,KAAM,SAASH,GACXC,KAAKC,WAAW,OAAQF,IAE5BI,K  
AAM,SAASJ,GACXC,KAAKC,WAAW,OAAQF,IAE5BK,MAAO,SAASL,GACZC,KAAKC,WAAW,QAASF,IA  
E7BM,YAAa,SAASC,GACIBN,KAAKO,WAAWC,KAAKF,IAEzBG,eAAgB,SAASH,GACrB,IAAK,IAAII,EA  
AII,EAAGA,EAAIV,KAAKO,WAAWzB,OAAQ4B,IACxC,GAAIV,KAAKO,WAAWG,KAAOJ,EAEvB,YADAN,K  
AAKO,WAAWI,OAAOD,EAAG,IAKtCT,WAAy,SAASW,EAAMb,GACvB,IAAK,IAAIW,EAAL,EAAGA,EA  
IV,KAAKO,WAAWzB,OAAQ4B,IAAK,CAC7C,IAAMG,EAACb,KAAKO,WAAWG,GAAGE,GACnCC,GACAA  
,EAAYd,KAIxBQ,WAAy,iBCxBZ,WAAyO,EAAGqBC,GAC7Bf,KAAKe,aAAeA,GAAgB,GACpCD,EAAsBA,G

AAuB,GAM7C,IAJA,IACME,EAAoB,GACpBC,EAAYD,EAakBE,OAFV,CAAC,eAagB,aAAc,gBAAiB,0BAIj  
ER,EAAI,EAAGA,EAAIO,EAAUnC,OAAQ4B,IAAK,CACvC,IAAMS,EAAWF,EAAUP,GACrBU,EAakBN,EA  
AoBK,GACxCC,EACApB,KAAKmB,GAAYC,EAAGBC,KAAKP,GAC/BJ,EAAIM,EAakBIC,QAC7BkB,KAAK  
E,KAAK,8CAA8CiB,IAkCxE,OA7BIG,2BAAA,SAAeC,EAAUC,EAakBnE,EAASoE,EAAaC,GAExDH,GACDI,  
EAAOzB,KAAK,kFAEQ,MAApBsB,GACAG,EAAOzB,KAAK,qFAGhB,IAAIa,EAAef,KAAKe,aACpB1D,EAA  
QuE,gBACRb,EAAe,GAAGG,OAAOH,GAACG,OAAO7D,EAAQuE,cAAcC,oBAExE,IAAK,IAAIInB,EAAIK,EA  
AajC,OAAS,EAAG4B,GAAK,EAAIA,IAAK,CACHd,IAAMoB,EAACf,EAAaL,GACjC,GAAIoB,EAAYJ,EAAS,e  
AAiB,YAAYH,EAAUC,EAakBnE,EAASoE,GACvF,OAAOK,EAGf,OAAO,MAGXR,2BAAA,SAAeQ,GACX9B  
,KAAKe,aAAaP,KAAKsB,IAG3BR,8BAAA,WACItB,KAAKe,aAAe,WcTdb,CACXgB,UAAy,UACZC,aAAe,U  
ACfC,KAAO,UACPC,WAAa,UACbC,MAAQ,UACRC,MAAQ,UACRC,OAAS,UACTC,MAAQ,UACRC,eAAiB,  
UACjBC,KAAO,UACPC,WAAa,UACbC,MAAQ,UACRC,UAAy,UACZC,UAAy,UACZC,WAAa,UACbC,UAA  
y,UACZC,MAAQ,UACRC,eAAiB,UACjBC,SAAW,UACXC,QAAU,UACVC,KAAO,UACPC,SAAW,UACXC,S  
AAW,UACXC,cAAgB,UACHBC,SAAW,UACXC,SAAW,UACXC,UAAy,UACZC,UAAy,UACZC,YAAc,UAC  
dC,eAAiB,UACjBC,WAAa,UACbC,WAAa,UACbC,QAAU,UACVC,WAAa,UACbC,aAAe,UACfC,cAAgB,UAC  
hBC,cAAgB,UACHBC,cAAgB,UACHBC,cAAgB,UACHBC,WAAa,UACbC,SAAW,UACXC,YAAc,UACdC,QAA  
U,UACVC,QAAU,UACVC,WAAa,UACbC,UAAy,UACZC,YAAc,UACdC,YAAc,UACdC,QAAU,UACVC,UA  
AY,UACZC,WAAa,UACbC,KAAO,UACPC,UAAy,UACZC,KAAO,UACPC,KAAO,UACPC,MAAQ,UACRC,Y  
AAc,UACdC,SAAW,UACXC,QAAU,UACVC,UAAy,UACZC,OAAS,UACTC,MAAQ,UACRC,MAAQ,UACRC  
,SAAW,UACXC,cAAgB,UACHBC,UAAy,UACZC,aAAe,UACfC,UAAy,UACZC,WAAa,UACbC,UAAy,UACZ  
C,qBAAuB,UACvBC,UAAy,UACZC,UAAy,UACZC,WAAa,UACbC,UAAy,UACZC,YAAc,UACdC,cAAgB,U  
ACHBC,aAAe,UACfC,eAAiB,UACjBC,eAAiB,UACjBC,eAAiB,UACjBC,YAAc,UACdC,KAAO,UACPC,UAAy  
,UACZC,MAAQ,UACRC,QAAU,UACVC,OAAS,UACTC,iBAAmB,UACnBC,WAAa,UACbC,aAAe,UACfC,aA  
Ae,UACfC,eAAiB,UACjBC,gBAakB,UACIBC,kBAAoB,UACpBC,gBAakB,UACIBC,gBAakB,UACIBC,aAAe,  
UACfC,UAAy,UACZC,UAAy,UACZC,SAAW,UACXC,YAAc,UACdC,KAAO,UACPC,QAAU,UACVC,MAA  
Q,UACRC,UAAy,UACZC,OAAS,UACTC,UAAy,UACZC,OAAS,UACTC,cAAgB,UACHBC,UAAy,UACZC,c  
AAgB,UACHBC,cAAgB,UACHBC,WAAa,UACbC,UAAy,UACZC,KAAO,UACPC,KAAO,UACPC,KAAO,UAC  
PC,WAAa,UACbC,OAAS,UACTC,cAAgB,UACHBC,IAAM,UACNC,UAAy,UACZC,UAAy,UACZC,YAAc,UA  
CdC,OAAS,UACTC,WAAa,UACbC,SAAW,UACXC,SAAW,UACXC,OAAS,UACTC,OAAS,UACTC,QAAU,U  
ACVC,UAAy,UACZC,UAAy,UACZC,UAAy,UACZC,KAAO,UACPC,YAAc,UACdC,UAAy,UACZC,IAAM,  
UACNC,KAAO,UACPC,QAAU,UACVC,OAAS,UACTC,UAAy,UACZC,OAAS,UACTC,MAAQ,UACRC,MAA  
Q,UACRC,WAAa,UACbC,OAAS,UACTC,YAAc,aCpJH,CACXpM,OAAQ,CACJqM,EAak,EAclC,GAAM,IA  
CNC,GAAM,KACNC,GAAM,MACNC,GAAM,MAAS,GACfC,GAAM,MAAS,GACfC,GAAM,MAAS,GAak,I  
AExBC,SAAU,CACNC,EAak,EAclC,GAAM,MAEVC,MAAO,CACHC,IAAO,GAak,EAaIC,KAAKc,IACrB  
C,IAAO,EAAI,IACXC,KAAQ,EAAI,IACZC,KAAQ,MCfD,CAAEC,SAAQC,gCCIrB,aACIrM,KAAKsM,OAAS,  
KACdtM,KAAKuM,sBAAmBC,EACxBxM,KAAKyM,iBAAcD,EACnBxM,KAAK0M,SAAW,KACHb1M,KAA  
K2M,OAAS,KAyKtB,OAtKIC,sBAAIC,mCAAJ,WACI,OAAO7M,KAAK8M,4CAGhBF,sBAAIC,yBAAJ,WACI,  
OAAO7M,KAAK+M,4CAGhBF,sBAAA,SAAug,EAAOV,GACb,SAASW,EAaIC,GACLA,GAAQA,aAAgBL,I  
ACxBK,EAakZ,OAASA,GAGIBa,MAAMC,QAAQJ,GACdA,EAAMK,QAAQJ,GAGdA,EAaID,IAIZH,qBAAA  
,WACI,OAAO7M,KAAKsN,QAAWtN,KAAKsM,QAAUtM,KAAKsM,OAAS,YAAe,GAGrEF,qBAAA,WACI,  
OAAO7M,KAAKuN,WAAcvN,KAAKsM,QAAUtM,KAAKsM,OAAOQ,YAAe,IAGxED,0BAAA,WAAkB,OA  
O,GAezBA,kBAAA,SAAMW,GACF,IAAMC,EAAO,GASb,OARazN,KAAK0N,OAaOF,EAAS,CACjBG,IAAK  
,SAASC,EAAOd,EAAUe,GAC3BJ,EAakjN,KAAKoN,IAEdE,QAAS,WACL,OAAuB,IAAhBL,EAak3O,UAGb  
2O,EAakM,KAAK,KAGrBIB,mBAAA,SAAOW,EAASQ,GACZA,EAAOL,IAAI3N,KAAKiO,QAGpBpB,mBA  
AA,SAAOqB,GACHIO,KAAKiO,MAAQc,EAQC,MAAMnO,KAAKiO,QAGpCpB,iBAAA,WAAS,OAAO7M,  
MAEhB6M,qBAAA,SAASW,EAASY,EAaIC,EAAGC,GACrB,OAAQF,GACJ,IAAK,IAAK,OAaOC,EAaIC,EA  
CrB,IAAK,IAAK,OAaOD,EAaIC,EACrB,IAAK,IAAK,OAaOD,EAaIC,EACrB,IAAK,IAAK,OAaOD,EAaIC,I  
AI7BzB,mBAAA,SAAOW,EAASS,GACZ,IAAMM,EAAYf,GAAWA,EAQgB,aAErC,OAAO,EAACc,QAAQR,  
EAQ,OAAS,QAAQH,IAAcN,GAG/DpB,UAAP,SAAewB,EAAGC,GAOd,GAakD,EAAS,SAGG,WAAXC,E

AAE1N,MAAgC,cAAX0N,EAAE1N,KAC3B,OAAOyN,EAAEM,QAAQL,GACd,GAAIA,EAAEK,QACT,OAAQ  
L,EAAEK,QAAQN,GACf,GAAIA,EAAEzN,OAAS0N,EAAE1N,KAAjB,CAMP,GAFAYN,EAIA,EAAEJ,MAC  
NK,EAAIA,EAAEL,OACDd,MAAMC,QAAQiB,GACf,OAAOA,IAAMC,EAAL,OAII9B,EAEEzB,GAII6B,EAA  
EvP,SAAWwP,EAAExP,OAAnB,CAGA,IAAK,IAAI4B,EAAL,EAAGA,EAII2N,EAAEvP,OAAQ4B,IAC1B,GA  
AiC,IAA7BmM,EAAK8B,QAAQN,EAAE3N,GAAI4N,EAAE5N,IACrB,OAGR,OAAO,KAGJmM,iBAAP,SAAs  
BwB,EAAGC,GACrB,OAAOD,EAAMC,GAAK,EACZD,IAAMC,EAAL,EACPD,EAAMC,EAAL,OAII9B,GA  
7BK,6BAAA,WAI,OA6H6B,MAAzB7M,KAAKuM,mBACLvM,KAAKuM,iBAAmB,GAEK,IAA1BvM,KAAKu  
M,kBAGhBM,+BAAA,WACiC,MAAzB7M,KAAKuM,mBACLvM,KAAKuM,iBAAmB,GAE5BvM,KAAKuM,i  
BAAmBvM,KAAKuM,iBAAmB,GAGpDM,kCAAA,WACiC,MAAzB7M,KAAKuM,mBACLvM,KAAKuM,iBA  
AmB,GAE5BvM,KAAKuM,iBAAmBvM,KAAKuM,iBAAmB,GAKpDM,6BAAA,WACI7M,KAAKyM,aAAc,G  
AKvBI,+BAAA,WACI7M,KAAKyM,aAAc,GAOvBI,sBAAA,WACI,OAAO7M,KAAKyM,aAGhBI,2BAAA,WA  
CI,MAAO,CACHN,iBAAkBvM,KAAKuM,iBACvBE,YAAzM,KAAKyM,cAI1BI,+BAAA,SAAmB1M,GACVA  
,IAGLH,KAAKuM,iBAAmBpM,EAAKoM,iBAC7BvM,KAAKyM,YAAcM,EAAKsM,mBC7K1BmC,EAAQ,SA  
ASC,EAAKR,EAAGS,GAC3B,IAAMC,EAAO/O,KAOTmN,MAAMC,QAAQyB,GACd7O,KAAK6O,IAAMA,E  
ACJA,EAALP,QAAU,GACrBkB,KAAK6O,IAAM,GACXA,EAALG,MAAM,SAASC,KAAL,SAALC,EAAGxO,G  
AC5BA,EAAL,EACJqO,EAAKF,IAALrO,KAAK2O,SAASD,EAAG,KAELBH,EAAKK,MAASD,SAASD,EAAG,I  
AAO,SAIzCIP,KAAK6O,IAAM,GACXA,EAALQ,MAAM,IAALJ,KAAL,SAALC,EAAGxO,GACvBA,EAAL,EACJ  
qO,EAAKF,IAALrO,KAAK2O,SAASD,EAAL,EAAG,KAEL9BH,EAAKK,MAASD,SAASD,EAAL,EAAG,IAA  
O,QAIjDIP,KAAKoP,MAAQpP,KAAKoP,QAAuB,iBAANf,EAALiBA,EAAL,QAC5B,IAAjBS,IACP9O,KAAKiO,  
MAAQa,IA8LrB,SAASQ,EAAMC,EAAGC,GACd,OAAOzD,KAAK0D,IAAL1D,KAAKyD,IAALD,EAAG,GAAL  
C,GAGpC,SAASE,EAAMH,GACX,MAAO,IAAL,EAALN,KAAL,SAALC,GAEvB,QADAA,EAAL,EAAMvD,K  
AAK4D,MAAMT,GAAL,MACb,GAAL,IAAM,IAAMA,EAALU,SAAS,OACzC7B,KAAK,IAALMzA,EAALiB,UA  
AYjD,OAAOkD,OAAO,IAALjD,EAAQ,CACxCjM,KAAM,QAENmP,gBACI,IAALC,EAALhQ,KAAK6O,IAAL,G  
AAK,IAALoB,EAALjQ,KAAK6O,IAAL,GAAL,IAALP,EAALtO,KAAK6O,IAAL,GAAL,IAALpE,MAAO,OAJPm  
B,EAAKA,GAAL,OAAWA,EAAL,MAAQjE,KAAKmE,KAAMF,EAAL,MAAS,MAAQ,MAI7C,OAHPBC,EAAK  
A,GAAL,OAAWA,EAAL,MAAQIE,KAAKmE,KAAMD,EAAL,MAAS,MAAQ,MAGhC,OAfjC3B,EAAKA,GAAL  
K,OAAWA,EAAL,MAAQvC,KAAKmE,KAAM5B,EAAL,MAAS,MAAQ,OAkrEZ,gBAAOF,EAASQ,GACZA,E  
AAOL,IAAL3N,KAAKmQ,MAAM3C,KAG1B2C,eAAM3C,EAAS4C,GACX,IACIC,EACAJB,EACAKB,EAHEC,  
EAAW/C,GAAWA,EAAQ+C,WAAaH,EAL7CI,EAAO,GAOX,GAFAPB,EAAQpP,KAAKyQ,OAAOjD,EAASxN,  
KAAKoP,OAEL9BP,KAAKiO,MACL,GAALc,IAA9BjO,KAAKiO,MAAMyC,QAAQ,OACftB,EAAQ,IACRKB,E  
AAgB,YAEjB,CAAA,GAALc,IAA9BtQ,KAAKiO,MAAMyC,QAAQ,OAOLB,OAAOLQ,KAAKiO,MALRqC,EA  
DAIB,EAAQ,EACQ,OAEL,WAMPBA,EAAQ,IACRKB,EAAGB,QALxB,OAQA,GACJ,IAAL,OACDE,EAAOx  
Q,KAAK6O,IAAL,KAAL,SAALC,GAC1B,OAAOL,EAAMvD,KAAK4D,MAAMT,GAAL,QAC7BhO,OAAOoO,E  
AAMF,EAAO,IACvB,MACJ,IAAL,OACDoB,EAAKhQ,KAAK8O,EAAMF,EAAO,IAC3B,IAAL,MACDiB,EA  
QrQ,KAAK2Q,QACbH,EAAO,CACHxQ,KAAKyQ,OAAOjD,EAAS6C,EAAMO,GACxB5Q,KAAKyQ,OAAOjD  
,EAAMB,IAAV6C,EAAM1E,OAC3B3L,KAAKyQ,OAAOjD,EAAMB,IAAV6C,EAAMQ,QACHC3P,OAAOsP,G  
AGjB,GAALF,EAEL,OAUA,MAALiBE,EAAKzC,KAAK,KAALwC,EAAL,GAAL,UAK7D,GAFALF,EAAQRQ,K  
AAK8Q,QAETP,EAAL,CACV,IAAMQ,EAALv,EAAMhB,MAAM,IAAG3B0B,EAAL,KAALOA,EAAL,IAAMA,  
EAAL,KAALOA,EAAL,IAAMA,EAAL,KAALOA,EAAL,KACnGV,EAAQ,IAALU,EAAL,GAALKA,EAAL,GA  
AKA,EAAL,IAALD,OAAOV,GASXW,iBAALQxD,EAASY,EAAL6C,GAGjB,IAFA,IAALpC,EAAM,IAAL1B,MA  
AM,GACHBiC,EAAQpP,KAAKoP,OAAS,EAAL6B,EAAM7B,OAAS6B,EAAM7B,MAC5CF,EAAL,EAAGA,EA  
AL,EAAGA,IACnBL,EAAL,GAALIP,KAAKkR,SAAS1D,EAASY,EAALpO,KAAK6O,IAAL,GAAL+B,EAAMp  
C,IAAL,IAELD,OAAO,IAALN,EAAMC,EAALKO,IAG1B0B,iBACI,OAAOpB,EAAM1P,KAAK6O,MAGtB8B,iB  
ACI,IAGIC,EACAJF,EAJEqE,EAALhQ,KAAK6O,IAAL,GAAL,IAALoB,EAALjQ,KAAK6O,IAAL,GAAL,IAALP  
,EAALtO,KAAK6O,IAAL,GAAL,IAALR,EAALrO,KAAKoP,MAEL9EI,EAAMzD,KAAKyD,IAALQ,EAAGC,EA  
G3B,GAALmB,EAAM1D,KAAK0D,IAALIO,EAAGC,EAAG3B,GAG9CuC,GAALrB,EAAMC,GAAL,OACIB0B,  
EAAL3B,EAAMC,EAELhB,GAALD,IAALQC,EACRmB,EAALjF,EAAL,MACL,CAGH,OAFAA,EAALiF,EAAL,GA  
MM,GAAL,EAAL3B,EAAMC,GAAL0B,GAAL3B,EAAMC,GAELvCD,GACJ,KAAKQ,EAAGY,GAALX,EAAL3

B,GAAK6C,GAAKIB,EAAI3B,EAAI,EAAI,GAAI,MAC3C,KAAK2B,EAAGW,GAAKtC,EAAI0B,GAAKmB,E  
AAI,EAAiB,MAC3C,KAAK7C,EAAGsC,GAAKZ,EAAIC,GAAKkB,EAAI,EAE9BP,GAAK,EAET,MAAO,CAA  
EA,EAAO,IAAJA,EAASjF,IAAGkF,IAAGxC,MAI/B+C,iBACI,IAGIR,EACAjF,EAJEqE,EAAIhQ,KAAK6O,IA  
AI,GAAK,IAAKoB,EAAIjQ,KAAK6O,IAAI,GAAK,IAAKP,EAAItO,KAAK6O,IAAI,GAAK,IAAKR,EAAIrO,K  
AAKoP,MAE9EI,EAAMzD,KAAKyD,IAAIQ,EAAGC,EAAG3B,GAAImB,EAAM1D,KAAK0D,IAAIO,EAAGC  
,EAAG3B,GAG9CiB,EAAIC,EAEJ2B,EAAI3B,EAAMC,EAOhB,GALI9D,EADQ,IAAR6D,EACI,EAEA2B,EAA  
I3B,EAGRA,IAAQc,EACRmB,EAAI,MACD,CACH,OAAQpB,GACJ,KAAKQ,EAAGY,GAAXX,EAAI3B,GAA  
K6C,GAAKIB,EAAI3B,EAAI,EAAI,GAAI,MAC3C,KAAK2B,EAAGW,GAAKtC,EAAI0B,GAAKmB,EAAI,EA  
AG,MAC7B,KAAK7C,EAAGsC,GAAKZ,EAAIC,GAAKkB,EAAI,EAE9BP,GAAK,EAET,MAAO,CAAEA,EAA  
O,IAAJA,EAASjF,IAAG4D,IAAGIB,MAG/BgD,kBACI,OAAO3B,EAAM,CAAc,IAAb1P,KAAKoP,OAAa1O,OA  
AOIB,KAAK6O,OAGhDF,iBAAQ2C,GACJ,OAAQA,EAAEzC,KACNyC,EAAEzC,IAAI,KAAO7O,KAAK6O,IA  
AI,IACtByC,EAAEzC,IAAI,KAAO7O,KAAK6O,IAAI,IACtByC,EAAEzC,IAAI,KAAO7O,KAAK6O,IAAI,IACt  
ByC,EAAEIC,QAAWpP,KAAKoP,MAAS,OAAI5C,KAI3CoC,EAAM2C,YAAc,SAASC,GACzB,IAAItC,EACEu  
C,EAAMD,EAAQE,cAQpB,GAPItF,EAAO3O,eAAegU,GACtBvC,EAAI,IAAIN,EAAMxC,EAAOqF,GAAKE,M  
AAM,IAEnB,gBAARF,IACLvC,EAAI,IAAIN,EAAM,CAAC,EAAG,EAAG,GAAI,IAGzBM,EAEA,OADAA,EA  
AEjB,MAAQuD,EACHtC,GC7Nf,IAAM0C,EAAQ,SAAS1E,GACnBIN,KAAKiO,MAAQf,GAGjB0E,EAAM/B,  
UAAyjD,OAAOkD,OAAO,IAAIjD,EAAQ,CACxCjM,KAAM,QAEN8M,gBAAOF,EAASQ,GACZA,EAAOL,IA  
AI,KACX3N,KAAKiO,MAAMP,OAAOF,EAASQ,GAC3BA,EAAOL,IAAI,MAGfkE,cAAKrE,GACD,OAAO,IA  
AIoE,EAAM5R,KAAKiO,MAAM4D,KAAKrE,OCfzC,IAAMsE,EAAsB,CACxB,IAAI,EACJC,KAAK,EACLC,K  
AAK,GAGHC,EAAa,SAAShE,GACV,MAAVa,GACAjO,KAAKiO,MAAQ,IACbjO,KAAKs,mBAAoB,IAEzBl  
S,KAAKiO,MAAQA,EAAQA,EAAMkE,OAAS,GACpCnS,KAAKs,kBAAmC,KAAfS,KAAKiO,QAIcGfE,EA  
AWpC,UAAyjD,OAAOkD,OAAO,IAAIjD,EAAQ,CAC7CjM,KAAM,aAEN8M,gBAAOF,EAASQ,GACZ,IAAM  
oE,EAAGB5E,EAAQ+C,UAAyUB,EAAoB9R,KAAKiO,OAAU,GAAK,IACIFD,EAAOL,IAAIyE,EAAepS,KAA  
KiO,MAAQmE,MCIB/C,IAAMC,EAAU,SAASC,EAAyRE,EAAOsE,EAAy1E,EAAO2E,EAAiBC,GAC5EzS,KA  
AKsS,WAAaA,aAAsBL,EACpCK,EAAa,IAAIL,EAAWK,GAG5BtS,KAAKiO,MADY,iBAAVA,EACMA,EAA  
MkE,OACZIE,GAGM,GAEjBjO,KAAKuS,WAAaA,EACIBvS,KAAKsN,OAASO,EACd7N,KAAKuN,UAAyIF,E  
ACjBxS,KAAK0S,mBAAmBD,GACxBzS,KAAK2S,UAAU3S,KAAKsS,WAAytS,OAGpCqS,EAAQxC,UAAyJ  
D,OAAOkD,OAAO,IAAIjD,EAAQ,CAC1CjM,KAAM,UAENgS,gBAAO1E,GACH,IAAMD,EAAQjO,KAAKiO,  
MACnBjO,KAAKsS,WAAapE,EAAQC,MAAMnO,KAAKsS,YAchB,iBAAVrE,IACPjO,KAAKiO,MAAQC,EA  
AQC,MAAMF,KAIc4D,cAAKrE,GACD,OAAO,IAAI6E,EAAQrS,KAAKsS,WACpBtS,KAAKiO,MAAM4D,K  
AAO7R,KAAKiO,MAAM4D,KAAKrE,GAAWxN,KAAKiO,MACIDjO,KAAKuS,WACLvS,KAAK+M,WACL/  
M,KAAK8M,WAAy9M,KAAKyS,mBAG9BI,iBACI,OAAO,IAAIR,EAAQrS,KAAKsS,WACpBtS,KAAKiO,MA  
CLjO,KAAKuS,WACLvS,KAAK+M,WACL/M,KAAK8M,WAAy9M,KAAKyS,mBAG9B/E,gBAAOF,EAASQ,  
GACZA,EAAOL,IAAI3N,KAAKmQ,MAAM3C,GAAUxN,KAAK8M,WAAy9M,KAAK+M,aAG1DoD,eAAM3  
C,GACFA,EAAUA,GAAW,GACrB,IAAIS,EAAQjO,KAAKiO,MACX6E,EAAGbTf,EAAQsF,cAQ9B,OAPI7E,a  
AAiB2D,IAGjBpE,EAAQsF,eAAgB,GAE5B7E,EAAQA,EAAMkC,MAAQIC,EAAMkC,MAAM3C,GAAWS,EA  
C7CT,EAAQsF,cAAgBA,EACV,KAAV7E,GAAoD,MAApCjO,KAAKsS,WAAWrE,MAAM8E,OAAO,GACtC,G  
AEA/S,KAAKsS,WAAWnC,MAAM3C,GAAWS,KCIE7C,IAAMIC,EAAO,CACHBiH,OAAQ,EACRC,gBAAiB,E  
ACjBC,OAAQ,GAICC,EACJ,EADIA,EAEF,EAFEa,EAGJ,ECLT,SAASC,EAAQC,GACb,OAAOzG,OAAOiD,U  
AAUD,SAAS0D,KAAKD,GAAS1B,MAAM,GAAI,GAqF7D,SAASvE,EAAQiG,GACb,MAA4B,UAArBD,EAA  
QC,GC3CnB,SAASE,EAACK,EAAQnW,GAEIB,YADgB,IAAZA,IAAsBA,EAAU,IACHc+P,EAAQoG,GACDA,  
EAAOvE,KAAI,SAAUvO,GAAG,OAAO6S,EAAG7S,EAAGrD,MDnB3B,WAArB+V,EADeC,ECqBAG,IDIBZH  
,EAAQI,cAAgB7G,QAAUA,OAAO8G,eAAeL,KAAazG,OAAOiD,UCmBxE2D,EAAtCf,WACI,IAAK,IAAI7H,EA  
AI,EAAGjL,EAAI,EAAGiT,EAACK,UAAU9U,OAAQ4B,EAAItT,EAAIjT,IAAKiL,GAAKiL,UAAUIT,GAAG5B  
,OACxE,IAAIkR,EAAI7C,MAAMxB,GAAIkI,EAAI,EAA3B,IAA8BnT,EAAI,EAAGA,EAAItT,EAAIjT,IACzC,I  
AAK,IAAI2N,EAAIuF,UAAUIT,GAAIoT,EAAI,EAAGC,EAAK1F,EAAEvP,OAAQgV,EAAIC,EAAID,IAAKD,I  
AC1D7D,EAAE6D,GAAXf,EAAEyF,GACjB,OAAO9D,EAoCAGe,CAFkPH,OAAOqH,oBAAoBT,GACzB5G,  
OAAOsH,sBAAsBV,IACLW,QAAO,SAAUC,EAAO3C,GAC1D,OAAIrE,EAAQ/P,EAAQgX,SAAWHx,EAAQg

X,MAAMC,SAAS7C,IAIC9D,SAAoB2C,EAAO3C,EAAK8C,EAAQC,EAAgBC,GACpD,IAAIC,EAAW,GAAGC ,qBAAqBrB,KAAKkB,EAAGB/C,GACtD,aACA,gBACW,eAAbID,IACAN,EAAM3C,GAAO8C,GACbE,GAAqC, kBAAbC,GACxB9H,OAAOgI,eAAeR,EAAO3C,EAAK,CAC9BxD,MAAOsG,EACPM,YAAAY,EACZC,UAAU,E ACVC,cAAc,IA4BIBC,CAAWZ,EAAO3C,EADL8B,EADHC,EAAO/B,GACMpU,GACQmW,EAAQnW,EAAQ4 X,eAJpCb,IAMZ,IDjCP,IAAuBf,WE7BP6B,EAAyRH,EAAOsH,GAK/B,IAJA,IAAIC,EAAIvH,EAAQ,EACZwH, EAAO,KACPC,GAAU,IAELF,GAAG,GAAB+,OAA1BD,EAAyPc,OAAOqC,IACICE,IAOJ,MAJqB,iBAAVzH,I ACPwH,GAAQF,EAAyxD,MAAM,EAAG9D,GAAOmB,MAAM,QAAU,IAAIQ,QAGrD,CACHuW,OACAC,m BAIQC,EAAUC,GACtB,IAAI9U,EACE5B,EAAS0W,EAAlI W,OACbyU,EAAO,IAAIpG,MAAMrO,GAEvB,IA AK4B,EAAI,EAAGA,EAAI5B,EAAQ4B,IACpB6S,EAAK7S,GAAG8U,EAAl9U,GAElB,OAAO6S,WAGKV,EA AM4C,GACIB,IAAMC,EAAS,GACf,IAAK,IAAMC,KAAQF,EACXA,EAAlhY,eAAekY,KACnBD,EAAOC,GA AQF,EAAIE,IAG3B,OAAOD,WAGKE,EAASC,EAAMC,GAC3B,IAAIC,EAASD,GAAQ,GACrB,IAAKA,EAAK E,UAAW,CACjBD,EAAS,GACT,IAAME,EAAW1C,EAAKsC,GACtBE,EAAOC,UAAyC,EACnB,IAAMP,EAA SI,EAAOvC,EAAKuC,GAAQ,GACnCIJ,OAAOkD,OAAOiG,EAAQE,EAAUP,GAEPc,OAAOK,WAGKG,EAAy L,EAAMC,GAC9B,GAAIA,GAAQA,EAAKE,UACb,OAAOF,EAEX,IAAMK,EAAOP,EAASC,EAAMC,GAQ5B ,GAPIK,EAAKC,aACLD,EAAKE,KAAOC,EAAepD,QAG3BiD,EAAlI,eACLJ,EAAKK,YAAcC,GAEE,iBAAd N,EAAKE,KACZ,OAAQF,EAAKE,KAAK3E,eACd,IAAK,SACDyE,EAAKE,KAAOC,EAAetD,OAC3B,MACJ,I AAK,kBACDmD,EAAKE,KAAOC,EAAerD,gBAC3B,MACJ,IAAK,SACL,IAAK,SACDkD,EAAKE,KAAOC,EA AepD,OAC3B,MACJ,QACliD,EAAKE,KAAOC,EAAepD,OAGvC,GAAgC,iBAArBiD,EAAKK,YACZ,OAAQL, EAAKK,YAAy9E,eACrB,IAAK,MACDyE,EAAKK,YAAcC,EACnB,MACJ,IAAK,QACDN,EAAKK,YAAcC,E ACnB,MACJ,IAAK,MACDN,EAAKK,YAAcC,EAI/B,OAAON,WAYKO,EAAlB,EAAKMB,gBAAAA,MAC9B, IAAK,IAAIjW,EAAI,EAAGkW,EAASpB,EAAlI W,OAAQ4B,EAAlkW,EAAQlW,IAAK,CACID,IAAMuN,EAA QuH,EAAl9U,GACdyM,MAAMC,QAAQa,GACdyI,EAAlzI,EAAO0I,QAENnK,IAAVyB,GACA0I,EAAOnW,K AAKyN,GAIxB,OAAO0I,gHApBWd,EAAMC,GACxB,IAAK,IAAMH,KAAQG,EACXA,EAAKrY,eAAekY,KA CpBE,EAAKF,GAAQG,EAAKH,IAG1B,OAAOE,oBCxGLgB,EAAGB,qCawBhBC,EAAy,SAASrX,EAAGsX,E AAgBC,GAC1CtX,MAAM4T,KAAKtT,MAEX,IAAMuB,EAAW9B,EAAlE8B,UAAyYv,EAK/B,GAHAhX,KAA KiX,QAAUxX,EAAEwX,QACjBjX,KAAKkX,MAAQzX,EAAEyX,MAEXH,GAAGBxV,EAAU,CAC5B,IAAM4 V,EAAQJ,EAAeK,SAAS7V,GACCh8V,EAAMC,EAAlk7X,EAAlEoO,MAAOsJ,GACn9B,EAAOgC,EAAlhC, KACTkC,EAAOF,EAAl/B,OACXkC,EAAW/X,EAAlE6T,MAAQgE,EAAlk7X,EAAlE6T,KAAM6D,GAAO9B,K ACtDoC,EAAQN,EAAQA,EAAM9H,MAAM,MAAQ,GAQ1C,GANArP,KAAKY,KAAOnB,EAAlEmB,MAAQ,S ACtBZ,KAAKuB,SAAWA,EACbVb,KAAK6N,MAAQpO,EAAlEoO,MACf7N,KAAKqV,KAAuB,iBAATA,EA AoBA,EAAO,EAAI,KACIDrV,KAAKsV,OAASiC,GAETvX,KAAKqV,MAAQrV,KAAKkX,MAAO,CAC1B,IA AMQ,EAAQ1X,KAAKkX,MAAMII,MAAM6H,GASzBc,EAAO,IAAIC,SAAS,IAAK,qBAC3BC,EAAa,EACjB,I ACIF,IACF,MAAOIY,GACL,IAAMuP,EAAQvP,EAAEyX,MAAMII,MAAM6H,GAEl5BgB,EAAa,GADTxC,EA AOIG,SAASH,EAAM,KAI1B0I,IACIA,EAAM,KACN1X,KAAKqV,KAAOIG,SAASuI,EAAM,IAAMG,GAEljCH ,EAAM,KACN1X,KAAKsV,OAASnG,SAASuI,EAAM,MAKzC1X,KAAKwX,SAAWA,EAAW,EAC3BxX,KAA K8X,YAAcL,EAAMD,GAElzBxX,KAAK+X,QAAU,CACXN,EAAMzX,KAAKqV,KAAO,GACIBoC,EAAMzX, KAAKqV,KAAO,GACIBoC,EAAMzX,KAAKqV,SAMvB,QAA6B,IAAIbzI,OAAOoL,OAAwB,CACtC,IAAMC, EAAl,aACVA,EAAEpI,UAAyNq,MAAMmQ,UACpBiH,EAAljH,UAAy,IAAIoI,OAE1BnB,EAAljH,UAAyJD ,OAAOoL,OAAOtY,MAAMmQ,WAG9CiH,EAAljH,UAAU4D,YAAcqD,EASICA,EAAljH,UAAUD,SAAW,S AASvS,GACpCA,EAAUA,GAAW,GAERB,IAAI4Z,EAAU,GACRc,EAAU/X,KAAK+X,SAAW,GAC5BjY,EAA Q,GACRoY,EAAU,SAAUC,GAAO,OAAOA,GACtC,GAAl9a,EAAQ6a,QAAS,CACjB,IAAMtX,SAAcvD,EAAQ 6a,QAC5B,GAAa,aAATtX,EACA,MAAMIB,MAAM,+CAA+CkB,OAE/DsX,EAAU7a,EAAQ6a,QAGtB,GAAGB ,OAAdlY,KAAKqV,KAAe,CAKpB,GAJ0B,iBAAf0C,EAAQ,IACfjY,EAAMU,KAAK0X,EAAlWY,KAAKqV,K AAO,MAAK0C,EAAQ,GAAM,SAG/B,iBAAfA,EAAQ,GAAlB,CACChC,IAAIK,EAAlpY,KAAKqV,SACnB0C,E AAQ,KACRK,GAAYL,EAAQ,GAAGpG,MAAM,EAAG3R,KAAKsV,QACjC4C,EAAQA,EAAQA,EAAQH,EA AQ,GAAGM,OAAOrY,KAAKsV,OAAQ,GAAl,QACvDyC,EAAQ,GAAGpG,MAAM3R,KAAKsV,OAAS,GAAl, OAAQ,YAEvDxV,EAAMU,KAAK4X,GAGW,iBAAlfL,EAAQ,IACfjY,EAAMU,KAAK0X,EAAlWY,KAAKqV, KAAO,MAAK0C,EAAQ,GAAM,SAEzDjY,EAAWA,EAAMiO,KAAK,MAAQmK,EAAQ,GAAl,cAkB9C,OAFaj

B,GAAWiB,EAAWIY,KAAKY,eAAcZ,KAAKiX,QAAW,OACrDjX,KAAKuB,WACL0V,GAAWiB,EAAQ,OAAQ,OAASIY,KAAKuB,UAEzCvB,KAAKqV,OACL4B,GAAWiB,EAAQ,YAAYIY,KAAKqV,kBAAGBrV,KAAKsV,OAAS,OAAM,SAG5E2B,GAAW,KAAKnX,EAEZE,KAAKwX,WACLp,GAACiB,EAAQ,QAAS,QAAUIY,KAAKuB,UAAy,SAC1D0V,GAACiB,EAAQIY,KAAKwX,SAAU,YAAWxX,KAAK8X,kBAGlDb,GC1JX,IAAMqB,EAAW,SAASC,EAAUC,EAAYC,EAAW5K,EAAO2E,EAAiBC,GAC/EzS,KAAKwY,WAAaA,EACIBxY,KAAKyY,UAAyA,EACjBzY,KAAK0Y,gBAaKBD,EACvBzY,KAAKsN,OAASO,EACd7N,KAAKuN,UAAyIF,EACjBxS,KAAKuY,SAAWvY,KAAK2Y,YAAYJ,GACjCvY,KAAK4Y,oBAAiBpM,EACtBxM,KAAK0S,mBAAmBD,GACxBzS,KAAK2S,UAAU3S,KAAKuY,SAAUvY,OAGlCsY,EAASzI,UAAyJd,OAAOkD,OAAO,IAAIjD,EAAQ,CAC3CjM,KAAM,WAENgS,gBAAO1E,GACCIO,KAAKuY,WACLvY,KAAKuY,SAAWrK,EAAQ2K,WAAW7Y,KAAKuY,WAExCvY,KAAKwY,aACLxY,KAAKwY,WAAAtK,EAAQ2K,WAAW7Y,KAAKwY,aAE1CxY,KAAKyY,YACLzY,KAAKyY,UAAyV,K,EAAQC,MAAMnO,KAAKyY,aAI5CK,uBAACp,EAAUC,EAAYE,GACHCH,EAAWvY,KAAK2Y,YAAYJ,GAC5B,IAAMQ,EAAC,IAAIT,EAASC,EAAUC,GAACxY,KAAKwY,WAC1D,KAAMxY,KAAK+M,WAAy/M,KAAK8M,WAAy9M,KAAKyS,kBAGjD,OAFAsG,EAAYL,eAAoC,MAAIB,A,EAA0BA,EAAiB1Y,KAAK0Y,eAC9EK,EAAYC,WAAAhZ,KAAKgZ,WACvBD,GAGXJ,qBAAYM,GACR,OAAKA,GAGc,iBAARA,GACPjZ,KAAKrC,MAAMub,UACPD,EACA,CAAC,YACDjZ,KAAKsN,OACLtN,KAAKuN,WACL,SAAS4L,EAAXc,GACV,GAAIwC,EACA,MAAM,IAAIrC,EAAU,CACHBjJ,MAAOsL,EAAiL,MACXoJ,QAASkC,EAAiC,SACdjX,KAAKrC,MAAMyb,QAASpZ,KAAKuN,UAAUhM,UAE1C0X,EAAMtC,EA AO,GAAG4B,YAGrBU,GAIBI,CAAC,IAAI5G,EAAQ,GAAL,KAAK,EAAOrS,KAAKsN,OAAQtN,KAAKuN,aAqB9D8L,gCACI,IAAMC,EAAC,IAAIjH,EAAQ,GAAL,KAAK,EAAOrS,KAAKsN,OAAQtN,KAAKuN,WAAyG M,EAAO,CAAC,IAAIjB,EAAS,CAACgB,GAAC,KAAM,KAAMtZ,KAAKsN,OAAQtN,KAAKuN,YAE9H,OAD AgM,EAAC,GAAGP,YAAa,EACdO,GAGXvK,eAAMiC,GACF,IAEIuI,EACA9Y,EAHE6X,EAAWvY,KAAKuY ,SACHBkB,EAAMIB,EAASzZ,OAMrB,GAaA,KADb0a,GADAvI,EAAQA,EAAMyI,iBACD5a,SACK2a,EAAMD ,EACpB,OAAO,EAEP,IAAK9Y,EAAL,EAAGA,EAAl8Y,EAAM9Y,IACIB,GAAL6X,EAAS7X,GAAGuN,QAAU gD,EAAMvQ,GAC5B,OAAO,EAKnB,OAAO8Y,GAGXE,yBACI,GAALIZ,KAAK4Y,eACL,OAAO5Y,KAAK4Y ,eAGhB,IAAIL,EAAWvY,KAAKuY,SAAStJ,KAAK,SAASM,GACvC,OAAOA,EAAE+C,WAAWrE,OAASsB,E AAETB,MAAMA,OAASsB,EAETB,UACjDF,KAAK,IAAIiB,MAAM,+BAUIB,OAIRuJ,EACoB,MAAhBA,EAAS,IAC TA,EAASoB,QAGbpB,EAAW,GAGPvY,KAAK4Y,eAAiBL,GAGlCqB,gCACI,OAAQ5Z,KAAKgZ,YACg B,IAAZBhZ,KAAKuY,SAASzZ,QACa,MAA3BkB,KAAKuY,SAAS,GAAGtK,QACsB,MAAtCjO,KAAKuY,SAAS,GAAGjG,WAAWrE,OAAuD,KAAAtCjO,KAAKuY,SAAS,GAAGjG,WAAWrE,QAGIF4D,cAAKrE,GACD,IAA Mkl,EAABi1Y,KAAKyY,WAAazY,KAAKyY,UAAU5G,KAAKrE,GACzD+K,EAAWvY,KAAKuY,SACHBC,E AAaxY,KAAKwY,WAKtB,OAHAD,EAAWA,GAAYA,EAAStJ,KAAI,SAAUxP,GAAC,OAAOA,EAAEoS,KAA KrE,MACjEgL,EAAaA,GAACa,EAAWvJ,KAAI,SAAS4K,GAAU,OAAOA,EAAOhI,KAAKrE,MAEzExN,KAA K8Y,cAAcP,EAAUC,EAAYE,IAGpDhL,gBAAOF,EAASQ,GACZ,IAAIItN,EAII,IAHM8M,GAAYA,EAAQsF,eA AwD,KAAAtC9S,KAAKuY,SAAS,GAAGjG,WAAWrE,OACpED,EAAOL,IAAI,IAAK3N,KAAK8M,WAAy9M, KAAK+M,YAErCrM,EAAL,EAAGA,EAALV,KAAKuY,SAASzZ,OAAQ4B,IACxBV,KAAKuY,SAAS7X,GACH BgN,OAAOF,EAASQ,IAIhC8L,uBACI,OAAO9Z,KAAK0Y,kBC1IpB,IAAMqB,EAAQ,SAAS9L,GACnB,IAAK A,EACD,MAAM,IAAIvO,MAAM,oCAEfyN,MAAMC,QAAQa,GAIfjO,KAAKiO,MAAQA,EAHbjO,KAAKiO, MAAQ,CAAEA,IAOVb8L,EAAMIK,UAAyJd,OAAOkD,OAAO,IAAIjD,EAAQ,CACxCjM,KAAM,QAENgS,gB AAO1E,GACCIO,KAAKiO,QACLjO,KAAKiO,MAAQC,EAAQ2K,WAAW7Y,KAAKiO,SAI7C4D,cAAKrE,GA CD,OAA0B,IAAtBxN,KAAKiO,MAAMnP,OACJkB,KAAKiO,MAAM,GAAG4D,KAAKrE,GAEnB,IAAIuM,EA AM/Z,KAAKiO,MAAMgB,KAAI,SAAUM,GACtC,OAAOA,EAAEsC,KAAKrE,QAK1BE,gBAAOF,EAASQ,GA CZ,IAAIItN,EACJ,IAAKA,EAAL,EAAGA,EAALV,KAAKiO,MAAMnP,OAAQ4B,IAC/BV,KAAKiO,MAAMvN, GAAGgN,OAAOF,EAASQ,GAC1BtN,EAAL,EAALV,KAAKiO,MAAMnP,QACnBkP,EAAOL,IAAKH,GAAWA, EAAQ+C,SAAY,IAAM,SCpCjE,IAAMyJ,EAAL,SAAS/L,GACrBjO,KAAKiO,MAAQA,GAGjB+L,EAAQnK,U AAyJd,OAAOkD,OAAO,IAAIjD,EAAQ,CAC1CjM,KAAM,UAEN8M,gBAAOF,EAASQ,GACZ,GAAMb,MAA fhO,KAAKiO,MAAiB,KAAM,CAAErN,KAAM,SAAUqW,QAAS,4BAC3DjJ,EAAOL,IAAI3N,KAAKiO,UAIxB +L,EAAQC,KAAO,IAAID,EAAQ,QAC3BA,EAAQE,MAAQ,IAAIF,EAAQ,SCd5B,IAAMG,EAAY,SAASIM,EA AOJ,EAAO2E,EAAiB4H,EAAUC,EAAa5H,GAC7EzS,KAAKiO,MAAQA,EACbjO,KAAKsN,OAASO,EACd7N,

KAAKuN,UAAyIF,EACjBxS,KAAKoa,SAAWA,EACbPa,KAAKqa,iBAAsC,IAAhBA,GAAuCA,EACIEra,KA  
AKsa,WAAy,EACjBta,KAAK0S,mBAAMBD,IAG5B0H,EAAUtK,UAAyJD,OAAOkD,OAAO,IAAIjD,EAAQ,C  
AC5CjM,KAAM,YACNiR,gBACI,OAAO,IAAIIsI,EAAUna,KAAKiO,MAAOjO,KAAKsN,OAAQtN,KAAKuN,U  
AAWvN,KAAKoa,SAAUpa,KAAKqa,YAAara,KAAKyS,mBAExG9D,iBAAQsC,GACJ,OAAOA,EAAMd,OAAS  
nQ,KAAKmQ,UAAyC,EAAMd,QAAU,OAAI3D,GAE/D+N,yBACI,OAAOva,KAAKqa,aAEhB3M,gBAAOF,EA  
ASQ,GACZhO,KAAKyM,YAAc+N,QAAQxa,KAAKiO,OAC5BjO,KAAKyM,aACLUb,EAAOL,IAAI3N,KAAKi  
O,MAAOjO,KAAKuN,UAAWvN,KAAKsN,OAAQtN,KAAKoa,aCrBrE,IAAMK,EAAOnE,EAab,IAAMoE,EAA  
c,SAASC,EAAM1M,EAAO2M,EAAWC,EAAOhN,EAAO2E,EAAiBsI,EAAQC,GACxF/a,KAAK2a,KAAOA,EA  
CZ3a,KAAKiO,MAASA,aAAiBpB,EAAQoB,EAAQ,IAAI8L,EAAM,CAAC9L,EAAQ,IAAIkM,EAAUIM,GAAS,  
OACzFjO,KAAK4a,UAAyA,EAAY,IAAIA,EAAUzI,OAAW,GACtDnS,KAAK6a,MAAQA,EACb7a,KAAKsN,O  
AASO,EACd7N,KAAKuN,UAAyIF,EACjBxS,KAAK8a,OAASA,IAAU,EACxB9a,KAAK+a,cAAyBvO,IAAbuO  
,EAA0BA,EACpCJ,EAAK5H,QAA8B,MAAnB4H,EAAK5H,OAAO,GACnC/S,KAAKsa,WAAy,EACjBta,KAA  
K2S,UAAU3S,KAAKiO,MAAOjO,OC7B/B,SAASgb,EAAUC,GACf,MAAO,WAAWA,EAaIC,UAAUC,gBAaE  
F,EAaIC,UAAUE,iBAGjE,SAASC,EAAaJ,GACIB,IAAIK,EAAuBL,EAaIC,UAAUE,SAIzC,MAHK,gBAAGbG,  
KAAKD,KACtBA,EAAuB,UAAUA,GAE9B,gDAAGDA,EAAqBne,QAAQ,eAAe,SAAUkR,GAIzG,MAHS,MAA  
LA,IACAA,EAaI,KAED,KAAKA,iCACc4M,EAaIC,UAAUC,kBAGhD,SAASD,EAAU1N,EAASyN,EAako,G  
AC7B,IAAI7E,EAAS,GACb,GAAInJ,EAAQiO,kBAAoBjO,EAAQ+C,SACpC,OAAQ/C,EAAQiO,iBACZ,IAAK,  
WACD9E,EAASqE,EAAUC,GACnB,MACJ,IAAK,aACDtE,EAAS0E,EAAaJ,GACtB,MACJ,IAAK,MACDtE,EA  
ASqE,EAAUC,IAAQO,GAAiB,IAAMH,EAAaJ,GAI3E,OAAOtE,EDAX+D,EAAY7K,UAAyJD,OAAOkD,OAA  
O,IAAIjD,EAAQ,CAC9CjM,KAAM,cAEN8M,gBAAOF,EAASQ,GACZA,EAAOL,IAAI3N,KAAK2a,MAAQnN,  
EAAQ+C,SAAW,IAAM,MAAOvQ,KAAK8M,WAAy9M,KAAK+M,YAC9E,IACI/M,KAAKiO,MAAMP,OAAO  
F,EAASQ,GAE/B,MAAOvO,GAGH,MAFAA,EAAEoO,MAAQ7N,KAAKsN,OACf7N,EAAE8B,SAAWvB,KAA  
KuN,UAAUhM,SACtB9B,EAEvuO,EAAOL,IAAI3N,KAAK4a,WAAC5a,KAAK8a,QAAWtN,EAAQkO,UAAyI  
O,EAAQ+C,SAAa,GAAK,KAAMvQ,KAAKuN,UAAWvN,KAAKsN,SAG3HuE,cAAKrE,GACD,IAAwBmO,EA  
A4BC,EAaHDC,GAAa,EAAiBIB,EAAO3a,KAAK2a,KAAkBI,EAAW/a,KAAK+a,SAC5D,iBAATJ,IAGPA,EA  
wB,IAAhBA,EAak7b,QAakB6b,EAak,aAAcX,EAC9CW,EAak,GAAG1M,MA/CxB,SAakBT,EAASmN,GA  
CvB,IACIja,EADAuN,EAAQ,GAENmH,EAAIuF,EAak7b,OACTkP,EAAS,CAACL,IAAK,SAAUhC,GAAIsC,G  
AAStC,IAC5C,IAAKjL,EAaI,EAAGA,EAAI0U,EAAG1U,IACfia,EAakja,GAAGmR,KAAKrE,GAASE,OAAO  
F,EAASQ,GAE1C,OAAOC,EAuCqB6N,CAAStO,EAASmN,GACtCI,GAAW,GAIF,SAATJ,GAAMbnN,EAAQ6I  
,OAASoE,EAakzH,SACzC6I,GAAa,EACbF,EAAWnO,EAAQ6I,KACnB7I,EAAQ6I,KAAOoE,EAakxH,iBAEx  
B,IAII,GAHAzF,EAAQuO,eAAevb,KAAK,IAC5Bob,EAAa5b,KAAKiO,MAAM4D,KAAKrE,IAExBxN,KAAK+  
a,UAAgC,oBAApBa,EAAWhb,KAC7B,KAAM,CAAEqW,QAAS,8CACbpJ,MAAO7N,KAAK+M,WAAyXL,SA  
AUvB,KAAK8M,WAAWvL,UAE1D,IAAIqZ,EAAY5a,KAAK4a,UACfoB,EAakBxO,EAAQuO,eAAeE,MAK/C,  
OAJKrB,GAAaoB,EAAGpB,YAC9BA,EAAYoB,EAAGpB,WAGzB,IAAIF,EAAYC,EACnBiB,EACAhB,EAC  
A5a,KAAK6a,MACL7a,KAAK+M,WAAy/M,KAAK8M,WAAy9M,KAAK8a,OACvCC,GAER,MAAOtb,GAKH  
,KAJuB,iBAAZA,EAAEoO,QACTpO,EAAEoO,MAAQ7N,KAAK+M,WACftN,EAAE8B,SAAWvB,KAAK8M,  
WAAWvL,UAE3B9B,UAGFoc,IACArO,EAAQ6I,KAAOsF,KAK3BO,yBACI,OAAO,IAAIxB,EAAY1a,KAAK2  
a,KACxB3a,KAAKiO,MACL,aACAjO,KAAK6a,MACL7a,KAAK+M,WAAy/M,KAAK8M,WAAy9M,KAAK8a  
,WErGnD,IAAMqB,EAAU,SAASIO,EAAOmO,EAAevO,EAAO2E,GACIDxS,KAAKiO,MAAQA,EACbjO,KAA  
Koc,cAAgBA,EACrBpc,KAAKsN,OAAso,EACd7N,KAAKuN,UAAyIF,EACjBxS,KAAKsa,WAAy,GAGrB6B,  
EAAQtM,UAAyJD,OAAOkD,OAAO,IAAIjD,EAAQ,CAC1CjM,KAAM,UAEN8M,gBAAOF,EAASQ,GACRhO,  
KAAKkb,WACLIn,EAAOL,IAAI0O,EAAa7O,EAASxN,MAAOA,KAAK8M,WAAy9M,KAAK+M,YAEIEiB,E  
AAOL,IAAI3N,KAAKiO,QAGpBqO,kBAAS9O,GACL,IAAM+O,EAAe/O,EAAQ+C,UAA8B,MAAIBvQ,KAAK  
iO,MAAM,GACpD,OAAOjO,KAAKoc,eAAiBG,KCvBrC,IAAMC,EAAW,GAIXC,EAAMb,SAA0BC,EAAUC,E  
AAaC,GACtE,GAAKF,EAEL,IAAK,IAAIhc,EAaI,EAAGA,EAaIkC,EAaIB9d,OAAQ4B,IACrCgc,EAASjf,eAA  
emf,EAaIBlc,MACzCic,EAAYC,EAaIBlc,IAAMgc,EAASE,EAaIBlc,MAQnEmc,EAASb,CAExB,QACA,cACA,  
WACA,gBACA,WACA,kBACA,WACA,aACA,aACA,OACA,eAEA,iBAEA,iBAGJL,EAASM,MAAQ,SAASzf,G  
ACtBof,EAaIBpf,EAAS2C,KAAM6c,GAEN,iBAaf7c,KAAK+c,QAASb/c,KAAK+c,MAAQ,CAAC/c,KAAK+c,

SAG7D,IAAMC,EAAqB,CACvB,QACA,WACA,OACA,cACA,YACA,iBACA,UACA,oBACA,gBACA,iBACA,eAsGJ,SAASC,EAAeC,GACpB,OAAQ,sBAAsB3B,KAAK2B,GAGvC,SAASC,EAAoBD,GACzB,MAA0B,MAAnBA,EAANKnK,OAAO,GAGvByJ,EAASY,KAAO,SAAS/f,EAASggB,GAC9BZ,EAAsBpf,EAAS2C,KAAMgd,GAEN,iBAAfhd,KAAK+c,QAAsB/c,KAAK+c,MAAQ,CAAC/c,KAAK+c,QAEZd/c,KAAKqd,OAASA,GAAU,GACxBrd,KAAK+b,eAAiB/b,KAAK+b,gBAaKb,IAGjDS,EAASY,KAAKvN,UAAUyN,UAAy,WAC3Btd,KAAKud,YACNvd,KAAKud,UAAy,IAErBvd,KAAKud,UAAU/c,MAAK,GACpBR,KAAKwd,QAAS,GAGIBhB,EAASY,KAAKvN,UAAU4N,SAAW,WAC/Bzd,KAAKud,UAAUtB,MACVjc,KAAKud,UAAUze,SACHBkB,KAAKwd,QAAS,IAItBhB,EAASY,KAAKvN,UAAU6N,cAAgB,WAC/B1d,KAAK2d,cACN3d,KAAK2d,YAAc,IAEvB3d,KAAK2d,YAAyNd,MAAK,IAG1Bgc,EAASY,KAAKvN,UAAU+N,iBAAmB,WACvC5d,KAAK2d,YAAy1B,OAGrBO,EAASY,KAAKvN,UAAU2N,QAAS,EACjChB,EAASY,KAAKvN,UAAUgO,QAAS,EACjCrB,EAASY,KAAKvN,UAAUiO,SAAW,SAAU1P,GACzC,QAAPpO,KAAK6d,YAGC,MAAPzP,GAAcpO,KAAKqW,OAASC,EAaetD,QAAYhT,KAAK2d,aAAgB3d,KAAK2d,YAAy7e,YAG7FkB,KAAKqW,KAAOC,EAaerD,kBACpBjT,KAAK2d,aAAe3d,KAAK2d,YAAy7e,UAKpD0d,EAASY,KAAKvN,UAAUkO,oBAAsB,SAAUb,GAGpD,OAFmBld,KAAKwW,cAAgBC,EAA8B0G,EAAsBF,GAE1EC,IAGtBV,EAASY,KAAKvN,UAAUmO,YAAc,SAAUd,EAAMe,GACID,IAAIC,EAaJ,OAXAD,EAAWA,GAAY,GACvBC,EAUle,KAAKme,cAAcF,EAAWf,GAIPCC,EAAoBD,IACpBD,EAaegB,KACKB,IAAjCd,EAaobe,KACpBA,EAaU,KAAKA,GAGZA,GAGX1B,EAASY,KAAKvN,UAAUsO,cAAgB,SAAUjB,GAC9C,IACIkB,EADEC,EAAWnB,EAAK7N,MAAM,KAAKiP,UAIjC,IADApB,EAaAO,GACoB,IAApBmB,EAASvf,QAEZ,OADAsf,EAaUC,EAASpC,OAef,IAAK,IACD,MACJ,IAAK,KACoB,IAAhBiB,EAAKpe,QAA4C,OAA1Boe,EAACA,EAAKpe,OAAS,GAC3Coe,EAAK1c,KAAM4d,GAEXIB,EAAKjB,MAET,MACJ,QACIiB,EAAK1c,KAAK4d,GAKtB,OAAoIB,EAANKnP,KAAK,YCxBjB,SAASwQ,EAACc,GACnB,MAAO,CACHC,MAAO,GACP9Q,IAAK,SAASgN,EAAMhd,GAGhBgD,EAaOA,EAAKjJ,cAER1R,KAAKyE,MAAMhhB,eAAekd,GAG9B3a,KAAKye,MAAM9D,GAAQhD,GAEvB+G,YAAa,SAASzd,GAAT,WACT2L,OAaO+R,KAAK1d,GAAWoM,SACnB,SAAsN,GACIie,EAAKjR,IAAIgN,EAAM1Z,EAaUOZ,QAGrCkE,IAAK,SAASIE,GACV,OAAO3a,KAAKye,MAAM9D,IAAW6D,GAAQA,EAAKK,IAAKIE,IAEnDme,kBAAmB,WACf,OAAO9e,KAAKye,OAehBM,QAAS,WACL,OAAOR,EAACve,OAEBgY,OAAQ,SAASwG,GACb,OAAOD,EAaAc,KAKjBD,CAAc,MChCvBS,EAAC,CACHbN,KAAM,WACF,IAAMtC,EAaIvP,KAAKif,OACTxf,EAaIO,KAAKkf,OACf,GAaIzf,EACA,MAAMA,EAeV,GAAS,MAAL8P,EACA,OAaOA,EAaIyK,EAaQC,KAAOD,EAaAQE,OAG1CjM,MAAO,SAAU5B,GACbvP,KAAKif,OAAS1P,GAeIBzP,MAAO,SAaUL,GACbO,KAAKkf,OAASzf,GAeIB0f,MAAO,WACHnf,KAAKif,OAASjf,KAAKkf,OAAS,OCN9BE,EAaU,SAASC,EAaWC,EAaOC,EAaE9M,GACtDzS,KAAKqf,UAAyA,EACjBrf,KAAKsf,MAAQa,EACbtf,KAAKwf,SAAW,GACHBxf,KAAKyf,WAAa,KACIBzf,KAAK0f,YAAc,KACnB1f,KAAKuf,cAAgBA,EACrBvf,KAAK0S,mBAAmBD,GACxBzS,KAAKsa,WAAy,EAejBta,KAAK2S,UAAU3S,KAAKqf,UAAWrf,MAC/BA,KAAK2S,UAAU3S,KAAKsf,MAAOtf,OAG/Bof,EAaQvP,UAAyjd,OAAOkD,OAAO,IAAIjD,EAaQ,CAC1CjM,KAAM,UACN+e,WAAW,EAEXpF,yBAaKb,OAAO,GAEB3H,gBAAO1E,GACCIO,KAAK+c,MACL/c,KAAK+c,MAAQ7O,EAaQ2K,WAAW7Y,KAAK+c,OAAO,GACrC/c,KAAKqf,YACzrf,KAAKqf,UAAyNr,EAaQ2K,WAAW7Y,KAAKqf,YAEzCrf,KAAKsf,OAAStf,KAAKsf,MAAMxgB,SACzBkB,KAAKsf,MAAQpR,EAaQ2K,WAAW7Y,KAAKsf,SAI7CzN,cAAKrE,GAED,IAAI6R,EACAO,EACAC,EACAnf,EACAof,EACAC,GAawB,EAe5B,GAaI/f,KAAKqf,YAAcO,EAAS5f,KAAKqf,UAAUvgB,QAAS,CAOpD,IANAUGB,EAAY,IAAIIS,MAAMyS,GACtBZ,EAAYif,MAAM,CACdc,KAAM,SACNqW,QAAS,6DAGRvW,EAaI,EAAGA,EAaIkf,EAaQlf,IAAK,CACzBmf,EAaW7f,KAAKqf,UAAU3e,GAAGmR,KAAKrE,GACIC,IAAK,IAAI5G,EAaI,EAAGA,EAaI+L,EAASth,SAASzZ,OAAQgV,IAC1C,GAaI+L,EAASth,SAASzE,GAAGvB,WAAy,CACjCuN,GAAC,EACd,MAGRT,EAaU3e,GAaKmf,EACXA,EAASnH,iBACTqH,GAawB,GAIHc,GAaID,EAaA,CACb,IAAME,EAaMB,IAAI7S,MAAMyS,GACnC,IAAKlf,EAaI,EAAGA,EAaIkf,EAaQlf,IACpBmf,EAaWR,EAaU3e,GACrBsf,EAaIBtf,GAaKmf,EAAS1P,MAAM3C,GAezCxB,KAAKrC,MAAMub,UACP8G,EAaIBjS,KAAK,KACtB,CAAC,aACDsR,EAaU,GAAGtS,WACBsS,EAaU,GAAGvS,YACb,SAASqM,EAaKxC,GACNA,IACA0I,EAAYY,EAaMBtJ,OAK/CqI,EAAYG,aAEZY,GAawB,EAG5B,IAEIG,EACAC,EAHAb,EAaQtf,KAAKsf,MAAQc,EAaGpPgB,KAAKsf,OAAS,KACjDe,EAaU,IAAIjB,EAaQC,EAaWC,EAaOtf,KAAKuf,cAAevf,KAAKyS,kBAIvE4N,EAaQC,gBAaKbtgB,KAC1BqgB,EAaQE,KAAOvgB,KAAKugB,KACpBF,EAaQG,UAAyxB,KAAKwgB,UACzBH,EAaQI,aAAezgB,KAAKyGB,aEXB



zgB,KAAKkb,YACLmF,EAAQnF,UAAyIb,KAAKkb,WAGxB6E,IACDT,EAAMxgB,OAAS,GAKnBuhB,EAAQ  
K,iBAAoB,SAAUrD,GAIIC,IAHA,IAEI3F,EAFahX,EAAI,EACF0U,EAAlIi,EAAOve,OAET4B,IAAM0U,IAAM  
1U,EAehB,GADAgX,EAAQ2F,EAAQ3c,GAAIggB,iBACL,OAAOhJ,EAElB,OAAOij,EARgB,CASzBnT,EAAQ  
6P,QAAS0B,UAGnB,IAAM6B,EAAYpT,EAAQ6P,OAC1BuD,EAAUC,QAAQR,GAGIB,IAAIS,EAaetT,EAAQ6  
R,UACtByB,IACDtT,EAAQ6R,UAAyYb,EAae,IAEvCA,EAAaD,QAAQ7gB,KAAKqf,YAGtBgB,EAAQE,MAA  
QF,EAAQI,eAAiBJ,EAAQd,gBACjDc,EAAQU,YAAyVt,GAKxB,IAAMwT,EAAUX,EAAQf,MACxB,IAAK5e,  
EAAI,EAAIwf,EAAOc,EAAQtgB,GAACA,IACzBwf,EAaKe,YACLD,EAAQtgB,GAAKwf,EAaKrO,KAAKrE,I  
AI/B,IAAM0T,EAAMb1T,EAAQ2T,aAAe3T,EAAQ2T,YAAyriB,QAAW,EAG/E,IAAK4B,EAAI,EAAIwf,EAA  
Oc,EAAQtgB,GAACA,IACX,cAAadwf,EAaKtf,MAEL0e,EAAQY,EAaKrO,KAAKrE,GAAS4T,QAAO,SAASpR  
,GACvC,QAACA,aAAa0K,GAAGb1K,EAaE+K,YAIvBsF,EAaQtF,SAAS/K,EAaE2K,SAIpCqG,EAaQrgB,OA  
AO0gB,MAAML,EAAS,CAACtgB,EAAG,GAAGQ,OAAOoe,IAC5C5e,GAaK4e,EAAMxgB,OAAS,EACpBuhB  
,EAAQiB,cACc,iBAafpB,EAaKtf,OAeZ0e,EAAQY,EAaKrO,KAAKrE,GAAS8R,MAAM8B,QAAO,SAASpR,  
GAC7C,QAACA,aAAa0K,GAAGb1K,EAaE+K,aAMxCiG,EAaQrgB,OAAO0gB,MAAML,EAAS,CAACtgB,EA  
AG,GAAGQ,OAAOoe,IAC5C5e,GAaK4e,EAAMxgB,OAAS,EACpBuhB,EAAQiB,cAKhB,IAAK5gB,EAAI,EA  
AIwf,EAAOc,EAAQtgB,GAACA,IACxBwf,EAaKe,YACND,EAAQtgB,GAAKwf,EAaOA,EAaKrO,KAAOqO,  
EAaKrO,KAAKrE,GAAW0S,GAK7D,IAAKxf,EAAI,EAAIwf,EAAOc,EAAQtgB,GAACA,IAE7B,GAAIwf,aAA  
gBd,GAAWc,EAaKb,WAAuC,IAA1Ba,EAaKb,UAAUvgB,QAExDohB,EAaKb,UAAU,IAAMa,EAaKb,UAAU  
,GAAGzF,uBAAWb,CAC/DoH,EAaQrgB,OAAOD,IAAK,GAEPb,IAASoT,EAAI,EAAIqM,EAaUD,EAaKZ,M  
AAMxL,GAACA,IACnCqM,aAAmBtT,IACnBsT,EAAQzN,mBAAMbWn,EAaKzN,kBAC1B0N,aAAmBzF,GA  
AiByF,EAaQpF,UAC9CiG,EAaQrgB,SAASD,EAAG,EAAGyf,IAY/C,GAHAS,EAaUjH,QACVmH,EAaAnH,Q  
AEtnM,EAAQ2T,YACR,IAAKzgB,EAAIwgB,EAaiBxgB,EAai8M,EAAQ2T,YAAyriB,OAAQ4B,IACtD8M,E  
AAQ2T,YAAyZgB,GAAG6gB,gBAAGbIC,GAI/C,OAAOgB,GAGXU,qBAAYvT,GACR,IACI9M,EACA8gB,EA  
FEIC,EAAQtf,KAAKsf,MAGnB,GAACA,EAEL,IAAK5e,EAAI,EAAGA,EAai4e,EAAMxgB,OAAQ4B,IACJ,W  
AAIB4e,EAAM5e,GAAGE,QACT4gB,EAaClC,EAAM5e,GAAGmR,KAAKrE,MACRgU,EAAY1iB,QAAiC,IAA  
vB0iB,EAAY1iB,SACIDwgB,EAAM3e,OAAO0gB,MAAM/B,EAaO,CAAC5e,EAAG,GAAGQ,OAAOsgB,IACx  
C9gB,GAAK8gB,EAAY1iB,OAAS,GAElBwgB,EAAM3e,OAAOD,EAAG,EAAG8gB,GAEvBxhB,KAAKshB,e  
AKjBpF,yBASi,OARe,IAAIkD,EAaQpf,KAAKqf,UAAWrf,KAAKsf,MAAMrQ,KAAI,SAAUe,GACHe,OAAIA,  
EAaEkM,cACKIM,EAaEkM,gBAEFIM,KAEXhQ,KAAKuf,cAAevf,KAAKyS,mBAKjCgP,mBAAUjR,GACN,O  
AAQA,GAawB,IAAhBA,EAaK1R,QAIzB4iB,wBAaElR,EAAMhD,GACjB,IAAMmU,EAaE3hB,KAAKqf,UAA  
Urf,KAAKqf,UAAUvgB,OAAS,GAC5D,QAaK6iB,EAaajJ,kBAGdiJ,EAaAlJ,YACZkJ,EAaAlJ,UAAU5G,KACp  
B,IAAI2K,EAASY,KAAK5P,EACdA,EAAQ6P,WAMxBiE,sBACIthB,KAAK4hB,UAAy,KACjB5hB,KAAKyf,  
WAAa,KACIBzf,KAAK0f,YAAc,KACnB1f,KAAKwf,SAAW,IAgpBqC,qBAoBI,OAAnBK7hB,KAAKyf,aACNzf,  
KAAKyf,WAAczf,KAAKsf,MAAatf,KAAKsf,MAAMnL,QAAO,SAAU2N,EAAM9R,GAOnE,GANIA,aAAa0K,I  
AA8B,IAAf1K,EAaE+K,WAC9B+G,EAaK9R,EAaE2K,MAAQ3K,GAKJ,WAAAXA,EAaEpP,MAAQBoP,EA  
EuQ,MAAQvQ,EAaEuQ,KAAKsB,UAAW,CACnD,IAAME,EAaO/R,EAaEuQ,KAAKsB,YACpB,IAAK,IAAM  
G,KAAQD,EACXA,EAaKtkB,eAAeukB,KACpBF,EAaKE,GAaQhS,EAaEuQ,KAAKxF,SAASiH,IAIzC,OA  
OF,IACR,IAhB6B,IAkB7B9hB,KAAKyf,YAGhBwC,sBAiBI,OAhBKjiB,KAAK0f,cACN1f,KAAK0f,YAAe1f,K  
AAKsf,MAAatf,KAAKsf,MAAMnL,QAAO,SAAU2N,EAAM9R,GACpE,GAaIA,aAAa0K,IAA8B,IAAf1K,EA  
E+K,SAAMb,CACjD,IAAMmH,EAaOB,IAAIbIS,EAaE2K,KAAK7b,QAaKbKr,EAaE2K,KAAK,aAAcX,EAC  
xDhK,EAaE2K,KAAK,GAAG1M,MAAQ+B,EAaE2K,KAEnBmH,EAaK,IAAI,GAIVJ,EAaK,IAAI,GAaQ1h  
B,KAAKwP,GAHtB8R,EAaK,IAAI,GAaU,CAAEIS,GAM7B,OAAO8R,IACR,IAb8B,IAe9B9hB,KAAK0f,aG  
hb3E,kBAASJ,GACL,IAAMwH,EAaOniB,KAAK6hB,YAAyIH,GAC9B,GAaIwH,EACA,OAAOniB,KAAKoiB  
,WAAWD,IAI/BE,kBAAS1H,GACL,IAAMwH,EAaOniB,KAAKiiB,aAAatH,GAC/B,GAaIwH,EACA,OAAOni  
B,KAAKoiB,WAAWD,IAI/BG,2BACI,IAAK,IAAI5hB,EAaIV,KAAKsf,MAAMxgB,OAAQ4B,EAAI,EAAGA,I  
AAK,CACxC,IAAMyhB,EAaOniB,KAAKsf,MAAM5e,EAAI,GAC5B,GAaIyhB,aAAgBzH,EACb,OAAO1a,K  
AAKoiB,WAAWD,KAKnCC,oBAAWG,GACP,IAAMxT,EAaO/O,KACb,SAASwiB,EAaQBL,GAC1B,OAAIA,  
EAaKIU,iBAAiBkM,IAAcgI,EAaKxV,QACT,iBAArBwV,EAaKIU,MAAMA,MACIBjO,KAAKrC,MAAMub,U  
ACPIJ,EAaKIU,MAAMA,MACX,CAAC,QAAS,aACVku,EAaKIU,MAAMIB,WACXoV,EAaKrV,YACL,SA

SqM,EAAKxC,GACNwC,IACAgJ,EAAKxV,QAAS,GAEdgK,IACAwL,EAAKIU,MAAQ0I,EAAO,GACpBwL,E  
AAKvH,UAAyJ,EAAO,IAAM,GAC9BwL,EAAKxV,QAAS,MAI1BwV,EAAKxV,QAAS,EAGXwV,GAGAA,E  
AGf,GAAKhV,MAAMC,QAAQmV,GAGd,CACD,IAAME,EAAQ,GAId,OAHAf,EAAQIV,SAAQ,SAAS+H,GA  
CrBqN,EAAMjiB,KAAKgiB,EAAqBIP,KAAKvE,EAAMqG,OAExCqN,EAPP,OAAOD,EAAqBIP,KAAKvE,EA  
AMwT,IAW/CG,oBACI,IAAK1iB,KAAKsf,MAAS,MAAO,GAElB,IAEl5e,EACAwf,EAHEyC,EAAY,GACZrD,  
EAAQtf,KAAKsf,MAInB,IAAK5e,EAAI,EAAIwf,EAAOZ,EAAM5e,GAACA,IACvBwf,EAAKP,WACLgD,EAA  
UniB,KAAK0f,GAIVB,OAAOyC,GAGXC,qBAAY1C,GACR,IAAMZ,EAAQtf,KAAKsf,MACfA,EACAA,EAAM  
uB,QAAQX,GAEdlgB,KAAKsf,MAAQ,CAAey,GAEnBlgB,KAAK2S,UAAUuN,EAAMlgB,OAGzB6iB,cAAKh  
D,EAAU9Q,EAAMqS,GACjBrS,EAAOA,GAAQ/O,KACf,IACIgP,EACA8T,EAFExD,EAAQ,GAGR7N,EAAMo  
O,EAAS1P,QAERb,OAAlSb,KAAOzR,KAAKwf,SAAMbxf,KAAKwf,SAAS/N,IAEjDzR,KAAK0iB,WAAWrv,S  
AAQ,SAAU6S,GAC9B,GAAlA,IAASnR,EACT,IAAK,IAAI+E,EAAI,EAAGA,EAAlOm,EAAKb,UAAUvgB,OA  
AQgV,IAEvC,GADA9E,EAAQ6Q,EAAS7Q,MAAMkR,EAAKb,UAAUvL,IAC3B,CACP,GAAl+L,EAAStH,SAA  
SzZ,OAASkQ,GAC3B,IAAKoS,GAAUA,EAAOIB,GAAO,CACzB4C,EAAC5C,EAAK2C,KAAK,IAAIvK,EAAS  
uH,EAAStH,SAAS5G,MAAM3C,IAASD,EAAMqS,GAC5E,IAAK,IAAI1gB,EAAI,EAAGA,EAAlOiB,EAAYhkB  
,SAAU4B,EACtCoIB,EAAYpiB,GAAGwc,KAAK1c,KAAK0f,GAE7B/S,MAAM0C,UAAUrP,KAAK6gB,MAA  
M/B,EAAOwD,SAGtCxD,EAAM9e,KAAK,CAAEOf,OAAMhD,KAAM,KAe7B,UAKhBlD,KAAKwf,SAAS/N,G  
AAO6N,EACdA,IAGX5R,gBAAOF,EAASQ,GACZ,IAAItn,EACAoT,EAKAoH,EAEAgF,EACAhD,EANA6F,E  
AAy,GAQhBvV,EAAQwV,SAAYxV,EAAQwV,UAAy,EAEnChjB,KAAKugB,MACN/S,EAAQwV,WAGZ,IAE  
IC,EAFEC,EAAl1V,EAAQ+C,SAAW,GAAKpD,MAAMK,EAAQwV,SAAW,GAAGjV,KAAK,MACtEoV,EA  
Y3V,EAAQ+C,SAAW,GAAKpD,MAAMK,EAAQwV,UAAUjV,KAAK,MAGnEqV,EAAMb,EACnBC,EAAKb,E  
ACtB,IAAK3iB,EAAI,EAAIwf,EAAOlG,KAAKsf,MAAM5e,GAACA,IAC5Bwf,aAAgB/D,GACZkH,IAAoB3iB  
,GACpB2iB,IAEJN,EAAUviB,KAAK0f,IACRA,EAAKoD,WAApD,EAAKoD,aAC9BP,EAAUpiB,OAAOyiB,E  
AAKb,EAAGID,GACtCkD,IACAC,KACqB,WAAdnD,EAAKtf,MACZmiB,EAAUpiB,OAAO0iB,EAAiB,EAAGn  
D,GACrCmD,KAeAN,EAAUviB,KAAK0f,GAOVb,GAJA6C,EATCyB,GASCI7hB,OAAO6hB,IAI/B/iB,KAAKug  
B,KAAM,EACZrF,EAAYmB,EAAl7O,EAASxN,KAAMmjB,MAGpCnV,EAAOL,IAAIuN,GACXIN,EAAOL,IA  
AIwV,IAGf,IAAMPg,EAAQ/c,KAAK+c,MACbwG,EAAUxG,EAAMje,OACIB0kB,SAIJ,IAFAP,EAAMzV,EA  
Q+C,SAAW,IAAO,MAAM4S,EAejCziB,EAAI,EAAGA,EAAl6iB,EAAS7iB,IAERb,GAAM8iB,GADNtG,EA  
AOH,EAAMrc,IACW5B,OAoxB,IANI4B,EAAI,GAAKsN,EAAOL,IAAlSv,GAExBzV,EAAQsF,eAAgB,EACxBoK,  
EAAK,GAAGxP,OAaOF,EAASQ,GAExBR,EAAQsF,eAAgB,EACnBgB,EAAI,EAAGA,EAAl0P,EAAY1P,IAC  
xBoJ,EAAKpJ,GAAGpG,OAaOF,EAASQ,GAIHcA,EAAOL,KAAKH,EAAQ+C,SAAW,IAAM,QAAU2S,GAIn  
D,IAAKxiB,EAAI,EAAIwf,EAAO6C,EAAUriB,GAACA,IAAK,CAEHcA,EAAI,IAAMqiB,EAAUjKB,SACpB0O,  
EAAQko,UAAW,GAGvB,IAAM+H,EAAKBJW,EAAQko,SAC5BwE,EAAK3F,cAAc2F,KACnB1S,EAAQko,U  
AAW,GAGnBwE,EAAKxS,OACLwS,EAAKxS,OAaOF,EAASQ,GACdkS,EAAKjS,OACZD,EAAOL,IAAIuS,E  
AAKjS,MAAM2B,YAG1BpC,EAAQko,SAAW+H,GAEdjW,EAAQko,UAAyW,EAAKwD,YAC1B1V,EAAOL  
,IAAIH,EAAQ+C,SAAW,GAAM,KAAK2S,GAezC1V,EAAQko,UAAW,EAI1b1b,KAAKugB,OACNvS,EAAOL  
,IAAKH,EAAQ+C,SAAW,IAAM,KAAK4S,OAC1C3V,EAAQwV,YAGPhV,EAaOF,WAAcN,EAAQ+C,WAAy  
vQ,KAAKwgB,WAC/CxS,EAAOL,IAAI,OAInBgW,uBAAC5G,EAAOvP,EAAS6R,GAC1B,IAAK,IAAI1T,EAAI,  
EAAGA,EAAl0T,EAAUvgB,OAAQ6M,IACIC3L,KAAK4jB,aAAa7G,EAAOvP,EAAS6R,EAAU1T,KAIpDiY,sB  
AAa7G,EAAOvP,EAASqS,GAezB,SAASgE,EAAKBC,EAAeC,GACtC,IAAIC,EAAKBIQ,EACtB,GAA6B,IAAZB  
gQ,EAACHb,OACdkIB,EAAMb,IAAIpS,EAAMkS,EAAC,QACxC,CACH,IAAMG,EAAl9W,MAAM2W,E  
AAChIB,QAC7C,IAAKgV,EAAI,EAAGA,EAAlgQ,EAACHb,OAAQgV,IACICmQ,EAAanQ,GAAK,IAAIzB,EA  
CIB,KACAYr,EAACHQ,GACdiQ,EAAgBxR,WACHbW,R,EAAgBzW,OACHByW,EAAgBxW,WAGxByW,EAAM  
B,IAAIpS,EAAM,IAAI0G,EAAS2L,IAE9C,OAaOD,EAGX,SAASE,EAAeC,EAAKBJ,GACtC,IAAIK,EAGJ,OA  
FAA,EAAU,IAAI/R,EAAQ,KAAM8R,EAAKBJ,EAAgBxR,WAAyW,R,EAAgBzW,OAAQyW,EAAgBxW,WACv  
G,IAAI+K,EAAS,CAAC8L,IAO7B,SAASC,EAAuBC,EAAeC,EAASC,EAAlBC,GACrE,IAAIC,EAAlB/C,EAAC  
gD,EAenC,GAbAD,EAAKb,GAIdJ,EAAcxIB,OAAS,GAEvB6iB,GADA+C,EAAKbtE,EAAgBkE,IACHrI,MAC/B  
0I,EAaBF,EAAlB3L,cAAcsH,EAAgBuB,EAAPJ,YAGhFoM,EAaBF,EAAlB3L,cAAc,IAGnDyL,EAAQzIB,O  
AAS,EAAG,CAMpB,IAAIwT,EAAakS,EAAgBIS,WAE3BsS,EAAWL,EAAQ,GAAGhM,SAAS,GACjCjG,EAA

WJ,oBAAsB0S,EAAStS,WAAWJ,oBACrDI,EAAAsS,EAAStS,YAG1BqS,EAakBpM,SAAS/X,KAAK,IAAI6R,E  
AChCC,EACAsS,EAAS3W,MACTuW,EAAGbJ,S,WACHBiS,EAAGBIX,OACHBkX,EAAGbJX,YAEpBoX,EAakB  
pM,SAAWoM,EAakBpM,SAASrX,OOAOqjB,EAAQ,GAAGhM,SAAS5G,MAAM,IAS7F,GAL0C,IAAtCgT,EA  
AkBpM,SAASzZ,QAC3B4IB,EAAGBlkB,KAAKmkB,GAIrBJ,EAQzIB,OAAS,EAAG,CACpB,IAAI+IB,EAaAn  
,EAAQ5S,MAAM,GAC/BkT,EAAaA,EAAW5V,KAAI,SAAU4Q,GACIC,OOAOA,EAAS/G,cAAc+G,EAAStH,S  
AAU,OAERdM,EAakBA,EAAGBxjB,OOAO2jB,GAE7C,OOAOH,EAMX,SAASI,EAA4BR,EAaEs,EAAUP,E  
AAiBC,EAakB9N,GAC7F,IAAI7C,EACJ,IAAKA,EAAl,EAAGA,EAAlwQ,EAacxIB,OOAQgV,IAAK,CACvC,I  
AAM4Q,EAakBL,EAauBC,EAacxQ,GAAlr,EAAP,EAaiBC,GAC5F9N,EAaOnW,KAAKkkB,GAehB,OOA  
O/N,EAGX,SAASqO,EA2BzM,EAau8G,GAC1C,IAAI3e,EAAGukB,EAEP,GAAwB,IAApB1M,EAASzZ,OA  
Gb,GAAyB,IAArBugB,EAauvgB,OAkd,IAAK4B,EAAl,EAAlukB,EAAM5F,EAau3e,GAAKA,IAE1BukB,EA  
AlnmB,OAAS,EACbmmB,EAAlA,EAAlnmB,OAAS,GAAKmmB,EAAlA,EAAlnmB,OAAS,GAAGga,cAAcmM,  
EAAlA,EAAlnmB,OAAS,GAAGyZ,SAASrX,OOAOqX,IAG5F0M,EAAlzkB,KAAK,IAAI8X,EAASC,SAV1B8G  
,EAau7e,KAAK,CAAE,IAAI8X,EAASC,KAsItC,SAAS2M,EAaezS,EAAGB0S,GACpC,IAAMpM,EAacoM,EA  
AWrM,cAAcqM,EAaw5M,SAAU4M,EAaw3M,WAAy2M,EAawzM,gBAEPg,OADAK,EAAYrG,mBAAMB  
D,GACxBsG,EAIX,IAAIrY,EAAG0kB,EAKP,IAhIA,SAASC,EAAsBtI,EAaOvP,EAAS8X,GAW3C,IAAI5kB,E  
AAGoT,EAAGD,EAAG0R,EAaiBC,EAacC,EAaqBR,EAak3L,EAa+Bxa,EAQ6iB,EACjFyC,EACpBsB,EAf  
kEC,GAAoB,EAwB9F,IARAJ,EAakB,GAIBC,EAae,CACX,IAGC9kB,EAAl,EAAl4Y,EAakgM,EAaw/M,SA  
AS7X,GAAKA,IAEvC,GAaiB,MAAb4Y,EAAGrL,MAAE,CACIB,IAAM2X,GazBNF,OOAAA,GADoBtB,EA0B  
sB9K,GAXBhCrL,iBAaiB2D,IAI/B8T,EAAGbtB,EAaQnW,MAAMA,iBACCqK,EAIXBoN,EARI,MAwBP,GAA  
sB,MAAlBE,EAawB,CAGxBZ,EA2BO,EAaiBC,GAe5C,IACIK,EADEC,EAac,GAEdC,EAauB,GAI7B,IAH  
AF,EAawR,EAAsBS,EAaatY,EAASoY,GACvDD,EAaOBA,GAAqBE,EAepChS,EAAl,EAAGA,EAAlis,EA  
YhnB,OOAQ+U,IAAK,CAErCiR,EA2BU,EAac,CADbtB,EAaeL,EAakBiC,EAAYjS,GAAlYf,GAAKA,IAClB  
A,EAAlgM,EAAYS,GAepFP,EAaeO,EACfR,EAakB,QAEIBA,EAAGb/kB,KAAK8Y,OAGtB,CAUH,IATAqM,  
GAAoB,EAepBF,EAAsB,GAItBT,EA2BO,EAaiBC,GAGvC1R,EAAl,EAAGA,EAAl0R,EAa1mB,OOAQgV,  
IAIjC,GAHAMR,EAAMO,EAa1R,GAGI,IAAnBtG,EAQ1O,OAGJmmB,EAAlnmB,OAAS,GACbmmB,EAAl,  
GAAG1M,SAAS/X,KAAK,IAAI6R,EAQIH,EAAGhH,WAAy,GAAIgh,EAAG/G,WAAy+G,EAAGhM,OOAQ  
gM,EAAG/L,YAErFkY,EAaOBjIB,KAAKykB,QAlzB,IAAKpR,EAAl,EAAGA,EAAlrG,EAQ1O,OOAQ+U,IA  
AK,CAGjC,IAAM6Q,EAakBL,EAauBY,EAakzX,EAQqG,GAAlYf,EAAlgM,GAepEG,EAaOBjIB,KAAKkk  
B,GAMrCc,EAaeC,EACfF,EAakB,GAQ1B,IAFAP,EA2BO,EAaiBC,GAEvC9kB,EAAl,EAAGA,EAAl8kB,E  
AAa1mB,OOAQ4B,KACjC5B,EAAS0mB,EAa9kB,GAAG5B,QACZ,IACtIE,EAAMvc,KAAKglB,EAa9kB,I  
ACxBihB,EAae6D,EAa9kB,GAAG5B,EAAS,GACxC0mB,EAa9kB,GAAG5B,EAAS,GAAK6iB,EAa7I,cA  
Ac6I,EAaPj,SAAU+M,EAaw9M,aAlnG,OOAOmN,EAaSN,CADpBD,EAaw,GACyC5X,EAASqS,GAGzD,G  
AAIrS,EAQ1O,OAAS,EAejB,IADAsmB,EAaw,GACN1kB,EAAl,EAAGA,EAAl8M,EAQ1O,OOAQ4B,IAA  
K,CAEjC,IAAMsIB,EAaexY,EAQ9M,GAAGuO,IAAlw,EAae7jB,KAAKrB,KAAM6f,EAASpN,mBAEvEuT,  
EAaxIB,KAAKqf,GACIBuF,EAAS5kB,KAAKwIB,QAlIBZ,EAaw,CAAC,CAACvF,IAIrB,IAAKnf,EAAl,EA  
GA,EAAl0kB,EAAStmB,OOAQ4B,IAC7Bqc,EAAMvc,KAAK4kB,EAAS1kB,OCr0BhC,IAAMulB,EAAS,SACX  
tL,EACA1M,EACAqR,EACAZR,EACA2E,EACA0I,EACAgL,EACAZT,GAEA,IAAI/R,EAIJ,GAFaV,KAAK2a,  
KAAQA,EACb3a,KAAKiO,MAASA,aAAiBpB,EAQoB,EAASA,EAQ,IAAIkM,EAAlUIM,GAASA,EAC3EqR,  
EAao,CAOP,IANInS,MAAMC,QAAQkS,GACdtf,KAAKsf,MAAQA,GAebtf,KAAKsf,MAAQ,CAACA,GACdtf  
,KAAKsf,MAAM,GAAGD,UAAy,IAAK/G,EAAS,GAAl,KAAM,KAAMzK,EAaO2E,GAakB6G,wBAEHf3Y,E  
AAI,EAAGA,EAAlV,KAAKsf,MAAMxgB,OOAQ4B,IAC/BV,KAAKsf,MAAM5e,GAAG+f,cAAe,EAejCzGB,K  
AAK2S,UAAU3S,KAAKsf,MAAOtf,MAE/BA,KAAKsN,OAASO,EACd7N,KAAKuN,UAAyIF,EACjBxS,KAA  
Kkb,UAAyA,EACjBlb,KAAKkmB,SAAWA,IAAY,EAC5BlmB,KAAK0S,mBAAMBd,GACxBzS,KAAKsa,WA  
AY,GAGrB2L,EAOPw,UAAyjd,OAaokD,OAaO,IAAIjd,EAQ,CACzCjM,KAAM,SACNgS,gBAAO1E,GA  
CH,IAAMD,EAQjO,KAAKiO,MAAOqR,EAQtf,KAAKsf,MACnCA,IACAtf,KAAKsf,MAAQpR,EAQ2K,W  
AAWyG,IAEHCrR,IACajO,KAAKiO,MAAQc,EAQc,MAAMF,KAInCsM,yBACI,OAaOva,KAAKsf,QAAUtf,  
KAAKsjB,aAG/BA,qBACI,MAAO,aAAetjB,KAAK2a,MAG/BjN,gBAAOF,EAASQ,GACZ,IAAMC,EAQjO,K  
AAKiO,MAAOqR,EAQtf,KAAKsf,MACvCtR,EAaOL,IAAI3N,KAAK2a,KAAM3a,KAAK8M,WAAy9M,KA

AK+M, YACxCKb, IACAD, EAAOL, IAAI, KACXM, EAAMP, OAAOF, EAASQ, IAETBSR, EACAtf, KAAKmmB, cA  
Ac3Y, EAASQ, EAAQsR, GAEPctR, EAAOL, IAAI, MAInBkE, cAAKRE, GACD, IAAI4Y, EAAiBC, EAAMBpY, EAA  
QjO, KAAKiO, MAAOqR, EAAQtf, KAAKsf, MAsBzE, OAIbA8G, EAakB5Y, EAAQ8Y, UAC1BD, EAAoB7Y, EAA  
Q2T, YAE5B3T, EAAQ8Y, UAAy, GACpB9Y, EAAQ2T, YAAc, GAeIBIT, IACAA, EAAQA, EAAM4D, KAAKRE, IA  
EnB8R, KAEEA, EAAQ, CAACA, EAAM, GAAGzN, KAAKRE, KACjB, GAAG+S, MAAO, GAGpB/S, EAAQ8Y, UA  
AYF, EACpB5Y, EAAQ2T, YAAcF, EAef, IAAIJ, EAAOjmb, KAAK2a, KAAM1M, EAAOqR, EACChCtf, KAAK+M,  
WAAy/M, KAAK8M, WAAy9M, KAAKkb, UAAWlb, KAAKkmB, SAAUlmB, KAAKyS, mBAG9EsI, kBAASJ, GA  
CL, GAAI3a, KAAKsf, MAEL, OAAOF, EAAQvP, UAAUkL, SAASzH, KAAKtT, KAAKsf, MAAM, GAAI3E, IAI9Dk  
I, gBACI, GAAI7iB, KAAKsf, MAEL, OAAOF, EAAQvP, UAAUgT, KAAKxB, MAAMrhB, KAAKsf, MAAM, GAAI1  
L, YAI3D8O, oBACI, GAAI1iB, KAAKsf, MAEL, OAAOF, EAAQvP, UAAU6S, SAASrB, MAAMrhB, KAAKsf, MAA  
M, KAI3D6G, uBAAc3Y, EAASQ, EAAQsR, GAC3B, IACI5e, EADE6IB, EAAUjH, EAAMxgB, OAKtB, GAHA0O, E  
AAQwV, SAAoC, GAAL, EAAnBxV, EAAQwV, UAGxBxV, EAAQ+C, SAAU, CAEIB, IADAvC, EAAOL, IAAI, KAC  
NjN, EAAI, EAAGA, EAAI6IB, EAAS7IB, IACrB4e, EAAM5e, GAAGgN, OAAOF, EAASQ, GAI7B, OAFAA, EAAOL  
, IAAI, UACXH, EAAQwV, WAKZ, IAAMG, EAAy, KAAKhW, MAAMK, EAAQwV, UAAUjV, KAAK, MAASmV, E  
AAgBC, OAC7E, GAAKoD, EAEE, CAGH, IAFAvY, EAAOL, IAAI, KAAKuV, GAChB5D, EAAM, GAAG5R, OAAO  
F, EAASQ, GACpBtN, EAAI, EAAGA, EAAI6IB, EAAS7IB, IACrBsN, EAAOL, IAAIuV, GACX5D, EAAM5e, GAAG  
gN, OAAOF, EAASQ, GAe7BA, EAAOL, IAAOwV, YARdnV, EAAOL, IAAI, KAAKwV, OAWpB3V, EAAQwV, cCn  
JhB, IAAMwD, GAAkB, SAASnG, EAAShD, GACtCrd, KAAKqgB, QAAUA, EACfrgB, KAAKqd, OAASA, EACdrd,  
KAAK2S, UAAU3S, KAAKqgB, QAASrgB, OAGjCwmB, GAAGB3W, UAAyJd, OAAOkD, OAAO, IAAIjD, EAAQ,  
CACIDjM, KAAM, kBACNqgB, WAAW, EAEXrO, gBAAO1E, GACHIO, KAAKqgB, QAAUnS, EAAQC, MAAMnO,  
KAAKqgB, UAGtCxO, cAAKRE, GACD, IAAM6P, EAASrd, KAAKqd, QAAU+C, EAAGB5S, EAAQ6P, QACtD, OAA  
O, IAAImJ, GAAGBxmB, KAAKqgB, QAAShD, IAG7CoJ, kBAASjZ, GACL, OAAOxN, KAAKqgB, QAAQxO, KAA  
K7R, KAAKqd, OAAS, IAAIb, EAASY, KAAK5P, EAASxN, KAAKqd, OAAOnc, OAAOsM, EAAQ6P, SAAW7P, MC  
pBhH, IAAMkZ, GAAO, SAASC, EAAWC, EAAaC, GAC1C7mB, KAAK2mB, UAAyA, EAAyVg, EAAGBuG, GAA  
WG, OAAS, GACjE9mB, KAAK4mB, YAAcA, EAACxG, EAAGBwG, GAAaE, OAAS, GACnED, EACA7mB, KAAK6  
mB, WAAaA, EACXF, GAAaA, EAAU7nB, SAC9BkB, KAAK6mB, WAAaF, EAAU, KAIpCD, GAAK7W, UAAyJd,  
OAAOkD, OAAO, IAAIjD, EAAQ, CACvCjM, KAAM, OAENiS, iBACI, OAAO, IAAI6T, GAAKtG, EAAGBpgB, KAA  
K2mB, WAAyVg, EAAGBpgB, KAAK4mB, aAAc5mB, KAAK6mB, aAG7FnZ, gBAAOF, EAASQ, GAeZ, IAAM+Y,  
EAACvZ, GAAWA, EAAQuZ, YACT, IAAI1B/mB, KAAK2mB, UAAU7nB, OACfkP, EAAOL, IAAI3N, KAAK2mB, U  
AAU, KACIBI, GAAe/mB, KAAK6mB, WAC5B7Y, EAAOL, IAAI3N, KAAK6mB, aACRE, GAAe/mB, KAAK4mB, Y  
AAy9nB, QACxCKp, EAAOL, IAAI3N, KAAK4mB, YAAy, KAIpChX, oBACI, IAAIIP, EAAGsmB, EAAyhnB, KAA  
K2mB, UAAU5Y, KAAK, KACvC, IAAKrN, EAAI, EAAGA, EAAIV, KAAK4mB, YAAy9nB, OAAQ4B, IACrCsmB,  
GAAa, IAAIhnB, KAAK4mB, YAAyImB, GAETc, OAAOsmB, GAGXrY, iBAAQsC, GACJ, OAAOjR, KAAKinB, GA  
AGhW, EAAMrB, YAAc, OAAIpD, GAG3CyA, YAAGC, GACC, OAAOlnB, KAAK4P, WAAWuX, gBAakBD, EAA  
WC, eAGxDC, oBACI, OAAOC, OAAO, wDAAYd, MAAM9L, KAAKvb, KAAKmq, UAG3FrC, mBACI, OAAiC, IAA  
I1B9N, KAAK2mB, UAAU7nB, QAA4C, IAA5BkB, KAAK4mB, YAAy9nB, QAG3DwoB, sBACI, OAAOtnB, KAAK  
2mB, UAAU7nB, QAAU, GAAiC, IAA5BkB, KAAK4mB, YAAy9nB, QAG1Dmq, aAAIsY, GACA, IAAI7mB, EAeJ, I  
AAKA, EAAI, EAAGA, EAAIV, KAAK2mB, UAAU7nB, OAAQ4B, IACnCV, KAAK2mB, UAAUjmB, GAAK6mB, E  
AASvnB, KAAK2mB, UAAUjmB, IAAI, GAGpD, IAAKA, EAAI, EAAGA, EAAIV, KAAK4mB, YAAy9nB, OAAQ4  
B, IACrCV, KAAK4mB, YAAyImB, GAAK6mB, EAASvnB, KAAK4mB, YAAyImB, IAAI, IAI5D8mB, qBACI, IAAI  
C, EAeAC, EACAC, EAfEhR, EAAS, GAaf, IAAKGR, KATLD, EAAU, SAAUE, GAMhB, OAJIH, EAAMhqB, eAAem  
qB, KAAgBjR, EAAOgR, KAC5ChR, EAAOgR, GAAaC, GAGjBA, GAGOVb, EACVA, EAAGB5O, eAAekqB, KAC/B  
F, EAAGpB, EAAGBsb, GAExB3nB, KAAKiP, IAAIyY, IAIjB, OAAO/Q, GAGXkR, kBACI, IACID, EACAInB, EAfEo  
nB, EAAU, GAIhB, IAAKpnB, EAAI, EAAGA, EAAIV, KAAK2mB, UAAU7nB, OAAQ4B, IAEnConB, EADAF, EAA  
a5nB, KAAK2mB, UAAUjmB, KACLonB, EAAQF, IAae, GAAK, EAGvD, IAAKlnB, EAAI, EAAGA, EAAIV, KAAK  
4mB, YAAy9nB, OAAQ4B, IAerConB, EADAF, EAAa5nB, KAAK4mB, YAAyImB, KACPonB, EAAQF, IAae, GAA  
K, EAMvD, IAAKA, KAHL5nB, KAAK2mB, UAAy, GACjB3mB, KAAK4mB, YAAc, GAeAkB, EACf, GAAIA, EAA  
QrqB, eAAemqB, GAAa, CACpC, IAAMG, EAAQD, EAAQF, GAETb, GAAIG, EAAQ, EACR, IAAKrnB, EAAI, EAAG

A,EAAIqnB,EAAOrnB,IACnBV,KAAK2mB,UAAUnmB,KAAKonB,QAERB,GAAIG,EAAQ,EACf,IAAKrnB,EA  
AI,EAAGA,GAACKqnB,EAAOrnB,IACpBV,KAAK4mB,YAAypmB,KAAKonB,GAMtC5nB,KAAK2mB,UAAU  
G,OACf9mB,KAAK4mB,YAAyE,UC9HzB,IAAMkB,GAAY,SAAS/Z,EAAOga,GAE9B,GADAJOB,KAAKiO,M  
AAQia,WAAWja,GACpBka,MAAMnoB,KAAKiO,OACX,MAAM,IAAIvO,MAAM,8BAEpBM,KAAKioB,KAA  
QA,GAAQA,aAAgBvB,GAAQuB,EACzC,IAAIvB,GAAKuB,EAAO,CAACA,QAAQzb,GAC7Bxm,KAAK2S,U  
AAU3S,KAAKioB,KAAMjOB,OAG9BgoB,GAAUnY,UAAyJD,OAAOkD,OAAO,IAAIJD,EAAQ,CAC5CjM,KA  
AM,YAENgS,gBAAO1E,GACHIO,KAAKioB,KAAO/Z,EAAQC,MAAMno,KAAKioB,OAGnCPw,cAAKrE,GA  
CD,OAAOxN,MAGXooB,mBACI,OAAO,IAAIxZ,EAAM,CAAC5O,KAAKiO,MAAOjO,KAAKiO,MAAOjO,KA  
AKiO,SAGnDP,gBAAOF,EAASQ,GACZ,GAACKR,GAAWA,EAAQuZ,cAAiB/mB,KAAKioB,KAAKX,aAC/C,M  
AAM,IAAI5nB,MAAM,sFAAsFM,KAAKioB,KAAKrY,YAGpH,IAAM3B,EAAQjO,KAAKyQ,OAAOjD,EAASx  
N,KAAKiO,OACpCoa,EAAWC,OAAOra,GAOtB,GALc,IAAVA,GAaEa,EAAQ,MAAYA,GAAS,OAE5Coa,EA  
AWpa,EAAMS,QAAQ,IAAIvR,QAAQ,MAAO,KAG5CqQ,GAAWA,EAAQ+C,SAAU,CAE7B,GAAC,IAAVtC,G  
AAejO,KAAKioB,KAAKb,WAEzB,YADApZ,EAAOL,IAAI0a,GAKXpa,EAAQ,GAACA,EAAQ,IACrBoa,EAA  
W,EAAWhQ,OAAO,IAIrCrK,EAAOL,IAAI0a,GACXroB,KAAKioB,KAAKva,OAAOF,EAASQ,IAM9BgD,iBA  
AQxD,EAASY,EAAI6C,GAEjB,IAAIhD,EAAQjO,KAAKkR,SAAS1D,EAASY,EAAIpO,KAAKiO,MAAOgD,E  
AAMhD,OACrDga,EAAOjOB,KAAKioB,KAAKpV,QAERB,GAAW,MAAPzE,GAAqB,MAAPA,EACd,GAA8B,I  
AA1B6Z,EAAKtB,UAAU7nB,QAA4C,IAA5BmpB,EAAKrB,YAAy9nB,OACDmpB,EAAOhX,EAAMgX,KAA  
KpV,QACd7S,KAAKioB,KAAKpB,aACVoB,EAAKpB,WAAa7mB,KAAKioB,KAAKpB,iBAE7B,GAAoC,IAAh  
C5V,EAAMgX,KAAKtB,UAAU7nB,QAA4C,IAA5BmpB,EAAKrB,YAAy9nB,YAE1D,CAGH,GAFAmS,EAAQ  
A,EAAMsX,UAAUvoB,KAAKioB,KAAKT,aAE9Bha,EAAQuZ,aAAe9V,EAAMgX,KAAKrY,aAAeqY,EAAKrY  
,WACtD,MAAM,IAAIQ,MAAM,8EACKuoB,EAAKrY,qBAAoBqB,EAAMgX,KAAKrY,iBAG7D3B,EAAQjO,  
KAAKkR,SAAS1D,EAASY,EAAIpO,KAAKiO,MAAOgD,EAAMhD,WAE3C,MAAPG,GACP6Z,EAAKtB,UAA  
YsB,EAAKtB,UAAUzIB,OAAO+P,EAAMgX,KAAKtB,WAAWG,OAC7DmB,EAAKrB,YAAcQB,EAAKrB,YA  
AY11B,OAAO+P,EAAMgX,KAAKrB,aAAaE,OACnEmB,EAAKJ,UACS,MAAPzZ,IACP6Z,EAAKtB,UAAysB,  
EAAKtB,UAAUzIB,OAAO+P,EAAMgX,KAAKrB,aAAaE,OAC/DmB,EAAKrB,YAAcQB,EAAKrB,YAAy11B,O  
AAO+P,EAAMgX,KAAKtB,WAAWG,OACjEmB,EAAKJ,UAET,OAAO,IAAIG,GAAU/Z,EAAOga,IAGhCtZ,iB  
AAQsC,GACJ,IAAI5C,EAAGC,EAEP,GAAM2C,aAAiB+W,GAAvB,CAIA,GAAlhoB,KAAKioB,KAAKna,WA  
AamD,EAAMgX,KAAKna,UACICO,EAAlrO,KACJsO,EAAI2C,OAIJ,GAFa5C,EAAlrO,KAAKwoB,QACTla,E  
AAI2C,EAAMuX,QACqB,IAA3Bna,EAAE4Z,KAAKtZ,QAAQL,EAAE2Z,MACjB,OAIR,OAAOpb,EAAK4b,eA  
Aepa,EAEEJ,MAAOK,EAEL,SAG1Cua,iBACI,OAAOxoB,KAAKuoB,UAAU,CAAEzPB,OAAQ,KAAM4M,S  
AAU,IAAKG,MAAO,SAGhE0c,mBAAUG,GACN,IAElhoB,EACainB,EACAF,EACaKB,EAEAC,EAPA3a,EAA  
QjO,KAAKiO,MACXga,EAAOjOB,KAAKioB,KAAKpV,QAKnBgW,EAAqB,GAGzB,GAA2B,iBAAhBH,EAA0  
B,CACjC,IAAKhoB,KAAK2L,EACFA,EAAGB3L,GAAGjD,eAAeirB,MACICG,EAAqB,IACFnoB,GAAGgoB,G  
AGhCA,EAACg,EAIbIB,IAAKIB,KaflIB,EAAY,SAAUhB,EAAYhB,GAE9B,OAAIa,EAAMhqB,eAAemqB,IA  
CjBhB,EACA3Y,GAaiBwZ,EAAMG,GAACH,EAAMkB,GAE3C1a,GAaiBwZ,EAAMG,GAACH,EAAMkB,GA  
GxCA,GAGJf,GAGOC,EACVA,EAAYjrB,eAAekqB,KAC3BgB,EAAaD,EAAYf,GACzBF,EAAQpb,EAAGBsb,G  
AExBM,EAAKhZ,IAAI2Z,IAMjB,OAFAX,EAAKJ,SAEE,IAAIG,GAAU/Z,EAAOga,MCvKpC,IAAMxN,GAO  
nE,EAGPwS,GAAY,SAAS1a,EAAI2a,EAAUC,GACrChpB,KAAKoO,GAACA,EAAG+D,OACbnS,KAAK+oB,S  
AAWA,EACHb/oB,KAAKgpB,SAAWA,GAGpBF,GAAUjZ,UAAyJD,OAAOkD,OAAO,IAAIjD,EAAQ,CAC5Cj  
M,KAAM,YAENgS,gBAAO1E,GACHIO,KAAK+oB,SAAW7a,EAAQ2K,WAAW7Y,KAAK+oB,WAG5CIX,cA  
AKrE,GACD,IAA4EY,EAAxEC,EAAlrO,KAAK+oB,SAAS,GAAGIX,KAAKrE,GAAUc,EAAlrO,KAAK+oB,SA  
AS,GAAGIX,KAAKrE,GAEIE,GAAla,EAAQsQ,SAAS9d,KAAKoO,IAAK,CAQ3B,GAPAA,EAaiB,OAAZpO,  
KAAKoO,GAAC,IAAMpO,KAAKoO,GAC/BC,aAAa2Z,IAAa1Z,aAAaM,IACvCP,EAAla,EAEE+Z,WAEN9Z,a  
AAa0Z,IAAa3Z,aAAaO,IACvCN,EAAla,EAEE8Z,YAEL/Z,EAEE2C,UAAy1C,EAEE0C,QAAS,CAC1B,IACK  
3C,aAAaya,IAAaxa,aAAawa,KAC5B,MAATza,EAED,IAAcZ,EAAQ6I,OAASoE,GAAKxH,gBAEzC,OAAO,IA  
AI6V,GAAU9oB,KAAKoO,GAAl,CAACC,EAAGC,GAAlrO,KAAKgpB,UAE/C,KAAM,CAAEpOB,KAAM,YA  
CVqW,QAAS,gCAGjB,OAAO5I,EAEE2C,QAAQxD,EAASY,EAAlE,GAE9B,OAAO,IAAIwa,GAAU9oB,KAA  
KoO,GAAl,CAACC,EAAGC,GAAlrO,KAAKgpB,WAlnDtb,gBAAOF,EAASQ,GACZho,KAAK+oB,SAAS,GA

AGrb,OAAOF,EAASQ,GAC7BhO,KAAKgpB,UACLhb,EAAOL,IAAI,KAefK,EAAOL,IAAI3N,KAAKoO,IACZ  
pO,KAAKgpB,UACLhb,EAAOL,IAAI,KAef3N,KAAK+oB,SAAS,GAAGrb,OAAOF,EAASQ,MCpDzC,IAAMib  
,GAAa,SAAShb,EAAOib,GAG/B,GAFAlpB,KAAKiO,MAAQA,EACbjO,KAAKkpB,UAYYA,GACZjb,EACD,M  
AAM,IAAIvO,MAAM,2CAIxBupB,GAAWpZ,UAYYjD,OAAOkD,OAAO,IAAIjD,EAAQ,CAC7CjM,KAAM,aA  
ENgS,gBAAO1E,GACHIO,KAAKiO,MAAQC,EAAQ2K,WAAW7Y,KAAKiO,QAGzC4D,cAAKrE,GACD,IAAI  
2b,EACEtL,EAASrQ,EAAQsQ,WACjBJ,EAAGb1d,KAAKopB,OAEvBC,GAAC,EA0BIB,OAZBI3L,GACAIQ,EA  
AQkQ,gBAER1d,KAAKiO,MAAMnP,OAAS,EACpBqqB,EAAC,IAAIF,GAAWjpB,KAAKiO,MAAMgB,KAAI,S  
AAUxP,GACID,OAAKA,EAAEoS,KAGApS,EAAEoS,KAAKrE,GAfH/N,KAGXO,KAAKkpB,WACoB,IAAtBl  
pB,KAAKiO,MAAMnP,SACdkB,KAAKiO,MAAM,GAAGmb,QAAWppB,KAAKiO,MAAM,GAAGqb,YAAe9b,  
EAAQgQ,SAC9D6L,GAAC,GAElBF,EAAcnpB,KAAKiO,MAAM,GAAG4D,KAAKrE,IAEjC2b,EAAcnpB,KAEd  
0d,GACAIQ,EAAQoQ,oBAER5d,KAAKopB,SAAUppB,KAAKspB,YAAezL,GAAWwL,GACxCF,aAAuBnB,KA  
C7BmB,EAAC,IAAIvX,EAAMuX,IAErBA,GAGXzb,gBAAOF,EAASQ,GACZ,IAAK,IAAItn,EAAI,EAAGA,EA  
AIV,KAAKiO,MAAMnP,OAAQ4B,IACnCV,KAAKiO,MAAMvN,GAAGgN,OAAOF,EAASQ,IACzBhO,KAAK  
kpB,WAAaxoB,EAAI,EAAlV,KAAKiO,MAAMnP,QACtCkP,EAAOL,IAAI,MAKvB4b,6BACIvpB,KAAKiO,M  
AAQjO,KAAKiO,MAAMmT,QAAO,SAAS7R,GACpC,QAASA,aAAa4M,SC/DIC,kBACI,WAAyxB,EAAMnN,  
EAASK,EAAO2E,GAC9BxS,KAAK2a,KAAOA,EAAKjJ,cACjB1R,KAAK6N,MAAQA,EACb7N,KAAKwN,QA  
AUA,EACfxN,KAAKwS,gBAAkBA,EAEvBxS,KAAK2X,KAAOnK,EAAQ6P,OAAO,GAAGqD,iBAAi7B,IAA  
I7e,KAAK2a,MA2ChE,OAxCI6O,oBAAA,WACI,OAAOhP,QAAQxa,KAAK2X,OAGxB6R,iBAAA,SAAKhZ,G  
AAL,WACUrD,MAAMC,QAAQoD,KACHBA,EAAO,CAACA,IAEZ,IAAMiZ,EAAWzpB,KAAK2X,KAAK8R,U  
ACV,IAAbA,IACAjZ,EAAOA,EAAKvB,KAAI,SAAAZ,GAAK,OAAAA,EAAEWd,KAAK+M,EAAKpR,aAErC,  
IAAMkc,EAAgB,SAAAC,GAAG,QAAgB,YAAAd,EAAK/oB,OASBrC,OAlBA4P,EAAOA,EACF4Q,OAAOsI,G  
ACPza,KAAI,SAAA0a,GACD,GAAB,eAAAd,EAAK/oB,KAAuB,CAC5B,IAAMgpB,EAAWD,EAAK1b,MAA  
MmT,OAAOsI,GACnC,OAAwB,IAApBE,EAAS9qB,OAEL6qB,EAAKP,QAA6B,MAAnBQ,EAAS,GAAGxb,GA  
CpBub,EAElC,EAAS,GAET,IAAIX,GAAWW,GAG9B,OAAOD,MAGE,IAAbF,EACOzpB,KAAK2X,WAAL3X,  
KCqHZ,SAAuB6pB,EAAIC,EAAMC,GACpC,GAAlA,GAAG6B,IAArBnW,UAAU9U,OAAC,IAAK,IAA4BkrB,EA  
AxBtpB,EAAl,EAAgMq,EAAIiZ,EAAKhrB,OAAy4B,EAAImQ,EAAgnQ,KACxEspB,GAAGtpB,KAAKopB,I  
ACRE,IAAlA,EAAK7c,MAAM0C,UAAU8B,MAAM2B,KAAKwW,EAAM,EAAGppB,IACIDspB,EAAGtpB,GA  
AKopB,EAAKppB,IAGrB,OAAOmpB,EAAG3oB,OAAO8oB,GAAMF,KD5HE9pB,KAAKwN,SAAYgD,IAG/Bx  
Q,KAAK2X,WAAL3X,KAAawQ,SE3CtByZ,GAAG,SAAS7P,EAAMnK,EAAM3C,EAAO2E,GACrCxS,KAAK2a  
,KAAOA,EACZ3a,KAAKwQ,KAAOA,EACZxQ,KAAKkqB,KAAgB,SAATvP,EACZ3a,KAAKsN,OAASO,EAC  
d7N,KAAKuN,UAYYiF,GAGrByX,GAAKpa,UAYYjD,OAAOkD,OAAO,IAAIjD,EAAQ,CACvCjM,KAAM,OA  
ENgS,gBAAO1E,GACCIO,KAAKwQ,OACLxQ,KAAKwQ,KAAOtC,EAAQ2K,WAAW7Y,KAAKwQ,QAE5CqB  
,cAAKrE,GAAL,WAIU2c,EAAqB3c,EAAQqQ,OACnCrQ,EAAQqQ,QAAU7d,KAAKkqB,MACnBlqB,KAAKkq  
B,MAAQ1c,EAAQgQ,SACrBhQ,EAAQ8P,YAGZ,IAOI3G,EAPE8G,EAAW,YACTmB,EAAKsL,MAAQ1c,EAA  
QgQ,SACrBhQ,EAAQiQ,WAEZjQ,EAAQqQ,OAASsM,GAIfC,EAAa,IAAIC,GAAGrB,KAAK2a,KAAMnN,EA  
ASxN,KAAK+M,WAAyM,KAAK8M,YAEhF,GAAlsd,EAAWE,UACX,IACI3T,EAASyT,EAAW9W,KAAKtT,  
KAAKwQ,MAC9BiN,IACF,MAAOhe,GACL,GAAlA,EAAEhC,eAAe,SAAWgC,EAAEhC,eAAe,UAC7C,MAA  
MgC,EAElV,KAAM,CACFmB,KAAMnB,EAEmB,MAAQ,UACHbqW,QAAS,8BAA+BjX,KAAK2a,UAAStb,E  
AAEWX,QAAU,KAAKxX,EAAEWX,QAAy,IACrFpJ,MAAO7N,KAAK+M,WACzXL,SAAUvB,KAAK8M,WA  
AWvL,SAC1B8T,KAAM5V,EAAE0b,WACR7F,OAAQ7V,EAAE8qB,cAKtB,GAAl5T,MAAAA,EACa,OAXMA  
,aAAk9J,IAKhB8J,EAAS,IAAIwD,EAJZxD,IAAQb,IAAXA,EAIYA,EAAO/G,WAHP,OA0/B+G,EAAOrJ,OA  
AS7N,KAAKsN,OACrBqJ,EAAOpJ,UAYYvN,KAAKuN,UACjBoJ,EAGX,IAAMnG,EAAOxQ,KAAKwQ,KAAK  
vB,KAAI,SAAAZ,GAAK,OAAAA,EAAEWd,KAAKrE,MAGvC,OFAlQ,IAEO,IAAIwM,GAAGkqB,KAAK2a,  
KAAMnK,EAAMxQ,KAAK+M,WAAyM,KAAK8M,aAG3DY,gBAAOF,EAASQ,GACZA,EAAOL,IAAO3N,K  
AAK2a,SAAS3a,KAAK8M,WAAy9M,KAAK+M,YAEID,IAAK,IAAIrM,EAAl,EAAGA,EAAlV,KAAKwQ,KA  
AK1R,OAAQ4B,IACICV,KAAKwQ,KAAK9P,GAAGgN,OAAOF,EAASQ,GACzBtN,EAAl,EAAlV,KAAKwQ,  
KAAK1R,QACIBkP,EAAOL,IAAI,MAInBK,EAAOL,IAAI,QCxCnB,IAAM6c,GAAW,SAAS7P,EAAM9M,EAA  
O2E,GACnCxS,KAAK2a,KAAOA,EACZ3a,KAAKsN,OAASO,EACd7N,KAAKuN,UAYYiF,GAGrBgY,GAAS3

a,UAAyJd,OAAOkD,OAAO,IAAIjD,EAAQ,CAC3CjM,KAAM,WAENiR,cAAKrE,GACD,IAAIuN,EAAUJ,EAAO3a,KAak2a,KAM1B,GAJ2B,IAAvBA,EAAKjK,QAAQ,QACbiK,EAAO,IAAI,IAAI6P,GAAS7P,EAAKhJ,MAAM,GAAI3R,KAAK+M,WAAy/M,KAAK8M,YAAy+E,KAAKrE,GAASS,OAGvFjO,KAAKyqB,WACL,KAAm,CAAe7pB,KAAM,OACVqW,QAAS,qCAAqC0D,EAC9CpZ,SAAUvB,KAAK8M,WAAWvL,SAC1BsM,MAAO7N,KAAK+M,YAqBpB,GAIBA/M,KAAKyqB,YAAa,EAEIb1P,EAAW/a,KAAK6iB,KAAKrV,EAAQ6P,QAAQ,SAAUqN,GAC3C,IAAMnb,EAAImb,EAAM3P,SAASJ,GACzB,GAAIpL,EAAG,CACH,GAAlA,EAAEqL,UACqBpN,EAAQuO,eAAevO,EAAQuO,eAAejd,OAAS,GAC/D8b,UAAyRl,EAAEqL,UAGjC,OAAlpN,EAAQgQ,OACD,IAAKyM,GAAK,QAAS,CAAC1a,EAAEtB,QAAS4D,KAAKrE,GAGpC+B,EAAEtB,MAAM4D,KAAKrE,OAM5B,OADAxN,KAAKyqB,YAAa,EACX1P,EAEP,KAAM,CAAEna,KAAM,OACVqW,QAAS,YAAy0D,kBACrBpZ,SAAUvB,KAAK8M,WAAWvL,SAC1BsM,MAAO7N,KAAK+M,aAIxB8V,cAAKpN,EAAKkV,GACN,IAAK,IAAIjqB,EAAI,EAAGsP,SAAGtP,EAAI+U,EAAl3W,OAAQ4B,IAE/B,GADAsP,EAAI2a,EAAIrX,KAAKmC,EAAKA,EAAI/U,IACb,OAAsP,EAEPB,OAAO,QCzDf,IAAM4a,GAAW,SAASjQ,EAAM9M,EAAO2E,GACnCxS,KAAK2a,KAAOA,EACZ3a,KAAKsN,OAASO,EACd7N,KAAKuN,UAAyIF,GAGrBoY,GAAS/a,UAAyJd,OAAOkD,OAAO,IAAIjD,EAAQ,CAC3CjM,KAAM,WAENiR,cAAKrE,GACD,IAAI6U,EACE1H,EAAO3a,KAAK2a,KAeZkQ,EAAard,EAAQ5L,cAAckpB,KAAKC,SAASC,aAAanb,UAAUob,YAE9E,GAAljrB,KAAKyqB,WACL,KAAM,CAAe7pB,KAAM,OACVqW,QAAS,oCAAoC0D,EAC7CpZ,SAAUvB,KAAK8M,WAAWvL,SAC1BsM,MAAO7N,KAAK+M,YAIcPb,GA9BA/M,KAAKyqB,YAAa,EAEIbPl,EAAWriB,KAAK6iB,KAAKrV,EAAQ6P,QAAQ,SAAUqN,GAC3C,IAAIInb,EACE2b,EAAOR,EAAMrI,SAAS1H,GAC5B,GAAluQ,EAAM,CACN,IAAK,IAAIxqB,EAAI,EAAGA,EAAIwqB,EAAKpsB,OAAQ4B,IAC7B6O,EAAI2b,EAAKxqB,GAETwqB,EAAKxqB,GAAK,IAAIga,EAAyNl,EAAEoL,KACxBpL,EAAEtB,MACFsB,EAAEqL,UACFrL,EAAEsL,MACFtL,EAAE1B,MACF0B,EAAEiD,gBACFjD,EAAEuL,OACFvL,EAAEWL,UAMV,GAHA8P,EAawk,IAEX3b,EAAI2b,EAAKA,EAAKpsB,OAAS,IACjB8b,UACqBpN,EAAQuO,eAAevO,EAAQuO,eAAejd,OAAS,GAC/D8b,UAAyRl,EAAEqL,UAGjC,OADArL,EAAIA,EAAEtB,MAAM4D,KAAKrE,OAMrB,OADAxN,KAAKyqB,YAAa,EACXpI,EAEP,KAAM,CAAeZb,KAAM,OACVqW,QAAS,aAAa0D,mBACtBpZ,SAAUvB,KAAKwS,gBAAgBjR,SAC/BsM,MAAO7N,KAAK6N,QAIxBgV,cAAKpN,EAAKkV,GACN,IAAK,IAAIjqB,EAAI,EAAGsP,SAAGtP,EAAI+U,EAAl3W,OAAQ4B,IAE/B,GADAsP,EAAI2a,EAAIrX,KAAKmC,EAAKA,EAAI/U,IACb,OAAsP,EAEPB,OAAO,QCrEf,IAAMmb,GAAY,SAAS1Z,EAAKrD,EAAIH,EAAOmd,GACvCprB,KAAKyR,IAAMA,EACXzR,KAAKoO,GAACA,EACVpO,KAAKiO,MAAQa,EACbjO,KAAKorB,IAAMA,GAGfD,GAAUtb,UAAyJd,OAAOkD,OAAO,IAAIjD,EAAQ,CAC5CjM,KAAM,YAENiR,cAAKrE,GACD,OAAO,IAAI2d,GACpnrB,KAAKyR,IAAII,KAAO7R,KAAKyR,IAAII,KAAKrE,GAAWxN,KAAKyR,IAC9CzR,KAAKoO,GACJpO,KAAKiO,OAASjO,KAAKiO,MAAM4D,KAAQ7R,KAAKiO,MAAM4D,KAAKrE,GAAWxN,KAAKiO,MACIEjO,KAAKorB,MAIb1d,gBAAOF,EAASQ,GACZA,EAAOL,IAAI3N,KAAKmQ,MAAM3C,KAG1B2C,eAAM3C,GACF,IAAIS,EAAQjO,KAAKyR,IAAItb,MAAQnQ,KAAKyR,IAAItb,MAAM3C,GAAWxN,KAAKyR,IAW5D,OATizR,KAAKoO,KACLH,GAASjO,KAAKoO,GACdH,GAAUjO,KAAKiO,MAAMkC,MAAQnQ,KAAKiO,MAAMkC,MAAM3C,GAAWxN,KAAKiO,OAG9DjO,KAAKorB,MACLnd,EAAQA,EAAQ,IAAMjO,KAAKorB,KAGxB,IAAIInd,SChcnB,IAAMod,GAAS,SAASIT,EAAKmT,EAASC,EAAS1d,EAAO2E,GACIDxS,KAAKurB,QAAsB,MAAXA,GAA0BA,EAC1CvrB,KAAKiO,MAAQqd,GAAW,GACxBtrB,KAAKwrB,MAAQrT,EAAIpF,OAAO,GACxB/S,KAAKsN,OAASO,EACd7N,KAAKuN,UAAyIF,EACjBxS,KAAKyR,cAAgB,iBACrBzrB,KAAK0rB,UAAy,kBACjB1rB,KAAKsa,UAAyIR,GAGrBF,GAAOxb,UAAyJd,OAAOkD,OAAO,IAAIjD,EAAQ,CACzCjM,KAAM,SAEN8M,gBAAOF,EAASQ,GACPhO,KAAKurB,SACNvd,EAAOL,IAAI3N,KAAKwrB,MAAOxrB,KAAK8M,WAAy9M,KAAK+M,YAEjDiB,EAAOL,IAAI3N,KAAKiO,OACXjO,KAAKurB,SACNvd,EAAOL,IAAI3N,KAAKwrB,QAIxBG,6BACI,OAAO3rB,KAAKiO,MAAMe,MAAMhP,KAAKyR,gBAGjC5Z,cAAKrE,GACD,IAAMoe,EAAO5rB,KACTiO,EAAQjO,KAAKiO,MASjB,SAAS4d,EAAiB5d,EAAO6d,EAAQC,GACrC,IAAIC,EAAiB/d,EACrB,GACIA,EAAQ+d,EAAepc,WACvBoc,EAAiB/d,EAAM9Q,QAAQ2uB,EAAQC,SACIC9d,IAAU+d,GACnB,OA AO,A,EAIX,OAFa/d,EAAQ4d,EAAiB5d,EAAOjO,KAAKyR,eAhBT,SAAU7tB,EAAG+c,GACrC,IAAMpL,EAAl,IAAIib,GAAS,IAAI7P,EAAQiR,EAAK7e,WAAy6e,EAAK9e,YAAy+E,KAAKrE,GAAS,GACnF,OAAQ+B,aAAa8b,GAAU9b,EAAEtB,MAAQsB,EAAEY,WAE/CIC,EAAQ4d,EAAiB5d,EAAOjO,KAAK0rB,WAbT,SAAU9tB,EAAG+c,GACrC,IAAMpL,EAAI,IAAIqb,GAAS,IAAIjQ,EAAQiR,EAAK7e,WAAy6e,EAAK9e,YAAy+E,K

AAKrE,GAAS,GACnF,OAAQ+B,aAAa8b,GAAU9b,EAAEtB,MAAQsB,EAAEY,WAYxC,IAAIkb,GAAOrrB,KA  
AKwrB,MAAQvd,EAAQjO,KAAKwrB,MAAOvd,EAAOjO,KAAKkurB,QAASvrB,KAAK+M,WAAY/M,KAAK8  
M,aAGlG6B,iBAAQsC,GA EJ,MAAmB,WAafA,EAAMrQ,MAAsBZ,KAAKkurB,SAAYta,EAAMsa,QAG5Cta,EA  
AMd,OAAAnQ,KAAKmq,UAAyC,EAAMd,QAAU,OAAI3D,EAfpDK,EAAK4b,eAAezO,KAAKiO,MAAOgD,  
EAAMhd,UCtDzD,IAAMge,GAAM,SAASC,EAAKre,EAAO2E,EAAiB2Z,GAC9CnsB,KAAKiO,MAAQie,EAC  
blsB,KAAKsN,OAASO,EACd7N,KAAKuN,UAAyif,EACjBxS,KAAKmsB,QAAUA,GAGnBF,GAAIpc,UAAy  
D,OAAOkD,OAAO,IAAIjD,EAAQ,CACtCjM,KAAM,MAENgS,gBAAO1E,GACHIO,KAAKiO,MAAQc,EAAQ  
C,MAAMnO,KAAKiO,QAGpCP,gBAAOF,EAASQ,GACZA,EAAOL,IAAI,QACX3N,KAAKiO,MAAMP,OAAO  
F,EAASQ,GAC3BA,EAAOL,IAAI,MAGfkE,cAAKrE,GACD,IACIyQ,EADEiO,EAAMIsB,KAAKiO,MAAM4D,  
KAAKrE,GAG5B,IAAKxN,KAAKmsB,UAGkb,iBADxBIO,EAAWje,KAAK8M,YAAc9M,KAAK8M,WAAWm  
R,WAERb,iBAAdiO,EAAIje,OACXT,EAAQuQ,oBAAoBmO,EAAIje,QAC3Bie,EAAIV,QACLvN,EAAsBA,EAI  
C1B9gB,QAAQ,eAAe,SAAS6R,GAAS,MAAO,KAAKA,MAoCrDkd,EAAIje,MAAQT,EAAQwQ,YAAyko,EA  
AIje,MAAOgQ,IAE3CiO,EAAIje,MAAQT,EAAQ2Q,cAAc+N,EAAIje,OAIct,EAAQ4e,UACHF,EAAIje,MAA  
Me,MAAM,cAAc,CAC/B,IACMod,IADwC,IAA5BF,EAAIje,MAAMyC,QAAQ,KAAc,IAAM,KAC5BID,EAAQ4  
e,SACJ,IAA5BF,EAAIje,MAAMyC,QAAQ,KACIBwb,EAAIje,MAAQie,EAAIje,MAAM9Q,QAAQ,IAAQivB,O  
AEtCF,EAAIje,OAASme,EAM7B,OAAO,IAAIH,GAAIC,EAAKIsB,KAAK+M,WAAY/M,KAAK8M,YAAy,MC  
ID9D,IAAMuf,GAAQ,SAASpe,EAAOqe,EAAUze,EAAO2E,EAAiBC,GAC5DzS,KAAKsN,OAASO,EACd7N,K  
AAKuN,UAAyif,EAEjB,IAAM6M,EAAY,IAAK/G,EAAS,GAAI,KAAM,KAAMtY,KAAKsN,OAAQtN,KAAK  
uN,WAAY8L,uBAE9ErZ,KAAKssB,SAAW,IAAIvS,EAAMuS,GAC1BtsB,KAAKsf,MAAQ,CAAC,IAAIF,EA  
QC,EAAWpR,IACrCjO,KAAKsf,MAAM,GAGmB,cAAe,EAC7BzgB,KAAK0S,mBAAmBD,GACxBzS,KAAK  
sa,WAAY,EACjBta,KAAK2S,UAAU0M,EAAWrf,MAC1BA,KAAK2S,UAAU3S,KAAKssB,SAAUtsB,MAC9B  
A,KAAK2S,UAAU3S,KAAKsf,MAAOtf,OAG/BqsB,GAAMxc,UAAyjd,OAAOkD,OAAO,IAAIW,EAAU,CA  
C1CrIB,KAAM,QAEN2Z,yBACI,OAAO,GAGX3H,gBAAO1E,GACCIO,KAAKssB,WACLtsB,KAAKssB,SA  
Wpe,EAAQC,MAAMnO,KAAKssB,WAEnCtsB,KAAKsf,QACLtf,KAAKsf,MAAQpR,EAAQ2K,WAAW7Y,KA  
AKsf,SAI7C5R,gBAAOF,EAASQ,GACZA,EAAOL,IAAI,UAAW3N,KAAKuN,UAAWvN,KAAKsN,QAC3CtN,  
KAAKssB,SAAS5e,OAAOF,EAASQ,GAC9BhO,KAAKmmB,cAAc3Y,EAASQ,EAAQhO,KAAKsf,QAG7CzN,c  
AAKrE,GACIA,EAAQ2T,cACT3T,EAAQ2T,YAAc,GACtB3T,EAAQ8Y,UAAy,IAGxB,IAAM7nB,EAAQ,IAAI  
4tB,GAAM,KAAM,GAAIrsB,KAAKsN,OAAQtN,KAAKuN,UAAWvN,KAAKyS,kBAkBP,E,OAjBIzS,KAAKkb,  
YACLlb,KAAKsf,MAAM,GAAGpE,UAAyIb,KAAKkb,UAC/Bzc,EAAMyc,UAAyIb,KAAKkb,WAG3Bzc,EA  
M6tB,SAAWtsB,KAAKssB,SAASza,KAAKrE,GAEPcA,EAAQ8Y,UAAU9IB,KAAK/B,GACvB+O,EAAQ2T,Y  
AAy3gB,KAAK/B,GAEZbuB,KAAKsf,MAAM,GAAGoB,iBAAmBIT,EAAQ6P,OAAO,GAAGqD,iBAAiB3B,U  
ACpEvR,EAAQ6P,OAAOwD,QAAQ7gB,KAAKsf,MAAM,IACIC7gB,EAAM6gB,MAAQ,CAACtf,KAAKsf,MA  
AM,GAAGzN,KAAKrE,IACICA,EAAQ6P,OAAO1D,QAefmM,EAAQ8Y,UAAUrK,MAEkB,IAA7BzO,EAAQ8Y  
,UAAUxnB,OAAeL,EAAM8tB,QAAQ/e,GACID/O,EAAM+tB,WAAWhf,IAGzB+e,iBAAQ/e,GACJ,IAAIJ,EA  
AS3W,KAGb,GAAIwN,EAAQ2T,YAAyriB,OAAS,EAAG,CACHc,IAAMugB,EAAY,IAAK/G,EAAS,GAAI,KA  
AM,KAAMtY,KAAK+M,WAAY/M,KAAK8M,YAAuM,wBACnF1C,EAAS,IAAIyI,EAAQC,EAAW7R,EAAQ2  
T,cACjCsL,YAAa,EACpB9V,EAAOjE,mBAAmB1S,KAAKyS,kBAC/BzS,KAAK2S,UAAUgE,EAAQ3W,MAM  
3B,cAHOWn,EAAQ2T,mBACR3T,EAAQ8Y,UAER3P,GAGX6V,oBAAWhf,GACP,IAAI9M,EACAuN,EACEiP,  
EAAO1P,EAAQ8Y,UAAUplB,OAAO,CAACIB,OAGvC,IAAKU,EAAI,EAAGA,EAAIwc,EAAKpe,OAAQ4B,IA  
CzBuN,EAAQiP,EAAKxc,GAAG4rB,oBAAoBvS,EACChmD,EAAKxc,GAAG4rB,SAASre,MAAQiP,EAAKxc,G  
AAG4rB,SACrCpP,EAAKxc,GAAYm,MAAMC,QAAQa,GAASA,EAAQ,CAACA,GASB9C,OAZAjO,KAAKss  
B,SAAW,IAAIvS,EAAM/Z,KAAK0sB,QAAQxP,GAAMjO,KAAI,SAAAiO,GAG7C,IAFAA,EAAOA,EAAKjO,  
KAAI,SAAAOd,GAAY,OAAAA,EAASxc,MAAQwc,EAAW,IAAIxS,EAAUwS,MAEjEjsB,EAAIwc,EAAKpe,O  
AAS,EAAG4B,EAAL,EAAGA,IAC7Bwc,EAAKvc,OAAOD,EAAG,EAAG,IAAIyZ,EAAU,QAGpC,OAAO,IAAI  
8O,GAAW/L,OAE1Bld,KAAK2S,UAAU3S,KAAKssB,SAAUtsB,MAGvB,IAAIof,EAAQ,GAAL,KAG3BsN,iBA  
AQIX,GACJ,GAAMb,IAAfA,EAAL1W,OACJ,MAAO,GACJ,GAAMb,IAAf0W,EAAL1W,OACX,OAAO0W,EA  
L,GAIX,IAFA,IAAMmB,EAAS,GACTiW,EAAO5sB,KAAK0sB,QAAQIX,EAAL7D,MAAM,IAC3BjR,EAAL,EA  
AGA,EAAIksB,EAAK9tB,OAAQ4B,IAC7B,IAAK,IAAIoT,EAAL,EAAGA,EAAI0B,EAAL,GAAG1W,OAAQgV,



IAC/B6C,EAAOnW,KAAK,CAACgV,EAAI,GAAG1B,IAAI5S,OAAO0rB,EAAKlsB,KAG5C,OAAOiW,GAIf4K  
,yBAAgBIC,GACPA,IAGLrf,KAAKsf,MAAQ,CAAC,IAAIF,EAAQgB,EAAGBf,GAAY,CAACrf,KAAKsf,MAA  
M,MACIEtf,KAAK2S,UAAU3S,KAAKsf,MAAOtf,UC/HnC,IAAM6sB,GAAS,SAAS3P,EAAMoP,EAAUjvB,EA  
ASwQ,EAAO2E,EAAiBC,GAQrE,GAPAZs,KAAK3C,QAAUA,EACf2C,KAAKsN,OAAO,EAACd7N,KAAKuN,  
UAAyIf,EACjBxS,KAAKkd,KAAOA,EACZld,KAAKssB,SAAWA,EACbBtsB,KAAKsa,WAAy,OAES9N,IAAt  
BxM,KAAK3C,QAAQytB,MAASb9qB,KAAK3C,QAAQyd,OACd9a,KAAK8sB,KAAO9sB,KAAK3C,QAAQy  
tB,MAAQ9qB,KAAK3C,QAAQyd,WAC3C,CACH,IAAMiS,EAAY/sB,KAAKgtB,UACnBD,GAAa,0BAA0BxR,  
KAAKwR,KAC5C/sB,KAAK8sB,KAAM,GAGnB9sB,KAAK0S,mBAAMBD,GACxBzS,KAAK2S,UAAU3S,KA  
AKssB,SAAUtsB,MAC9BA,KAAK2S,UAAU3S,KAAKkd,KAAMld,OAG9B6sB,GAAOhd,UAAyjD,OAAOkD,  
OAAO,IAAIjD,EAAQ,CACzCjM,KAAM,SAENgS,gBAAO1E,GACCIO,KAAKssB,WACLtsB,KAAKssB,SAAW  
pe,EAAQC,MAAMnO,KAAKssB,WAEvCtsB,KAAKkd,KAAOhP,EAAQC,MAAMnO,KAAKkd,MAC1Bld,KAA  
K3C,QAAQ4vB,UAAajtB,KAAK3C,QAAQyd,SAAU9a,KAAKugB,OACvDvgB,KAAKugB,KAAOrS,EAAQC,  
MAAMnO,KAAKugB,QAIvC7S,gBAAOF,EAASQ,GACRho,KAAK8sB,UAAyCtgB,IAAICxM,KAAKkd,KAA  
K3P,UAAU2f,YACChf,EAAOL,IAAI,WAAy3N,KAAKuN,UAAWvN,KAAKsN,QAC5CtN,KAAKkd,KAAKxP,  
OAAOF,EAASQ,GACtBhO,KAAKssB,WACLte,EAAOL,IAAI,KACX3N,KAAKssB,SAAS5e,OAAOF,EAASQ,I  
AEICA,EAAOL,IAAI,OAInBqf,mBACI,OAAQhtB,KAAKkd,gBAAGb+O,GACzBjsB,KAAKkd,KAAKjP,MAA  
MA,MAAQjO,KAAKkd,KAAKjP,OAG1Ckf,4BACI,IAAIjQ,EAAOId,KAAKkd,KAIhB,OAHiA,aAAgB+O,KAC  
hB/O,EAAOA,EAAKjP,SAEZiP,aAAgBmO,KACTnO,EAAKyO,qBAMpByB,uBAAc5f,GACV,IAAI0P,EAAOId,  
KAAKkd,KAMhB,OAjIA,aAAgB+O,KACb/O,EAAOA,EAAKjP,OAGT,IAAI4e,GAAO3P,EAAKrL,KAAKrE,  
GAAUxN,KAAKssB,SAAUtsB,KAAK3C,QAAS2C,KAAKsN,OAAQtN,KAAKuN,UAAWvN,KAAKyS,mBAGz  
G4a,kBAAS7f,GACL,IAAM0P,EAAOId,KAAKkd,KAAKrL,KAAKrE,GACtBV,EAAW9M,KAAKuN,UAEtB,K  
AAM2P,aAAgB+O,IAAM,CAExB,IAAMc,EAAY7P,EAAKjP,MACnBnB,GACaigB,GACAvf,EAAQuQ,oBAAo  
BgP,GAC5B7P,EAAKjP,MAAQT,EAAQwQ,YAAy+O,EAAWjgB,EAASmR,UAERdf,EAAKjP,MAAQT,EAAQ  
2Q,cAAcjb,EAAKjP,OAIhD,OAAOiP,GAGXrL,cAAKrE,GACD,IAAMmJ,EAAS3W,KAAKstB,OAAO9f,GAW3  
B,OAVIxN,KAAK3C,QAAQ6vB,WAAaltB,KAAKutB,sBAC3B5W,EAAO7X,QAA4B,IAAIb6X,EAAO7X,OAC  
xB6X,EAAOtJ,SAAQ,SAAUH,GACrBA,EAAKsgB,wBAIT7W,EAAO6W,sBAGR7W,GAGX2W,gBAAO9f,GA  
CH,IAAI6S,EACAoN,EACEnB,EAAWtsB,KAAKssB,UAAytsB,KAAKssB,SAASza,KAAKrE,GAERd,GAAIxN,  
KAAK3C,QAAQ4vB,SAAU,CACvB,GAAIjtB,KAAKugB,MAAQvgB,KAAKugB,KAAK1O,KACvB,IACI7R,K  
AAKugB,KAAK1O,KAAKrE,GAEnB,MAAO/N,GAEH,MADAA,EAAEwX,QAAU,iCACN,IAAIH,EAAUrX,EA  
AGO,KAAKugB,KAAKnH,QAASpZ,KAAKugB,KAAKhf,UAQ5D,OALaksB,EAAWjgB,EAAQ6P,OAAO,IAA  
M7P,EAAQ6P,OAAO,GAAGqd,mBACjC1gB,KAAKugB,MAAQvgB,KAAKugB,KAAKtf,WACpCwsB,EAAS/  
O,YAAa1e,KAAKugB,KAAKtf,WAG7B,GAGX,GAAIjB,KAAK0tB,OACoB,mBAAd1tB,KAAK0tB,OACZ1tB,  
KAAK0tB,KAAO1tB,KAAK0tB,QAejB1tB,KAAK0tB,MACL,MAAO,GAGf,GAAI1tB,KAAK3C,QAAQyd,OA  
AQ,CACrB,IAAM1D,EAAW,IAAI+C,EAUUna,KAAKugB,KAAM,EACiC,CACIhf,SAAUvB,KAAK2tB,iBACfT  
,UAAWltB,KAAKkd,KAAK3P,WAAavN,KAAKkd,KAAK3P,UAAU2f,YACvD,GAAM,GAEB,OAAltB,KAAK  
ssB,SAAW,IAAID,GAAM,CAACjV,GAAWpX,KAAKssB,SAASre,OAAS,CAACmJ,GACIE,GAAIpX,KAAK8s  
B,IAAK,CACjB,IAAMc,EAAY,IAAI,GAAO7sB,KAAKqtB,SAAS7f,GAAU8e,EAUtsB,KAAK3C,QAAS2C,K  
AAKsN,QACIF,IAAKsgB,EAAUd,KAAO9sB,KAAKF,MACvB,MAAME,KAAKF,MAEf,OAAO8tB,EACJ,OAA  
I5tB,KAAKugB,OACZF,EAAU,IAAIjB,EAAQ,KAAMgB,EAAGBpgB,KAAKugB,KAAKjB,SAC9CyB,YAAyVt  
,GAEBxN,KAAKssB,SAAW,IAAID,GAAMhM,EAAQf,MAAOtf,KAAKssB,SAASre,OAASoS,EAAQf,OAExE,  
MChLnB,IAAMuO,GAAa,aAEnBA,GAAWhe,UAAyjD,OAAOkD,OAAO,IAAIjD,EAAQ,CAC7CihB,4BAAMb  
C,EAAYvgB,GAC3B,IAAIjB,EACEiV,EAAO5rB,KACpGuB,EAAC,GAEPB,IAAKxgB,EAAQygB,kBACT,KAA  
M,CAAEhX,QAAS,+DACb1V,SAAUvB,KAAK8M,WAAWvL,SAC1BsM,MAAO7N,KAAK+M,YAGpBghB,EA  
AaA,EAAW5wB,QAAQ,kBAakB,SA AUS,EAAG+c,GAC3D,OAAOiR,EAAKsC,MAAM,IAAIID,GAAS,IAAI7  
P,EAAQiR,EAAK7e,WAAy6e,EAAK9e,YAAy+E,KAAKrE,OAGtF,IAClugB,EAaA,IAAIInW,SAAS,WAAWm  
W,OACvC,MAAOtuB,GACL,KAAM,CAAEwX,QAAS,gCAAgCxX,EAAEwX,kBAakB8W,MACjExsB,SAAUv  
B,KAAK8M,WAAWvL,SAC1BsM,MAAO7N,KAAK+M,YAGpB,IAAM8U,EAAYrU,EAAQ6P,OAAO,GAAGw  
E,YACpC,IAAK,IAAMhO,KAAKgO,EACRA,EAAUpkB,eAAeoW,KAEzBma,EAAYna,EAAEIC,MAAM,IAAM

,CAcTb1D,MAAO4T,EAAUhO,GAAG5F,MACpBkgB,KAAM,WACF,OAAOnuB,KAAKiO,MAAM4D,KAAKrE,GAAS2C,WAMhD,IACIwG,EAASoX,EAAWza,KAAK0a,GAC3B,MAAOvuB,GACL,KAAM,CAAewX,QAA S,iCAAiCxX,EAAekb,UAA5Ib,EAAewX,QAAQ9Z,QAAQ,OAAQ,SACnFoE,SAAUvB,KAAK8M,WAAWvL,S AC1BsM,MAAO7N,KAAK+M,YAEpB,OAAO4J,GAGXuX,eAAMzY,GACF,OAAItI,MAAMC,QAAQqI,EAAIx H,QAAWwH,EAAIxH,MAAMnP,OAAS,EACzC,IAAI2W,EAAIxH,MAAMgB,KAAI,SAAUM,GAAK,OAEOA, EAAEY,WAAypC,KAAK,UAE3D0H,EAAItF,WcNDvB,IAAMie,GAAa,SAASC,EAAQ9C,EAAS1d,EAAO2E,G AChDxS,KAAKurB,QAAUA,EACfvrB,KAAK+tB,WAAaM,EACIBruB,KAAKsN,OAASO,EACd7N,KAAKuN, UAAyIf,GAGrB4b,GAAWve,UAAyJD,OAAOkD,OAAO,IAAI+d,GAAc,CACnDjtB,KAAM,aAENiR,cAAKrE, GACD,IAAMmJ,EAAS3W,KAAK8tB,mBAAMb9tB,KAAK+tB,WAAyvgB,GACID5M,SAAC+V,EAepB,MAAa ,WAAT/V,GAAsBunB,MAAMxR,GAEZ,WAAT/V,EACA,IAAIyqB,GAAO,IAAI1U,MAAWA,EAAQ3W,KAAK urB,QAASvrB,KAAKsN,QACrDH,MAAMC,QAAQuJ,GACd,IAAIwD,EAAUxD,EAAO5I,KAAK,OAE1B,IAAIo M,EAAUxD,GANd,IAAIqR,GAAUrR,MCIBjC,IAAM2X,GAAa,SAAS7c,EAAKya,GAC7BlSb,KAAKyR,IAAM A,EACXzR,KAAKiO,MAAQie,GAGjBoC,GAAWze,UAAyJD,OAAOkD,OAAO,IAAIjD,EAAQ,CAC7CjM,KA AM,aAENgS,gBAAO1E,GACHIO,KAAKiO,MAAQC,EAAQC,MAAMnO,KAAKiO,QAGpC4D,cAAKrE,GACD, OAAIxN,KAAKiO,MAAM4D,KACJ,IAAIyc,GAAWtuB,KAAKyR,IAAKzR,KAAKiO,MAAM4D,KAAKrE,IAE 7CxN,MAGX0N,gBAAOF,EAASQ,GACZA,EAAOL,IAAO3N,KAAKyR,SACfzR,KAAKiO,MAAMP,OACX1N, KAAKiO,MAAMP,OAAOF,EAASQ,GAE3BA,EAAOL,IAAI3N,KAAKiO,UCxB5B,IAAMsgB,GAAY,SAASng B,EAAIyC,EAAGb,EAAGtP,EAAG8tB,GACpCxB,KAAKoO,GAACA,EAAG+D,OACbnS,KAAKyB,OAAS5d ,EACd7Q,KAAK0uB,OAAS1e,EACdhQ,KAAKsN,OAAS5M,EACdV,KAAKwuB,OAASA,GAGIBD,GAAU1e,U AAYjD,OAAOkD,OAAO,IAAIjD,EAAQ,CAC5CjM,KAAM,YAENgS,gBAAO1E,GACHIO,KAAKyB,OAASvg B,EAAQC,MAAMnO,KAAKyB,QACjCzuB,KAAK0uB,OAASxgB,EAAQC,MAAMnO,KAAK0uB,SAGrC7c,c AAKrE,GACD,IAAMmJ,EAAS,SAAWvI,EAAIC,EAAGC,GAC7B,OAAQF,GACJ,IAAK,MAAO,OAAOC,GAA KC,EACxB,IAAK,KAAO,OAAOD,GAACK,EACxB,QACI,OAAQzB,EAAK8B,QAAQN,EAAGC,IACpB,KAA M,EACF,MAAc,MAAPF,GAAqB,OAAPA,GAAsB,OAAPA,EACxC,KAAK,EACD,MAAc,MAAPA,GAAqB,OA APA,GAAsB,OAAPA,GAAsB,OAAPA,EACvD,KAAK,EACD,MAAc,MAAPA,GAAqB,OAAPA,EACzB,QACI, OAAO,IabZ,CAGBzP,O,KAAKoO,GAAIpO,KAAKyB,OAAO5c,KAAKrE,GAAUxN,KAAK0uB,OAAO7c,KA AKrE,IAExD,OAAOxN,KAAKwuB,QAAU7X,EAASA,KCnCvC,IAAMgY,GAAoB,SAAS1gB,GAC/BjO,KAAKi O,MAAQA,GAGjB0gB,GAakB9e,UAAyJD,OAAOkD,OAAO,IAAIjD,EAAQ,CACpDjM,KAAM,sBCHV,IAAM guB,GAAW,SAAS1hB,GACtBIN,KAAKiO,MAAQf,GAGjB0hB,GAAS/e,UAAyJD,OAAOkD,OAAO,IAAIjD,E AAQ,CAC3CjM,KAAM,WAEN8M,gBAAOF,EAASQ,GACZA,EAAOL,IAAI,KACX3N,KAAKiO,MAAMP,OA AOF,EAASQ,IAG/B6D,cAAKrE,GACD,OAAIA,EAAQsQ,WACD,IAAKgL,GAAU,IAAK,CAAC,IAAIId,IAAW, GAAIhoB,KAAKiO,QAAS4D,KAAKrE,GAE/D,IAAIohB,GAAS5uB,KAAKiO,MAAM4D,KAAKrE,OCjB5C,IA AMqhB,GAAS,SAAShP,EAAUip,EAAQjhB,EAAO2E,EAAiBC,GAU9D,OATAzS,KAAK6f,SAAWA,EACb7f, KAAK8uB,OAASA,EACd9uB,KAAK+uB,UAAyF,GAAOG,UACxBhvB,KAAKivB,WAAa,CAACjvB,KAAK+u B,WACxB/uB,KAAKsN,OAASO,EACd7N,KAAKuN,UAAyIf,EACjBxS,KAAK0S,mBAAMbD,GACxBzS,KA AKsa,WAAy,EAETwU,GACJ,IAAK,MACD9uB,KAAKkvB,aAAc,EACnBlvB,KAAKmvB,YAAa,EACIB,MACJ ,QACInvB,KAAKkvB,aAAc,EACnBlvB,KAAKmvB,YAAa,EAG1BnvB,KAAK2S,UAAU3S,KAAK6f,SAAU7f, OAGIC6uB,GAAOhf,UAAyJD,OAAOkD,OAAO,IAAIjD,EAAQ,CACzCjM,KAAM,SAENgS,gBAAO1E,GACHI O,KAAK6f,SAAW3R,EAAQC,MAAMnO,KAAK6f,WAGvChO,cAAKrE,GACD,OAAO,IAAIqhB,GAAO7uB,K AAK6f,SAAShO,KAAKrE,GAAUxN,KAAK8uB,OAAQ9uB,KAAK+M,WAAy/M,KAAK8M,WAAy9M,KAAK yS,mBAGvGI,eAAMrF,GACF,OAAO,IAAIqhB,GAAO7uB,KAAK6f,SAAU7f,KAAK8uB,OAAQ9uB,KAAK+M, WAAy/M,KAAK8M,WAAy9M,KAAKyS,mBAIZf2c,2BAakB/P,GACd,IAAU3e,EAAG2uB,EAAtBC,EAAe,G AEnB,IAAK5uB,EAAI,EAAGA,EAAI2e,EAAUvgB,OAAQ4B,IAC9B2uB,EAAMbhQ,EAAU3e,GAAG6X,SAG5 B7X,EAAI,GAAK2uB,EAAiBvwB,QAAmD,KAAZCuW,EAAiB,GAAG/c,WAAWrE,QACnEohB,EAAiB,GAA G/c,WAAWrE,MAAQ,KAE3CqhB,EAAeA,EAApuB,OAAOme,EAAU3e,GAAG6X,UAGpDvY,KAAKuvB,cAA gB,CAAC,IAAIjX,EAASgX,IACnctvB,KAAKuvB,cAAc,GAAG7c,mBAAMb1S,KAAKyS,qBAItDoc,GAAOG,Q AAU,ECtDjB,IAAMQ,GAAe,SAASzU,EAAUIN,EAAO2E,GAC3CxS,KAAK+a,SAAWA,EACb/a,KAAKsN,O AASO,EACd7N,KAAKuN,UAAyIf,EACjBxS,KAAKsa,WAAy,GAGrBkV,GAAa3f,UAAyJD,OAAOkD,OAAO

,IAAIjD,EAAQ,CAC/CjM,KAAM,eAENiR,cAAKrE,GACD,IAAI8R,EACAmQ,EAakB,IAAIjF,GAASxqB,KAAK+a,SAAU/a,KAAK+M,WAAyM,KAAK8M,YAAy+E,KAAKrE,GACnF1N,EAAQ,IAAIgX,EAAU,CAACG,QAAS,oCAAoCjX,KAAK+a,WAE/E,IAAK0U,EAAGbPp,QAAS,CAC1B,GAAIoP,EAAGbNq,MAChBA,EAAQmQ,OAEP,GAAItiB,MAAMC,QAAQqiB,GACnBnQ,EAAQ,IAAIF,EAAQ,GAAIqQ,OAeVb,CAAA,IAAIItiB,MAAMC,QAAQqiB,EAAGbXhB,OAIInC,MAAMnO,EAHNwf,EAAQ,IAAIF,EAAQ,GAAIqQ,EAAGbXhB,OAK5CwhB,EAakB,IAAIjJ,GAAGbIH,GAG1C,GAAImQ,EAAGbPp,QACHb,OAAOoP,EAAGbHJ,SAASjZ,GAEPc,MAAM1N,KCnCd,IAAM4vB,GAAiB,SAASC,EAAUC,EAAS/hB,EAAOf,GACTD9M,KAAKiO,MAAQ0hB,EACb3vB,KAAK4vB,QAAUA,EACf5vB,KAAKsN,OAASO,EACd7N,KAAKuN,UAAyT,GAGrB4iB,GAae7f,UAAyJd,OAAOkD,OAAO,IAAIjD,EAAQ,CACjDjM,KAAM,iBAENiR,cAAKrE,OACG9M,EAAMia,EAAM2E,EAAQtF,KAAKiO,MAAM4D,KAAKrE,GAExC,IAAK9M,EAAl,EAAGA,EAAlV,KAAK4vB,QAAQ9wB,OAAQ4B,IAAK,CAYtC,GAXAia,EAAO3a,KAAK4vB,QAAQlvB,GAOhByM,MAAMC,QAAQkS,KACdA,EAAQ,IAAIF,EAAQ,CAAC,IAAI9G,GAAagH,IAG7B,KAAT3E,EACA2E,EAAQA,EAAMgD,uBAEb,GAAuB,MAAnB3H,EAak5H,OAAO,IAQjB,GAPuB,MAAnB4H,EAak5H,OAAO,KACZ4H,EAAO,IAAI,IAAI6P,GAAS7P,EAakTc,OAAO,IAAIxG,KAAKrE,GAASS,OAETdqR,EAAMuC,YACNvC,EAAQA,EAAMvE,SAASJ,KAGtB2E,EACD,KAAM,CAAE1e,KAAM,OACVqW,QAAS,YAAy0D,eACrBpZ,SAAUvB,KAAK8M,WAAWvL,SAC1BsM,MAAO7N,KAAK+M,gBAGnB,CAWD,GATI4N,EADyB,OAAzBA,EAakKv,UAAU,EAAG,GACX,IAAI,IAAIrF,GAAS7P,EAakTc,OAAO,IAAIxG,KAAKrE,GAASS,MAG5B,MAAnB0M,EAak5H,OAAO,GAAa4H,EAAO,IAAIA,EAE3C2E,EAM2C,aACN3C,EAAQA,EAAM+C,SAAS1H,KAGtB2E,EACD,KAAM,CAAE1e,KAAM,OACVqW,QAAS,aAAa0D,EAakTc,OAAO,iBAC1C9W,SAAUvB,KAAK8M,WAAWvL,SAC1BsM,MAAO7N,KAAK+M,YAIpBuS,EAAQA,EAAMA,EAAMxgB,OAAS,GAG7BwgB,EAAMrR,QACNqR,EAAQA,EAAMzN,KAAKrE,GAASS,OAe5BqR,EAAMe,UACNf,EAAQA,EAAMe,QAAQxO,KAAKrE,IAGnC,OAAO8R,KCpEf,IAAMwQ,GAAa,SAASnV,EAAMoV,EAAQzQ,EAAO7G,EAAWuX,EAAU3S,EAAQ5K,GAC1EzS,KAAK2a,KAAOA,GAAQ,kBACpB3a,KAAKqf,UAAy,CAAC,IAAI/G,EAAS,CAAC,IAAIjG,EAAQ,KAAMsI,GAAM,EAAO3a,KAAKsN,OAAQtN,KAAKuN,cACjFvN,KAAK+vB,OAASA,EACd/vB,KAAKyY,UAAyA,EACjBzY,KAAKgwB,SAAWA,EACHbhwB,KAAKiWb,MAAQF,EAAOjxB,OACpBkB,KAAKsf,MAAQA,EACbtf,KAAKwf,SAAW,GACHb,IAAM0Q,EAaqB,GAC3BlwB,KAAKmwB,SAAWJ,EAAO5b,QAAO,SAAU4T,EAAOqI,GAC3C,OAAKA,EAaeZv,MAASyV,EAaeZv,OAASyV,EAEniB,MACIB8Z,EAAQ,GAGfmI,EAAMb1vB,KAAK4vB,EAaeZv,MACnBoN,KAeZ,GACH/nB,KAAKkwB,mBAAqBA,EAC1BlwB,KAAKqd,OAASA,EACdrd,KAAK0S,mBAAmBD,GACxBzS,KAAKsa,WAAy,GAGrBwV,GAAWjgB,UAAyJd,OAAOkD,OAAO,IAAIsp,EAAW,CACHdxE,KAAM,kBACnqgB,WAAW,EAExrO,gBAAO1E,GACCIO,KAAK+vB,QAAU/vB,KAAK+vB,OAAOjxB,SAC3BkB,KAAK+vB,OAA57hB,EAAQ2K,WAAW7Y,KAAK+vB,SAE1C/vB,KAAKsf,MAAQpR,EAAQ2K,WAAW7Y,KAAKsf,OACjCtf,KAAKyY,YACLzY,KAAKyY,UAAyV,K,EAAQC,MAAMnO,KAAKyY,aAI5C4X,oBAAW7iB,EAAS8iB,EAAU9f,EAAM+f,GAehC,IAEIC,EACAC,EAEA/vB,EACAoT,EACAoY,EACAvR,EACA+v,EACAC,EAVEjG,EAAQ,IAAIItL,EAAQ,KAAM,MAI1B2Q,EAAS3P,EAAGbPgB,KAAK+vB,QAOhCa,EAAa,EAoJB,GALIN,EAASjT,QAAUIt,EAASjT,OAAO,IAAMiT,EAASjT,OAAO,GAAGqD,mBAC5DgK,EAAMhK,iBAAMb4P,EAASjT,OAAO,GAAGqD,iBAAIb3B,WAEjEuR,EAAW,IAAI9T,EAASY,KAAKkT,EAAU,CAAC5F,GAAOxpB,OAAOovB,EAASjT,SAE3D7M,EAIA,IAFAogB,GADApG,EAAO4P,EAAGb5P,IACL1R,OAEB4B,EAAl,EAAGA,EAAlkwB,EAAYlwB,IAExB,GAAIia,GADJ8V,EAAMjgB,EAak9P,KACQ+vB,EAAl9V,KAAO,CAE1B,IADA+v,GAae,EACV5c,EAAl,EAAGA,EAAlc,EAAOjxB,OAAQgV,IAC3B,IAAKyc,EAaezc,IAAM6G,IAASoV,EAAOjc,GAG6G,KAAM,CAC/C4V,EAaezc,GAak2c,EAAlxiB,MAAM4D,KAAKrE,GACnCKd,EAAM9H,YAAy,IAAIII,EAAYC,EAAM8V,EAAlxiB,MAAM4D,KAAKrE,KACvDkjB,GAae,EACf,MAGR,GAAIA,EAAC,CACdlgB,EAak7P,OAAOD,EAAG,GACfA,IACA,SAEA,KAAM,CAAE,KAAM,UAAWqW,QAAS,sBAAsBjX,KAAK2a,SAAQnK,EAak9P,GAAGia,mBAM7F,IADAgW,EAAW,EACNjwB,EAAl,EAAGA,EAAlqvB,EAAOjxB,OAAQ4B,IAC3B,IAAI6vB,EAae7vB,GAAnB,CAIA,GAFA+vB,EAAMjgB,GAAQA,EAakmgB,GAefhW,EAAOoV,EAOrvB,GAAGia,KACjB,GAAIoV,EAOrvB,GAAGsvB,SAAU,CAEPb,IADAQ,EA AU,GACL1c,EAAl6c,EAAU7c,EAAl8c,EAAY9c,IAC/B0c,EAQhwB,KAAKgQ,EAakSd,GAAG7F,MAAM4D,KAAKrE,IAEPcKd,EAAM9H,YAAy,IAAIII,EAAYC,EAAM,IAAlSO,GAAWuH,GAAS3e,KAAKrE,SACIE,CAEH,GADA0e,EAAMuE,GAOA,EAAlxiB,MAITie,EADA/e,MAAMC,QAAQ8e,GACR,IAAIIF,GAAGb,IAAIpH,EAAQ,GAAl8M,IAGpCA,EA

AIra,KAAKrE,OAeHb,CAAA,IAAIuiB,EAAOrvB,GAAGuN,MAIjB,KAAM,CAAErN,KAAM,UAAWqW,QAAS  
,iCAAiCjX,KAAK2a,UAAStW,UAAkB5wB,KAAKiwB,WAHxG/D,EAAM6D,EAAOrvB,GAAGuN,MAAM4D,  
KAAKye,GAC3B5F,EAAMPj,aAKVoJ,EAAM9H,YAAY,IAAIII,EAAYC,EAAMuR,IACxCqE,EAAe7vB,GAAK  
wrB,EAI5B,GAAI6D,EAAOrvB,GAAGsvB,UAAyxf,EACtB,IAAKsD,EAAI6c,EAAU7c,EAAI8c,EAAY9c,IAC/  
Byc,EAAezc,GAAKtD,EAAKsD,GAAG7F,MAAM4D,KAAKrE,GAG/CmjB,IAGJ,OAAOjG,GAGXxO,yBACI,I  
AAMoD,EAAStf,KAAKsf,MAAQbtF,KAAKsf,MAAMrQ,KAAI,SAAUe,GAC9D,OAAIA,EAAEkM,cACKIM,EA  
AEkM,eAAc,GAehBIM,KAJahQ,KAAKsf,MAQjC,OADe,IAAIwQ,GAAW9vB,KAAK2a,KAAM3a,KAAK+vB,  
OAAQzQ,EAAOtf,KAAKyY,UAAWzY,KAAKgwB,SAAUhwB,KAAKqd,SAIrGxL,cAAKrE,GACD,OAAO,IAA  
IsiB,GAAW9vB,KAAK2a,KAAM3a,KAAK+vB,OAAQ/vB,KAAKsf,MAAOtf,KAAKyY,UAAWzY,KAAKgwB,  
SAAUhwB,KAAKqd,QAAU+C,EAAGB5S,EAAQ6P,UAGpIwT,kBAASrjB,EAASgD,EAAMoK,GACpB,IAGIOE,  
EACAe,EAJEyQ,EAAa,GACbC,EAAC/wB,KAAKqd,OAASrd,KAAKqd,OAAOnc,OAAOsM,EAAQ6P,QAAU7P,  
EAAQ6P,OACzEqN,EAAQ1qB,KAAKqwB,WAAW7iB,EAAS,IAAIgP,EAASY,KAAK5P,EASujB,GAACvgB,  
EAAMsgB,GActF,OA VApG,EAAM9H,YAAY,IAAIII,EAAY,aAAc,IAAIuO,GAAW6H,GAAYjf,KAAKrE,KAeh  
F8R,EAAQc,EAAGBpgB,KAAKsf,QAe7Be,EAAU,IAAIjB,EAAQ,KAAME,IACpBgB,gBAakBtgB,KAC1BqgB,  
EAAUA,EAAQxO,KAAK,IAAI2K,EAASY,KAAK5P,EAAS,CAACxN,KAAM0qB,GAAOxpB,OAAO6vB,KACn  
EnW,IACAyF,EAAUA,EAAQnE,iBAEfmE,GAGXqB,wBAaeIR,EAAMhD,GACjB,QAAIxN,KAAKyY,YAAczY  
,KAAKyY,UAAU5G,KACIC,IAAI2K,EAASY,KAAK5P,EACd,CAACxN,KAAKqwB,WAAW7iB,EACb,IAAIgP  
,EAASY,KAAK5P,EAASxN,KAAKqd,OAASrd,KAAKqd,OAAOnc,OAAOsM,EAAQ6P,QAAU7P,EAAQ6P,QA  
AS7M,EAAM,KACpGtP,OAAOIB,KAAKqd,QAAU,IACtBnc,OAAOsM,EAAQ6P,YAMhCoE,mBAAUjR,EA  
MhD,GACZ,IACliM,EADEuX,EAACxgB,GAAQA,EAAK1R,QAAW,EAETCoxB,EAAqBlwB,KAAKkwB,mBAC  
1Be,EAAMbzgB,EAAWA,EAAK2D,QAAO,SAAU4T,EAAOqI,GAC7D,OAAIF,EAAMBxf,QAAQOf,EAAEzV,  
MAAQ,EAC9BoN,EAAQ,EAERA,IAEZ,GAN6B,EAQHc,GAAK/nB,KAAKgwB,UAQN,GAALIb,EAAMBjxB,K  
AAKmwB,SAAW,EACnC,OAAO,MATK,CACHb,GAAIc,EAakBjxB,KAAKmwB,SACvB,OAAO,EAEX,GAAIa  
,EAAahxB,KAAK+vB,OAAOjxB,OACzB,OAAO,EASf2a,EAAM1N,KAAK0D,IAAIwhB,EAAiBjxB,KAAKiwB,  
OAErC,IAAK,IAAIvvB,EAAL,EAAGA,EAAL+Y,EAAL/Y,IACrB,IAAKV,KAAK+vB,OAAOrvB,GAAGia,OAA  
S3a,KAAK+vB,OAAOrvB,GAAGsvB,UACpCxf,EAAK9P,GAAGuN,MAAM4D,KAAKrE,GAAS2C,SAAWnQ,  
KAAK+vB,OAAOrvB,GAAGuN,MAAM4D,KAAKrE,GAAS2C,QAC1E,OAAO,EAInB,OAAO,KC1Nf,IAAM+g  
B,GAAY,SAAS3Y,EAAU/H,EAAM3C,EAAO2E,EAAiBoI,GAC/D5a,KAAK6f,SAAW,IAAIvH,EAASC,GAC7B  
vY,KAAK4T,UAAypD,GAAQ,GACzBxQ,KAAKsN,OAASO,EACd7N,KAAKuN,UAAyif,EACjBxS,KAAK4a,  
UAAyA,EACjB5a,KAAKsa,WAAy,EACjBta,KAAK2S,UAAU3S,KAAK6f,SAAU7f,OAGICKxB,GAAUrhB,UA  
AYjD,OAAOkD,OAAO,IAAIjD,EAAQ,CAC5CjM,KAAM,YAENgS,gBAAO1E,GACCIO,KAAK6f,WACL7f,KA  
AK6f,SAAW3R,EAAQC,MAAMnO,KAAK6f,WAEnC7f,KAAK4T,UAAU9U,SACfKB,KAAK4T,UAAy1F,EA  
Q2K,WAAW7Y,KAAK4T,aAIjD/B,cAAKrE,GACD,IAAI2jB,EACAC,EACAC,EAEAZ,EACAa,EAGA5wB,EAC  
AyK,EACAomB,EACAC,EACAC,EAEAC,EAEAC,EAKA5J,EACAZH,EACAsR,EAPBEphB,EAAO,GAGP8O,E  
AAQ,GACVtQ,GAAQ,EAMN6iB,EAAa,GAEBc,EAakB,GAYxB,SAASC,EAAaX,EAAOC,GACzB,IAAIE,EA  
GnB,EAAG4B,EAEV,IAAKT,EAAL,EAAGA,EAAL,EAAGA,IAAK,CAGpB,IAFAO,EAAGBP,IAAK,EACrBvS,E  
AAY/Q,MAAMsjB,GACbnB,EAAL,EAAGA,EAALiB,EAALUvyB,QAAUgzB,EAAGBP,GAALnB,KACpD4B,EA  
YX,EAAUjB,IACR1O,iBACV0Q,EAAGBP,GAAKO,EAAGBP,IAAMS,EAAUtQ,eAAe,KAAMIU,IAG9E4jB,EA  
AM1P,iBACNoQ,EAAGBP,GAAKO,EAAGBP,IAAMH,EAAM1P,eAAeIR,EAAMhD,IAG9E,OAAIskB,EAAGB,I  
AAMA,EAAGB,GACICA,EAAGB,IAAMA,EAAGB,GAC/BA,EAAGB,GA1BnB,EACC,EAfD,GADW,EAqC3B,I  
A7BA9xB,KAAK6f,SAAW7f,KAAK6f,SAAShO,KAAKrE,GA6B9B9M,EAAL,EAAGA,EAALIV,KAAK4T,UAA  
U9U,OAAQ4B,IAGnC,GADA4wB,GADAb,EAAMzwb,KAAK4T,UAAUIT,IACNuN,MAAM4D,KAAKrE,GACt  
BijB,EAALwB,QAAU9kB,MAAMC,QAAQkkB,EAASrjB,OAERc,IADAqjB,EAAWA,EAASrjB,MACf9C,EAAL,  
EAAGA,EAALImmB,EAASxyB,OAAQqM,IAC7BqF,EAAKhQ,KAAK,CAACyN,MAAOqjB,EAASnmB,UAG/Bq  
F,EAAKhQ,KAAK,CAACma,KAAM8V,EAAL9V,KAAM1M,MAAOqjB,IAM1C,IAFAM,EAAoB,SAAS1R,GAA  
O,OAAOA,EAAKuB,UAAU,KAAMjU,IAE3D9M,EAAL,EAAGA,EAAL8M,EAAQ6P,OAAOve,OAAQ4B,IACnC  
,IAAKywB,EAAS3jB,EAAQ6P,OAAO3c,GAAGmiB,KAAK7iB,KAAK6f,SAAU,KAAM+R,IAAoB9yB,OAAS,E  
AAG,CAQtF,IAPA2yB,GAAa,EAORtmB,EAAL,EAAGA,EAALgmB,EAALoryB,OAAQqM,IAAK,CAIhC,IAHAi

mB,EAAQD,EAAOhmB,GAAG+U,KACIBmR,EAAyF,EAAOhmB,GAAG+R,KACtBsU,GAAC,EACTD,EAAI,E  
AAGA,EAAI/jB,EAAQ6P,OAAOve,OAQyyB,IACnC,KAAOH,aAAiBc,KAAqBd,KAAW5jB,EAAQ6P,OAAO  
kU,GAAGjR,iBAAmB9S,EAAQ6P,OAAOkU,IAAK,CAC7GC,GAAC,EACd,MAGJA,GAIAJ,EAAM3P,UAAUjR  
,EAAMhD,MA3EX,KA4EXkkB,EAAY,CAACN,QAAO3J,MAAOsK,EAAaX,EAAOC,KAejC5J,OACVok,EAA  
WrxB,KAAKkxB,GAGpB1iB,GAAQ,GAOhB,IAHAgQ,EAAYG,QAeZ4I,EAAQ,CAAC,EAAG,EAAG,GACV5c  
,EAAI,EAAGA,EAAI0mB,EAAW/yB,OAQqM,IAC/B4c,EAAM8J,EAAW1mB,GAAGsc,SAGxB,GAAIM,EA5  
FI,GA4Fa,EACjB4J,EA3FK,OA8FL,GADAA,EA9FI,EA+FC5J,EA/FD,GA+FkBA,EA9FjB,GA8FoC,EACrC,KA  
AM,CAAEnB,KAAM,UACVqW,QAAS,yDAA4DjX,KAAKmyB,OAAO3hB,OACjF3C,MAAO7N,KAAK+M,W  
AAyxL,SAAUvB,KAAK8M,WAAWvL,UAI9D,IAAK4J,EAAI,EAAGA,EAAI0mB,EAAW/yB,OAQqM,IAE/B  
,GAzGI,KAwGJumB,EAAYG,EAAW1mB,GAAGsc,QACMiK,IAAcC,EAC1C,KACIP,EAAQS,EAAW1mB,GA  
AGimB,iBACCc,KACnB5R,EAakB8Q,EAAM9Q,iBAAmB8Q,GAC3CA,EAAQ,IAAIc,GAAGb,GAAI,GAAd,E  
AAM9R,MAAO,MAAM,EA AO,KAAMgB,EAAGb7N,mBAC9E6N,gBAakBA,GAe5B,IAAM8R,EAWhB,EA  
AMP,SAASrjB,EAASgD,EAAMxQ,KAAK4a,WAAW0E,MAC/Dtf,KAAKqyB,4BAA4BD,GACjCjB,MAAM0C,  
UAAUrP,KAAK6gB,MAAM/B,EAAO8S,GACpC,MAAO3yB,GACL,KAAM,CAAExX,QAASxX,EAAEwX,QA  
ASpJ,MAAO7N,KAAK+M,WAAyxL,SAAUvB,KAAK8M,WAAWvL,SAAU2V,MAAOzX,EAAEyX,OAK7G,G  
AIII,EACA,OAAOsQ,EAInB,MAImS,EACM,CAAe7wB,KAAS,UACbqW,QAAS,yCAA0CjX,KAAKmyB,O  
AAO3hB,OAC/D3C,MAAS7N,KAAK+M,WAAyxL,SAAUvB,KAAK8M,WAAWvL,UAEID,CAAEX,KAAS,O  
ACbqW,QAAYjX,KAAK6f,SAAS1P,QAQgC,uBACICtE,MAAS7N,KAAK+M,WAAyxL,SAAUvB,KAAK8M,  
WAAWvL,WAIhE8wB,qCAA4BC,GACxB,IAAI5xB,EACJ,GAIV,KAAKutB,mBACL,IAAK7sB,EAAI,EAAG  
A,EAAI4xB,EAAYzB,OAQ4B,IACzB4xB,EAAY5xB,GACd8sB,sBAKjB2E,gBAAO3hB,GACH,OAAXQ,K  
AAK6f,SAAS1P,QAQgC,YAAU3B,EAAOA,EAAKvB,KAAI,SAAUZ,GACHE,IAAIjB,EAAW,GASf,OARIjB,  
EAAEsM,OACF2W,GAaejB,EAAEsM,UAEjBtM,EAAEJ,MAAMkC,MACRmhB,GAAYjB,EAAEJ,MAAMkC,  
QAEpBmhB,GAAY,MAETA,KACRvB,KAAK,MAAQ,kBcVKT,CACXIB,OAAM+B,QAQqX,SAAQO,mBAA  
iBsC,aACtCd,aAAWtB,QAAM1M,UAAASwQ,YAAUI,YACpCxL,UAAAS/M,UAAAS8Y,aAAWIZ,aAAyqG,WACz  
C+S,UAAQpC,cAAyV0,cAAauP,QAAMgC,OAaky,UAC5C1Q,UAAShC,YAAWJ,QAQqU,cAAyE,cACvCC,  
aAAW3c,QAQOya,SAAOsC,qBAAmBC,YAC5CC,UAAQW,gBAAcE,kBACtB0B,MAAO,CACHnH,KAAMiH,  
GACNpB,WAAyOC,mBCjDpB,cAmIA,OAIHK,oBAAA,SAAQhxB,GACJ,IAAIuS,EAAIvS,EAASixB,YAAY,K  
AQ7B,OAPI1e,EAAI,IACjvS,EAAWA,EAASoQ,MAAM,EAAGmC,KAejCA,EAAIvS,EAASixB,YAAY,MACjB  
,IACJ1e,EAAIvS,EAASixB,YAAY,OAeZB1e,EAAI,EACG,GAejvS,EAASoQ,MAAM,EAAGmC,EAAI,IAGjCye  
,+BAAA,SAAMBrV,EAAMuV,GACrB,MAAO,yBAAYBIX,KAAK2B,GAAQA,EAAOA,EAAOuV,GAG/DF,mC  
AAA,SAAUbrV,GACnB,OAAlD,KAAK0yB,mBAAmBxV,EAAM,UAGzCqV,yBAAA,WACI,OA AO,GAGXA,  
oCAA,WACI,OA AO,GAGXA,2BAAA,SAAhxB,GACX,MAAO,yBAA2Bga,KAAKha,IAI3CgxB,iBAAA,SA  
KI,EAAUC,GACX,OA AKD,EAGEA,EAAWC,EAFPA,GAKfL,qBAAA,SAASM,EA AKC,GAGV,IAGIpyB,EAC  
A8O,EACAujB,EACAC,EA NEC,EA AWjzB,KAAKkzB,gBAAGBL,GAehCM,EA AenzB,KAAKkzB,gBAAGBJ,G  
AKtCM,EAAO,GACX,GA AIH,EA ASI,WAAaF,EA AaE,SACnC,MAAO,GAGX,IADA7jB,EAAMzD,KAAKyD,I  
AAI2jB,EAAaG,YAAYx0B,OAQm0B,EAASK,YAAYx0B,QACHE4B,EAAI,EAAGA,EAAI8O,GACR2jB,EAA  
aG,YAAY5yB,KAAOuyB,EAASK,YAAY5yB,GADxCa,KAKrB,IAFAsyB,EAaqBG,EAAaG,YAAY3hB,MA  
MjR,GACpDqyB,EAAiBE,EAASK,YAAY3hB,MAAMjR,GACvCA,EAAI,EAAGA,EAAIsyB,EAAMBI0B,OAAS  
,EAAG4B,IAC3C0yB,GAAQ,MAEZ,IAAK1yB,EAAI,EAAGA,EAAIqyB,EAej0B,OAAS,EAAG4B,IACvC0yB,  
GAAWL,EAAeryB,OAe9B,OA AO0yB,GAIXb,4BAAA,SAAGBM,EA AKC,GAOjB,IAMIPyB,EACAYyB,EAPEI,  
EAAGb,kGAehBN,EA AWJ,EAAI7jB,MAAMukB,GACrBC,EA AW,GACbC,EAAiB,GACfH,EAAC,GAIPB,IA  
KL,EACD,MAAM,IAAIvzB,MAAM,iCAAIcmzB,OAIrD,GAAIC,KAAaG,EAAS,IAAMA,EAAS,IAAK,CAE1C,  
KADAE,EAAeL,EAAQ9jB,MAAMukB,IAEzB,MAAM,IAAI7zB,MAAM,+BAA+BozB,OAEnDG,EAAS,GA AK  
A,EAAS,IAAME,EAAa,IAAM,GAC3CF,EAAS,KACVA,EAAS,GA AKC,EA Aa,GA AKF,EAAS,IAIJD,GA IA,  
EAAS,GAIT,IAHAQ,EAAiBR,EAAS,GAAG91B,QAQq,MAAO,KAAKks,MAAM,KAGID3O,EAAI,EAAGA,EA  
AI+yB,EA Ae30B,OAQ4B,IAET,OAAtB+yB,EA Ae/yB,GACf4yB,EAAYrX,MAEe,MAAtBwX,EA Ae/yB,IACp  
B4yB,EAAY9yB,KAAKizB,EA Ae/yB,IAA5C,OAPA8yB,EAASH,SAAWJ,EAAS,GAC7BO,EAASF,YAAcA,EA  
CvBE,EAASE,SAAWT,EAAS,IAAM,IAAMQ,EA Ae11B,KAAK,KAC7DyB,EAAStW,MAAQ+V,EAAS,IAAM,I

AAMK,EAAYvIB,KAAK,KACvDyIB,EAASjyB,SAAW0xB,EAAS,GAC7BO,EAASG,QAAUH,EAAStW,MAA Q+V,EAAS,IAAM,IACnDO,EAASX,IAAMW,EAASG,SAAWV,EAAS,IAAM,IAC3CO,sBC7HX,aAEIxzB,KAA K4zB,QAAU,WACX,OAAO,MA8KnB,OA1KIC,uBAAA,SAAWzc,EAAU5J,EAAS4L,EAAS0a,EAAehnB,GAEL D,IAAY2gB,EAAUsG,EAAWC,EAAapyB,EAAeL,EAAUoV,EAEvE/U,EAAGb4L,EAAQ5L,cAEpBkL,IAEIVL,E ADoB,iBAAbuL,EACIA,EAGAA,EAASvL,UAG5B,IAAM0yB,GAAY,IAAKj0B,KAAK8qB,KAAKoJ,aAAehB,g BAAgB3xB,GAAUA,SAEIE,GAAIA,IACAwYB,EAAynYB,EAACid,IAAItD,IAEf,CAEX,GADaOV,EAAS3W,K AAKm0B,cAAcJ,EAAWxyB,EAAU0yB,EAAWH,GAExD,OAAOnd,EAEX,IACQod,EAAUK,KACVL,EAAUK,I AAI9gB,KAAKtT,KAAKwN,QAASumB,GAGzC,MAAOt0B,GAEH,OADAA,EAAEwX,QAAUxX,EAAEwX,SA AAW,4BACIB,IAAIH,EAAUrX,EAAG2Z,EAAS7X,GAERc,OAAOwyB,EAGfC,EAAC,CACVK,QAAS,GACTzyB, gBACaKl,YAEJ2gB,EAAW/M,EAAiB1I,SAM5B,IACa,IAAIJ,SAAS,SAAU,UAAW,iBAakB,YAAa,OAAQ,OA AQ,WAAYR,EACtGkd,CAAON,EAAah0B,KAAK4zB,QAAQryB,IANd,SAASkU,GAC5Bse,EAAYte,IAKgdgY, EAAUzB,KAAK8qB,KAAKyJ,KAAMv0B,KAAK8qB,KAAMhe,GAERg,MAAOOrN,GACH,OAAO,IAAIqX,EA AUrX,EAAG2Z,EAAS7X,GAQRc,GALKwyB,IACDA,EAAYC,EAAYK,UAE5BN,EAAY/zB,KAAKw0B,eAAeT ,EAAWxyB,EAAU0yB,cAE5Bnd,EACrB,OAAOid,EAGX,IAAIA,EAoCA,OAAO,IAAIjd,EAAU,CAAEG,QAAS, sBAAwBmC,EAAS7X,GA/BjE,GAJAWyB,EAAU3a,QAAUA,EACpB2a,EAAUxyB,SAAWA,IAGhBwyB,EAAU U,YAAcz0B,KAAK00B,eAAe,QAASX,EAAUU,YAAc,KAC9E9d,EAAS3W,KAAKm0B,cAAcJ,EAAWxyB,EA AU0yB,EAAWH,IAGxD,OAAOnd,EAUF,GALA/U,EAAC+yB,UAAUZ,EAAWjnB,EAASvL,SAAUksB,GACtDs G,EAAU9yB,UAAywsB,EAAS3O,oBAG/BnI,EAAS3W,KAAKm0B,cAAcJ,EAAWxyB,EAAU0yB,EAAWH,GA ExD,OAAOnd,EAIX,IACQod,EAAUK,KACVL,EAAUK,IAAI9gB,KAAKtT,KAAKwN,QAASumB,GAGzC,MA AOt0B,GAEH,OADAA,EAAEwX,QAAUxX,EAAEwX,SAAW,4BACIB,IAAIH,EAAUrX,EAAG2Z,EAAS7X,G AQzC,OAAOwyB,GAIXF,0BAAA,SAACE,EAAQrzB,EAAUoZ,EAAMtd,GACIC,GAAIA,IAAYu3B,EAAOC,W ACnB,OAAO,IAAI/d,EAAU,CACjBG,QAAS,6CAA6C0D,qCAG9D,IACIia,EAAOC,YAAcD,EAAOC,WAAWx3 B,GAE3C,MAAOoC,GACH,OAAO,IAAIqX,EAAUrX,KAI7Bo0B,2BAAA,SAAEe,EAAQrzB,EAAUoZ,GAC7B, OAAIia,GAGsB,mBAAXA,IACPA,EAAS,IAAIA,GAGbA,EAAOH,YACHz0B,KAAK00B,eAAeE,EAAOH,WA AYz0B,KAAK8qB,KAAKgK,SAAW,EACrD,IAAIhe,EAAU,CACjBG,QAAS,UAAU0D,uBAAyB3a,KAAK+0B, gBAAgBH,EAAOH,cAI7EG,GA EJ,MAGxf,2BAAA,SAAEemB,EAAUC,GACG,iBAAbD,IACPA,EAAWA,EAAS hmB,MAAM,6BACjB2K,QAEB,IAAK,IAAIjZ,EAAI,EAAGA,EAAs0B,EAAS12B,OAAQ4B,IACjC,GAAs0B,E AASt0B,KAAOu0B,EAASv0B,GACzB,OAAOyo,SAAS6IB,EAASt0B,IAAMyo,SAAS8IB,EAASv0B,KAAO,E AAI,EAGpE,OAAO,GAGxmzB,4BAAA,SAAGBiB,GAEZ,IADA,IAAIL,EAAGb,GACXx0B,EAAI,EAAGA,EA AIo0B,EAAQh2B,OAAQ4B,IACChw0B,IAAKBA,EAAGb,IAAM,IAAMJ,EAAQp0B,GAELD,OAAOw0B,GAGXr B,uBAAA,SAAWsB,GACP,IAAK,IAAIz0B,EAAI,EAAGA,EAAYoB,EAAQr2B,OAAQ4B,IAAK,CACrC,IAAM k0B,EAASO,EAAQz0B,GACnBk0B,EAAOQ,YACPR,EAAOQ,oBC/KjBC,GAAa,CAAEC,aAAa,GAC9BC,IAAc ,EAEIB,SAASC,GAAMtoB,GACX,OAAOA,EA0BX,kBACI,WAAyuoB,GACRz1B,KAAK01B,gBAakBD,EAC vBz1B,KAAK21B,cAAgB,GACrB31B,KAAK41B,eAAiB,GAejBL,MA7Bb,SAASM,EAAEvpB,EAAQwpB,GA E5B,IAAIrkB,EAAskB,EACT,IAAKtkB,KAAOnF,EAGR,cADAYpB,EAAQzpB,EAAOmF,KAEX,IAAK,WAGG skB,EAAMlmB,WAAakmB,EAAMlmB,UAAUjP,OACnCM1B,EAAMlmB,UAAUmmB,UAAyF,KAehC,MACJ, IAAK,SACDA,EAASD,EAAeE,EAAOD,GAK3C,OAAOA,EAUCD,CAAetB,GAAM,GACrBgB,IAAc,GA0H1B, OAtHIU,kBAAA,SAAM/oB,GACF,IAAKA,EACD,OAAOA,EAGX,IAAMgpB,EAAGbhpB,EAAs8oB,UAC3B,I AAKE,EAKD,OAHlhpB,EAKe,OAASf,EAKe,MAAM+nB,WACzBh2B,KAAKmO,MAAMjB,EAKe,OAEBf ,EAGX,IAIipB,EAJEC,EAAOp2B,KAAK01B,gBACd/d,EAAO3X,KAAK21B,cAAcO,GAC1BG,EAAUr2B,KA AK41B,eAAeM,GAC5BI,EAAyJb,GAalB,GAVAiB,EAAUhB,aAAc,EAEnB3d,IAEDA,EAAOye,EADPD,EAAS, QAAQjpB,EAAKtM,OACC40B,GACvBa,EAAUD,EAAQD,UAAgBX,GACICx1B,KAAK21B,cAAcO,GAAiBve, EACpC3X,KAAK41B,eAAeM,GAAiBG,GAGrC1e,IAAS6d,GAAO,CACHB,IAAMe,EAAU5e,EAAKrE,KAAK8i B,EAAMlpB,EAAMopB,GACICppB,GAAQkpB,EAAKI,cACbtpB,EAAOqpB,GAIf,GAAID,EAAUhB,aAAepoB, EACzB,GAAIA,EAAKpO,OACL,IAAK,IAAI4B,EAAI,EAAG+1B,EAAMvpB,EAAKpO,OAAQ4B,EAAI+1B,E AAK/1B,IACpCwM,EAAXm,M,GAAGks,QACR1F,EAAXm,M,GAAGks,OAAO5S,WAGhBkN,EAAs0F,QACZ1 F,EAAs0F,OAAO5S,MAQpB,OAJIq2B,GAAWb,IACXa,EAAQ/iB,KAAK8iB,EAAMlpB,GAGhBA,GAGX+oB, uBAAA,SAAWjpB,EAAO0pB,GACd,IAAK1pB,EACD,OAAOA,EAGX,IACItM,EADE+1B,EAAMzpB,EAAMI

O,OAIIB,GAAI43B,IAAIb12B,KAAK01B,gBAAgBc,YAAa,CACnD,IAAK91B,EAAI,EAAGA,EAAI+1B,EAAK /1B,IACjBV,KAAKmO,MAAMnB,EAAMtM,IAErB,OAAOsM,EAIx,IAAM2pB,EAAM,GACZ,IAAKj2B,EAAI, EAAGA,EAAI+1B,EAAK/1B,IAAK,CACtB,IAAMk2B,EAAQ52B,KAAKmO,MAAMnB,EAAMtM,SACjB8L,I AAVoqB,IACCA,EAAMj2B,OAEAi2B,EAAM93B,QACbkB,KAAK62B,QAAQD,EAAOD,GAFpBA,EAAIn2B, KAAKo2B,IAKjB,OAAOD,GAGXV,oBAAA,SAAQzgB,EAAKmhB,GAKT,IAAIF,EAAK/1B,EAAGipB,EAAM mN,EAWhjB,EAAGijB,EAEhC,IANKJ,IACDA,EAAM,IAKLj2B,EAAI,EAAG+1B,EAAMjhB,EAAI1W,OAA Q4B,EAAI+1B,EAAK/1B,IAEnC,QAAa8L,KADbmd,EAAOnU,EAAI9U,IAIX,GAAKipB,EAAKhpB,OAKV,IA AKmT,EAAI,EAAGgjb,EAYnN,EAAK7qB,OAAQgV,EAAIgjB,EAAWhjB,SAE7tH,KADnBuqB,EAApN,E AAK7V,MAIbijB,EAAWp2B,OAELo2B,EAAWj4B,QACIBkB,KAAK62B,QAAQE,EAAIJ,GAFzBA,EAAIn2B, KAAKu2B,SAVbj,EAAIn2B,KAAKmpB,GAIbjB,OAAOgN,sBC/JX,WAAKY,GACRh3B,KAAKoZ,QAAU,GA CfpZ,KAAKi3B,gBAaKb,GACvBj3B,KAAKk3B,kBAAoBF,EACzBh3B,KAAKm3B,cAAgB,EAQD7B,OA7CIC, sBAAA,SAAU7P,GACN,IAAM8P,EAakBr3B,KACpBs3B,EAAa,CACT/P,WACA/W,KAAM,KACN+mB,SAAS ,GAGjB,OADAv3B,KAAKoZ,QAAQ5Y,KAAK82B,GACX,WACHA,EAAW9mB,KAAOrD,MAAM0C,UAAU8 B,MAAM2B,KAAKM,UAAW,GACxD0jB,EAAWC,SAAU,EACrBF,EAAGBG,WAIxBJ,8BAAA,SAaKb7P,GA CdvN,KAAKi3B,gBAaGbz2B,KAAK+mB,IAG9B6P,mBAAA,WACIp3B,KAAKm3B,gBACL,IACI,OAAa,CA CT,KAAOn3B,KAAKoZ,QAAQta,OAAS,GAAG,CAC5B,IAAMw4B,EAAat3B,KAAKoZ,QAAQ,GACChC,IAAK ke,EAAWC,QACZ,OAElv3B,KAAKoZ,QAAUpZ,KAAKoZ,QAAQzH,MAAM,GACIC2IB,EAAW/P,SAASIG,M AAM,KAAMiW,EAAW9mB,MAE/C,GAAoC,IAAhCxQ,KAAKi3B,gBAaGbn4B,OACrB,MAEJ,IAAM24B,EA AiBz3B,KAAKi3B,gBAaGb,GAC5Cj3B,KAAKi3B,gBAaKbj3B,KAAKi3B,gBAaGbtIB,MAAM,GACID8IB,aA Gjz3B,KAAKm3B,gBAEKb,IAAvBn3B,KAAKm3B,eAAuBn3B,KAAKk3B,mBACjC13B,KAAKk3B,0BC7CXQ, GAAgB,SAASC,EAAUC,GAErC53B,KAAK63B,SAAW,IAAI5B,GAAQj2B,MAC5BA,KAAK83B,UAAHY,EA CjB33B,KAAK+3B,QAAUH,EACf53B,KAAKwN,QAAU,IAAIgP,EAASY,KAC5Bpd,KAAKq4B,YAAc,EACnB h4B,KAAKi4B,qBAaUB,GAC5Bj4B,KAAKk4B,kBAAoB,GACzBl4B,KAAKm4B,WAAa,IAAI,GAAGbP3B,K AAKk3B,kBAaKb71B,KAAKrB,QAGtE03B,GAAc7nB,UAAI,CACtB2mB,aAAa,EACb4B,IAAK,SAAU7X,GA CX,IAElvgB,KAAK63B,SAAS1pB,MAAMoS,GAExB,MAAO9gB,GACHO,KAAKF,MAAQL,EAGjBO,KAAKq 4B,YAAa,EACIBr4B,KAAKm4B,WAAWX,UAEpBN,kBAaMB,WACV13B,KAAKq4B,YAGVr4B,KAAK+3B,Q AAQ/3B,KAAKF,QAETBw4B,YAAa,SAAUC,EAAIJ,C,GAC/B,IAAMkC,EAAID,EAAW17B,QAAQyd,OAER,C,IA AKyd,EAAWzL,KAAO0L,EAAW,CAE9B,IAAMhrB,EAAU,IAAIgP,EAASY,KAAKpd,KAAKwN,QAAS4S,E AAgBpgB,KAAKwN,QAAQ6P,SACvEob,EAAejrB,EAAQ6P,OAAO,GAEPcrd,KAAKq4B,cACDO,EAAWpL,m BACXntB,KAAKm4B,WAAWO,kBAaKb14B,KAAK24B,kBAaKb3B,KAAKrB,KAAMu4B,EAAI/qB,EAASir B,IAEzFz4B,KAAK24B,kBAaKbJ,EAAI/qB,EAASirB,GAGpDnC,EAAUHb,aAAc,GAE5BqD,kBAaMB,SAAS J,EAAI/qB,EAASirB,GAC7C,IAAIG,EACEJ,EAAID,EAAW17B,QAAQyd,OAER,C,IACI8d,EAakBL,EAAWnL, cAAc5f,GAC7C,MAAO/N,GACAA,EAAE8B,WAAI9B,EAAEoO,MAAQ0qB,EAAWxrB,WAAytN,EAAE8B,S AAWg3B,EAAWzrB,WAAWvL,UAEvFg3B,EAAWzL,KAAM,EAEjByL,EAAWz4B,MAAQL,EAGvB,IAAI5 B,GAAqBA,EAAgB9L,MAAO0L,EAqB5Cx4B,KAAKq4B,cACDh4B,KAAKq4B,YACLr4B,KAAKm4B,WAAW X,aAvBoC,CAEPDoB,EAAgBv7B,QAAQw7B,WACxBrrB,EAAQsrB,gBAaIB,GAM7B,IAFA,IAAMC,OAAIDv sB,IAAxBoS,EAAgB9L,IAEtCpsB,EAAI,EAAGA,EAAI+3B,EAAanZ,MAAMxgB,OAAQ4B,IAC3C,GAAI+3B, EAAanZ,MAAM5e,KAAO63B,EAAI,CACICE,EAAanZ,MAAM5e,GAak4B,EACxB,MAIR,IAAMI,EAah5B ,KAAK5B,WAAW33B,KAAKrB,KAAM44B,EAAiBprB,GAAUyrB,EAAsbj5B,KAAKm4B,WAAWe,UAAUF, GAEzHh5B,KAAK83B,UAAUt3B,KAAKo4B,EAAgB5L,UAAW+L,EAAwBH,EAAgB9rB,WACnF8rB,EAAgBv 7B,QAAS47B,KAQrCD,WAAI,SAAUT,EAAI/qB,EAAS/N,EAAG8gB,EAAM4Y,EAAgBC,GAC5D35B,IACK A,EAAE8B,WACH9B,EAAEoO,MAAQ0qB,EAAWxrB,WAAytN,EAAE8B,SAAWg3B,EAAWzrB,WAAWvL,U AExEvB,KAAKF,MAAQL,GAGjB,IAAM45B,EAAgBr5B,KACIBw4B,EAAID,EAAW17B,QAAQyd,OAC/BmS ,EAAWsL,EAAW17B,QAAQ4vB,SAC9BqM,EAAaf,EAAW17B,QAAQk8B,SACHCC,EAakBL,GAakBC,KAAY C,EAAcnB,kBAoBIE,GAIBK1qB,EAAQsrB,iBAELP,EAAW7K,OADX8L,GAGkB,WACd,OAAIJ,KAAAYC,EAA cpB,uBAG9BoB,EAAcpB,qBAaQBmB,IAAY,GACxC,MAKdA,GAAIE,IACbf,EAAW7K,MAAO,GAGIBnN,IA CAgY,EAAWhY,KAAOA,EACIBgY,EAAW5K,iBAAMByL,GAEBZ,IAAcvL,IAAazf,EAAQsrB,iBAAMBU,IA AkB,CACzEH,EAAcnB,kBAaKbKB,IAAY,EAE5C,IAAMK,EAAaz5B,KAAKwN,QACxBxN,KAAKwN,QAAU

A,EACf,IACIxN,KAAK63B,SAAS1pB,MAAMoS,GACtB,MAAO9gB,GACLO,KAAKF,MAAQL,EAEjBO,KAA KwN,QAAUisB,EAIvBJ,EAACrB,cAEVqB,EAACHB,YACdgB,EAACLb,WAAWX,UAGJcKc,iBAakB,SAAUc,E AAUrD,GACN,oBAAXBqD,EAAS1rB,MAAMrN,KACfZ,KAAKwN,QAAQ6P,OAAOwD,QAAQ8Y,GAE5BrD, EAAUhB,aAAc,GAGhCsE,oBAaqB,SAASD,GACE,oBAAXBA,EAAS1rB,MAAMrN,MACfZ,KAAKwN,QAAQ 6P,OAAO1D,SAG5BkgB,YAAa,SAAUc,EAAYxD,GAC/Bt2B,KAAKwN,QAAQ6P,OAAOwD,QAAQiZ,IAEhC C,eAAgB,SAAUD,GACtB95B,KAAKwN,QAAQ6P,OAAO1D,SAExBqgB,qBAAsB,SAAUc,EAaqB3D,GACjDt 2B,KAAKwN,QAAQ6P,OAAOwD,QAAQoZ,IAEhCC,wBAAYB,SAAUD,GAC/Bj6B,KAAKwN,QAAQ6P,OAA O1D,SAExBwgB,aAAc,SAAUc,EAAa9D,GACjCt2B,KAAKwN,QAAQ6P,OAAOwD,QAAQuZ,IAEhCC,gBAAi B,SAAUD,GACvBp6B,KAAKwN,QAAQ6P,OAAO1D,SAExB2gB,WAAy,SAAUc,EAawjE,GAC7Bt2B,KAA KwN,QAAQ6P,OAAOwD,QAAQ0Z,EAAUjb,MAAM,KAehDkb,cAAe,SAAUD,GACrBv6B,KAAKwN,QAAQ6 P,OAAO1D,UCzL5B,kBACI,WAAy8gB,GACrZ6B,KAAKy6B,QAAUA,EAwCvB,OArCIC,gBAAA,SAAIa,G ACavgB,KAAKmO,MAAMoS,IAGfma,uBAAA,SAAW1tB,GACP,IAAKA,EACD,OAAOA,EAGX,IACItM,EAD E+1B,EAAMzpB,EAAMIO,OAEIB,IAAK4B,EAAl,EAAGA,EAAl+1B,EAak/1B,IACjBV,KAAKmO,MAAMnB ,EAAMtM,IAErB,OAAOsM,GAGX0tB,kBAAA,SAAMxtB,GACF,OAAKA,EAGDA,EAakuG,cAAgBtG,MACd nN,KAAK6Y,WAAW3L,KAGtBA,EAakqB,kBAaObrgB,EAakqB,qBAG/BvtB,KAAKy6B,QACLvtB,EAak ytB,mBAELztB,EAak0tB,qBAGT1tB,EAak0F,OAAO5S,OARDkN,GAPAA,sBChBf,aACIIN,KAAK63B,SA A W,IAAI5B,GAAQj2B,MAC5BA,KAAKwc,SAAW,GACHBxc,KAAK66B,gBAakB,CAAC,IAwFhC,OArFIC,gBA AA,SAAIva,GAGA,OAFaa,EAAOvgB,KAAK63B,SAAS1pB,MAAMoS,IACtBwa,WAAa/6B,KAAK66B,gBAA gB,GACHCta,GAGXua,6BAAA,SAAiBnB,EAUrD,GACvBA,EAUhbB,aAAc,GAG5BwF,iCAAA,SAaqBb,EA AqB3D,GACtCA,EAUhbB,aAAc,GAG5BwF,yBAAA,SAaAV,EAAa9D,GACtB,IAAI8D,EAAY7Z,KAahB,CAI A,IAAI7f,EACAoT,EACA+F,EAEArB,EADEwiB,EAAYB,GAIZB1b,EAQ8a,EAAY9a,MAAOiH,EAUjH,EA AQA,EAAMxgB,OAAS,EACIE,IAAK4B,EAAl,EAAGA,EAAl6IB,EAAS7IB,IACjB05B,EAAY9a,MAAM5e,aAAc 6zB,GAak1F,SACrCmM,EAauBx6B,KAAK8e,EAAM5e,IACIC05B,EAAYa,mBAaOb,GAMxC,IAAMle,EA A Qqd,EAAYrd,MAC1B,IAAKrc,EAAl,EAAGA,EAAlqc,EAAMje,OAAQ4B,IAAK,CAC/B,IAAMw6B,EAaene,E AAMrc,GAAsDy6B,EAavCD,EAaAa,EAaap8B,OAAS,GAA6B0Z,WAW1G,KATAA,EAa2iB,EAagB/a,EA A gB+a,GAaej6B,OAAO85B,GAC7DA,KAGFxiB,EAaAa,EAawvJ,KAAl,SAASmsB,GACjC,OAAOA,EAamBv oB,YAI7BiB,EAAl,EAAGA,EAAl0E,EAaw1Z,OAAQgV,IAC/B9T,KAAKq7B,cAAe,GACpBxB,EAASrB,EA AW1E,IACbsb,kBAakB8L,GACzBrhB,EAaOwG,QAAU+Z,EACP,IAANtmB,IAAW+F,EAaOyhB,+BAAGC,G ACtDt7B,KAAK66B,gBAAGB76B,KAAK66B,gBAAGB/7B,OAAS,GAAG0B,KAAKqZ,GAInE7Z,KAAKwc,SA AShc,KAAK45B,EAAY/a,aAGnCyb,4BAAA,SAAGBV,GACPA,EAAY7Z,OACbvB,KAAKwc,SAAS1d,OAASK B,KAAKwc,SAAS1d,OAAS,IAItDg8B,uBAAA,SAAWP,EAawjE,GACIBiE,EAUQ,WAAa,GACvB/6B,KAAK 66B,gBAAGBr6B,KAAK+5B,EAUQ,aAGxCD,0BAAA,SAACp,GACv6B,KAAK66B,gBAAGB/7B,OAASKB, KAAK66B,gBAAGB/7B,OAAS,GAGhEg8B,wBAAA,SAAYhB,EAAYxD,GACpBwD,EAawIB,WAAa,GACxB/ 6B,KAAK66B,gBAAGBr6B,KAAKs5B,EAawIB,aAGzCD,2BAAA,SAAEhB,GACX95B,KAAK66B,gBAAGB/7 B,OAASKB,KAAK66B,gBAAGB/7B,OAAS,sBAKhE,aACIkB,KAAK63B,SAAW,IAAI5B,GAAQj2B,MAwYpC, OArYU7B,gBAAA,SAAlhb,GACA,IAAMib,EAae,IAAIV,GAGzB,GAFa96B,KAAKy7B,cAAgB,GACrBD,EA AapD,IAAI7X,IACZib,EAaAH,aAGB,OAAO9a,EACzCA,EAakwa,WAAaxa,EAakwa,WAAW75B,OAAOIB, KAAK07B,iBAAiBnb,EAakwa,WAAyxa,EAakwa,aACrF/6B,KAAK66B,gBAakB,CAACta,EAakwa,YAC7B ,IAAMY,EAU37B,KAAK63B,SAAS1pB,MAAMoS,GAEPc,OADAvG,KAAK47B,0BAA0Brb,EAakwa,YAC 7BY,GAGXJ,sCAAA,SAAOB/iB,GACtB,IAAMqjB,EAU77B,KAAKy7B,cACrBjjB,EAaw4I,QAAO,SAASvH, GACvB,OAAQA,EAaOiiB,iBAA+C,GAA5BjiB,EAaOoV,WAAWnwB,UACrDuO,SAAQ,SAASwM,GACHB,IA AIgG,EAaw,YACf,IACIA,EAawhG,EAaOGG,SAAS1P,MAAM,IAErC,MAAOvS,IAEFi+B,EAawhiB,EAaOh M,UAAsgS,KAC5BgC,EAawhiB,EAaOhM,UAAsgS,IAAc,EACzCle,EAaOzB,KAAK,WAAW2f,2BAKnC0b,6 BAAA,SAAiBQ,EAaAc,EAAMBC,GAU7C,IAAIC,EAEAC,EACAC,EAEArjB,EAEAmiB,EACArhB,EACawiB, EACAC,EAANEC,EAae,GAefC,EAagBx8B,KActB,IARAI8B,EAaiBA,GAakB,EAQ9BC,EAac,EAAGA,EAac H,EAAYj9B,OAAQo9B,IACpD,IAAKC,EAaOB,EAAGA,EAaOBH,EAakB19B,OAAQq9B,IAEtEtiB,EAASKiB, EAAYG,GACrBG,EAaeL,EAakBG,GAG5BtiB,EAaOoV,WAAWve,QAAS2rB,EAaAtN,YAAe,IAG5DmM,EA Ae,CAACmB,EAa9M,cAAc,KAC3C6M,EAaUI,EAacC,UAAU5iB,EAaqhB,IAE9Bp8B,SACR+a,EAaOiiB,i



BAAkB,EAGzBjB,EAAO0V,cAAcliB,SAAQ,SAASqvB,GACIC,IAAMv8B,EAAOk8B,EAAa5pB,iBAG1BsG,E  
AAcyjB,EAACg,eAAeP,EAASIB,EAACwB,EAAC7iB,EAAO6J,cAGvF4Y,EAAY,IAAI/H,GAAW,OAAE8H,EA  
axc,SAAUwc,EAAavN,OAAQ,EAAGuN,EAAavvB,WAAy3M,IAC3FovB,cAAgBxW,EAG1BA,EAAYA,EAAYj  
a,OAAS,GAAG0Z,WAAa,CAAC8jB,GAGIDC,EAAa/7B,KAAK87B,GACIBA,EAAUjc,QAAUgc,EAAahc,QAGj  
Cic,EAAUrN,WAAaqN,EAAUrN,WAAW/tB,OAAOm7B,EAAapN,WAAypV,EAAOoV,YAK/EoN,EAaf,gCA  
CbgB,EAAUhB,+BAAGC,EAC1Ce,EAAahc,QAAQtD,MAAMvc,KAAKuY,SAOpD,GAAIwjB,EAAaz9B,OAAQ,  
CAIrB,GADAKB,KAAK48B,mBACDX,EAAiB,IAAK,CACtB,IAAIY,EAAC,wBACdC,EAAC,wBACIB,IACID,E  
AAcN,EAAa,GAAGhN,cAAc,GAAGpf,QAC/C2sB,EAACp,EAAa,GAAG1c,SAAS1P,QAE3C,MAAO1Q,IACP,K  
AAM,CAAewX,QAAS,gFAAgF4IB,aAAsBC,OAK3H,OAAOP,EAAar7B,OAAOs7B,EAACd,iBAAiBa,EAACp,E  
AAmBC,EAAiB,IAE5G,OAAOM,GAIfhB,6BAAA,SAAiBwB,EAAUzG,GACvBA,EAAUhB,aAAc,GAG5BiG,iC  
AAA,SAAqBtB,EAAqB3D,GACTCA,EAAUhB,aAAc,GAG5BiG,0BAAA,SAacyB,EAAC1G,GACxBA,EAAUhB,  
aAAc,GAG5BiG,yBAAA,SAAanB,EAAa9D,GACTB,IAAI8D,EAAY7Z,KAAhB,CAGA,IAAI6b,EACAa,EACaf,  
EAIaHb,EAHEH,EAAa/6B,KAAK66B,gBAAGB76B,KAAK66B,gBAAGB/7B,OAAS,GACHeO+B,EAAiB,GACj  
BV,EAAGBx8B,KAKtB,IAAKk8B,EAAC,EAAGA,EAACnB,EAAWj8B,OAAQo9B,IACnD,IAAKe,EAAY,EAAG  
A,EAAY7C,EAAYrd,MAAMje,OAAQm+B,IAItD,GAHA/B,EAAd,EAAYrd,MAAMkgB,IAG7B7C,EAAYa,kB  
AAhB,CACA,IAAMziB,EAAa0iB,EAAaA,EAAap8B,OAAS,GAAG0Z,WACrDA,GAACa,EAAW1Z,SAE7Bs9B,  
EAAUp8B,KAAKy8B,UAAU1B,EAAWmB,GAACHB,IAEtCp8B,SACRi8B,EAAWmB,GAAaJ,iBAAkB,EAE1Cf  
,EAAWmB,GAAa3M,cAAcliB,SAAQ,SAASqvB,GACnD,IAAIS,EACJA,EAAoBX,EAACg,eAAeP,EAASIB,EA  
ACwB,EAAC3B,EAAWmB,GAAaxY,aAC9GwZ,EAAe18B,KAAK28B,OAKpC/C,EAAYrd,MAAQqd,EAAYrd,M  
AAM7b,OAAOg8B,KAGjd3B,sBAAA,SAAU1hB,EAAQujB,GAKd,IAAIC,EAEAC,EACAC,EACAC,EACAC,E  
ACA/8B,EAIAG9B,EAfEC,EAAiB9jB,EAAOgG,SAAStH,SACjCqIB,EAAMb,GAEnBxB,EAAU,GAGhB,IAAKi  
B,EAAWb,EAAGA,EAAWBD,EAAqBt+B,OAAQu+B,IAGjF,IAFAC,EAAoBF,EAAqBC,GAEPCE,EAAWb,EA  
GA,EAAWBD,EAakB/kB,SAASzZ,OAAQy+B,IAUvF,IARAC,EAakBF,EAakB/kB,SAASglB,IAGzC1jB,EA  
AOqV,aAA0C,IAA1BmO,GAAYD,IAA1BE,IACtDK,EAAiBp9B,KAAK,CAACy8B,UAAWI,EAABxvB,MAAO0v  
B,EAABM,QAAS,EAC5FC,kBAAMBN,EAAGBlrB,aAGtC5R,EAAl,EAAGA,EAAlk9B,EAAiB9+B,OAAQ4B,I  
ACrCg9B,EAAiBE,EAAiB19B,GAMT,MADzB+8B,EAAMBD,EAAGBlrB,WAAWrE,QACW,IAA1BsV,IAC3BE  
,EAAMb,MA5Bbz9B,KAGCS+9B,qBAAqBJ,EAAd,EAAG,SAAS5vB,MAAOuvB,EAAGBvvB,QACjGyvB,EA  
AeG,QAAU,GAAKF,EAAd,EAAG,SAASvrB,WAAWrE,QAAUwvB,EAC3FC,EAAiB,KAEjBA,EAAG,UAIf  
H,IACAA,EAAM,SAAWN,EAAG,UAAYF,EAAG7+B,OACHe4+B,EAAM,WACbnkB,EAASv,aACJoO,EA  
AwB,EAAlD,EAakB/kB,SAASzZ,QAAUu+B,EAAWb,EAAlD,EAaqBt+B,UACvH4+B,EAAiB,OAIrBA,EACIA  
,EAAM,WACfN,EAAG5+B,OAAS6+B,EAAG7+B,OACvC4+B,EAAGo,aAAeZ,EAC9BK,EAAGQ,oBAASBX,EA  
AwB,EAC7DK,EAAiB9+B,OAAS,EAC1Bs9B,EAAG57B,KAAKk9B,KAGjBE,EAAiBj9B,OAAOD,EAAG,GAC  
3BA,KAKhB,OAAO07B,GAGXb,iCAAA,SAAqB4C,EAAGc,GACHC,GAA6B,iBAAlBD,GAAuD,iBAAlBC,EA  
C5C,OAAOD,IAAKBC,EAE7B,GAAID,aAAYB5J,GAAKpJ,UAC9B,OAAlGT,EAAGvB,KAAOgwB,EAACHwB,I  
AAM+vB,EAAG1sB,MAAQ2sB,EAAG3sB,MAG5E0sB,EAAGlwB,OAAUmwB,EAAGnwB,OAM3CkwB,EAAGB  
A,EAAGlwB,MAAMA,OAASkwB,EAAGlwB,UAC3DmwB,EAAGBA,EAAGnwB,MAAMA,OAASmwB,EAAGnw  
B,QANnDkwB,EAAGlwB,QAASmwB,EAAGnwB,OAWjD,GAFakwB,EAAGBA,EAAGlwB,MAC9BmwB,EAAG  
BA,EAAGnwB,MAC1BkwB,aAAYB5J,GAAKjc,SAAU,CACxC,KAAAM8IB,aAAYB7J,GAAKjc,WAAa6IB,EAAG5  
IB,SAASzZ,SAASwS/B,EAAG7IB,SAASzZ,OACtG,OAAO,EAEX,IAAK,IAAI4B,EAAl,EAAGA,EAAGy9B,EA  
c5IB,SAASzZ,OAAQ4B,IAAK,CACrD,GAAlY9B,EAAG5IB,SAAS7X,GAAG4R,WAAWrE,QAAUmwB,EAAG7I  
B,SAAS7X,GAAG4R,WAAWrE,QAC1E,IAANvN,IAAYy9B,EAAG5IB,SAAS7X,GAAG4R,WAAWrE,OAAS,Q  
AAUmwB,EAAG7IB,SAAS7X,GAAG4R,WAAWrE,OAAS,MACIH,OAAO,EAGf,IAAKjO,KAAK+9B,qBAAqBI  
,EAAG5IB,SAAS7X,GAAGuN,MAAOmwB,EAAG7IB,SAAS7X,GAAGuN,OACtF,OAAO,EAGf,OAAO,EAEX,O  
AAO,GAGXstB,2BAAA,SAAGa,EAASIB,EAAGmD,EAAGq3a,GAIVD,IAAKF4a,EAAYze,EAAU0e,EAAGvB,E  
AAOwvB,EAAGzHC,EAAG2B,EAAGC,EAAGkC,EAAGxhB,EAAG,GAAG9E,IAAKohB,EAAG,EAAGA,EAAGlC,EA  
AQ9B,OAAQw/B,IAE9Cze,EAAGwqB,GADXLsB,EAAGQotB,EAAGkC,IACCrB,WAC9BsB,EAAG,IAAlhK,GAAG  
liB,QACpBrD,EAAM8uB,kBACNO,EAAGb9IB,SAAS,GAAGtK,MACHCowB,EAAGb9IB,SAAS,GAAGhG,WA  
ChC8rB,EAAGb9IB,SAAS,GAAGxL,WACHCsxB,EAAGb9IB,SAAS,GAAGzL,YAGhCkC,EAAMiuB,UAAyWb,

GAA4BC,EAAkC,IACfXhB,EAAKA,EAAKpe,OAAS,GAAGyZ,SAAW2E,EAAKA,EAAKpe,OAAS,GAC/CyZ, SAASrX,OOAOg6B,EAAuD,GAA0BlmB,SAAS5G,MAAM+sB,IAC3EA,EAAkC,EACICD,KAGJD,EAAc3e,E AASth,SACIB5G,MAAM+sB,EAAiC1vB,EAAMnB,OAC7C3M,OOAO,CAACq9B,IACRr9B,OOAOm9B,EAAo B9IB,SAAS5G,MAAM,IAE3C8sB,IAA6BzvB,EAAMiuB,WAAaqB,EAAa,EAC7DphB,EAAKA,EAAKpe,OAAS, GAAGyZ,SACIB2E,EAAKA,EAAKpe,OAAS,GAAGyZ,SAASrX,OOAOs9B,IAE1CthB,EAAOA,EAAKhc,OOA Og6B,EAAavpB,MAAM8sB,EAA0BzvB,EAAMiuB,aAEjEz8B,KAAK,IAAI+zB,GAAKjc,SACfkmB,IAGRC,EA A2BzvB,EAAMivB,cACjCS,EAAkC1vB,EAAMkvB,sBACDhD,EAAuD,GAA0BlmB,SAASzZ,SACnF4/B,EAA kC,EACICD,KAqBR,OAjBIA,EAA2BvD,EAAap8B,QAAU4/B,EAAkC,IACpFxbB,EAAKA,EAAKpe,OAAS,GA AGyZ,SAAW2E,EAAKA,EAAKpe,OAAS,GAC/CyZ,SAASrX,OOAOg6B,EAAuD,GAA0BlmB,SAAS5G,MAA M+sB,IAC3ED,KAIJvhB,GADAA,EAAOA,EAAKhc,OOAOg6B,EAAavpB,MAAM8sB,EAA0BvD,EAAap8B,U ACjEmQ,KAAI,SAAU0vB,GAETB,IAAMC,EAAUD,EAAa7IB,cAAc6lB,EAAapmB,UAMxD,OALImL,EACAkB, EAAQjE,mBAERIE,EAAQhE,qBAELgE,MAKfrD,uBAAA,SAAWHb,EAAWjE,GACIB,IAAIuI,EAAgBtE,EAAU Q,WAAW75B,OOAOIB,KAAK66B,gBAAGb76B,KAAK66B,gBAAGb/7B,OAAS,IACnG+/B,EAAgBA,EAAc39 B,OOAOIB,KAAK07B,iBAAiBmD,EAAetE,EAAUQ,aACpF/6B,KAAK66B,gBAAGb6B,KAAKq+B,IAG9BtD,0 BAAA,SAACHB,GACV,IAAMuE,EAAY9+B,KAAK66B,gBAAGb/7B,OAAS,EACHDkB,KAAK66B,gBAAGb/7B ,OAASggC,GAGICvD,wBAAA,SAAYzB,EAAYxD,GACpB,IAAIuI,EAAgB/E,EAAWiB,WAAW75B,OOAOIB, KAAK66B,gBAAGb76B,KAAK66B,gBAAGb/7B,OAAS,IACpG+/B,EAAgBA,EAAc39B,OOAOIB,KAAK07B,i BAAiBmD,EAAe/E,EAAWiB,aACrF/6B,KAAK66B,gBAAGb6B,KAAKq+B,IAG9BtD,2BAAA,SAAEzB,GACX ,IAAMgF,EAAY9+B,KAAK66B,gBAAGb/7B,OAAS,EACHDkB,KAAK66B,gBAAGb/7B,OAASggC,sBC1eIC,a ACI9+B,KAAKwc,SAAW,CAAC,IACjBxc,KAAK63B,SAAW,IAAI5B,GAAQj2B,MAiDpC,OA9CI++B,gBAAA, SAAIxe,GACA,OOAOvgB,KAAK63B,SAAS1pB,MAAMoS,IAG/Bwe,6BAAA,SAAiBpF,EAAUrD,GACvBA,E AAUhB,aAAc,GAG5ByJ,iCAAA,SAAQb9E,EAAQb3D,GACtCA,EAAUhB,aAAc,GAG5ByJ,yBAAA,SAAa3E,E AAa9D,GACTb,IAEjX,EAFE7R,EAAUxN,KAAKwc,SAASxc,KAAKwc,SAAS1d,OAAS,GAC/Cie,EAAQ,GAG d/c,KAAKwc,SAAShc,KAAKuc,GAEdqd,EAAY7Z,QACbIB,EAAY+a,EAAY/a,aAEpBA,EAAYA,EAAU+B,QA AO,SAASvB,GAAY,OOAOA,EAAS/F,iBACIEsgB,EAAY/a,UAYA,EAAUvgB,OAASugB,EAAaA,EAAY,KA ChEA,GAAa+a,EAAYzW,cAAc5G,EAAOvP,EAAS6R,IAE1DA,IAAa+a,EAAY9a,MAAQ,MACtC8a,EAAYrd,M AAQA,IAI5BgiB,4BAAA,SAAGb3E,GACZp6B,KAAKwc,SAAS1d,OAASkB,KAAKwc,SAAS1d,OAAS,GAGID igC,uBAAA,SAAWxE,EAAWjE,GACIB,IAAM9oB,EAAUxN,KAAKwc,SAASxc,KAAKwc,SAAS1d,OAAS,GA CrDy7B,EAAUjb,MAAM,GAAGiB,KAA2B,IAAnB/S,EAAQ1O,QAAgB0O,EAAQ,GAAGif,YAGIEsS,wBAAA, SAAyJf,EAAYxD,GACpB,IAAM9oB,EAAUxN,KAAKwc,SAASxc,KAAKwc,SAAS1d,OAAS,GACjDg7B,EAA Wxa,OAASwa,EAAWxa,MAAMxgB,SACrCg7B,EAAWxa,MAAM,GAAGiB,KAAQuZ,EAAW5T,UAA+B,IAAn B1Y,EAAQ1O,QAAgB,0BC/CnF,WAAy0O,GACrXN,KAAK63B,SAAW,IAAI5B,GAAQj2B,MAC5BA,KAAK g/B,SAAWxxB,EAwExB,OAReIyxB,0CAAA,SAAS8BC,GACIB,IAAIhf,EACJ,IAAKgf,EACD,OOAO,EAEX,IAA K,IAAIvB,EAAl,EAAGA,EAAlkvB,EAAUpGc,OOAQkR,IAEIC,IADAKQ,EAAOgf,EAAUlvB,IACRmS,UAAy 4D,EAAK5D,SAAStc,KAAKg/B,YAAc9e,EAAKqN,mBAGvD,OOAO,EAGf,OOAO,GAGX0R,kCAAA,SAASBE ,GACdA,GAASA,EAAM7f,QACf6f,EAAM7f,MAAQ6f,EAAM7f,MAAM8B,QAAO,SAAGe,GAAS,OOAAA,E AAM1b,iBAIxDub,oBAAA,SAAQE,GACJ,OOAQ,IAASA,EAAM7f,OACO,IAAvB6f,EAAM7f,MAAMxgB,Q AGvBmgC,+BAAA,SAAMb7E,GACf,SAQA,IAAeA,EAAYrd,QAC5Bqd,EAAYrd,MAAMje,OAAS,GAGtCmg C,8BAAA,SAAKb/xB,EAAMmyB,GACpB,IAAKnyB,EAAKqgB,mBAAoB,CAC1B,GAAIvtB,KAAK8N,QAAQ Z,KAAUIN,KAAKs/B,8BAA8BD,GAC1D,OAGJ,OOAOnyB,EAGX,IAAMqyB,EAAoBryB,EAAKoS,MAAM,G AGrC,GAFAtf,KAAKw/B,sBAASBD,IAEvBv/B,KAAK8N,QAAQyxB,GAOjB,OAHAryB,EAAKytB,mBACLztB ,EAAKuyB,wBAEEvyB,GAGX+xB,6BAAA,SAAiB7E,GACb,QAAIA,EAAY5Z,YAIzxB,KAAK8N,QAAQssB, OAIza,EAAY7Z,OAASvgB,KAAK0/B,mBAAMbtF,UAQpDpP,GAae,SAASxd,GAC1BxN,KAAK63B,SAAW,I AAI5B,GAAQj2B,MAC5BA,KAAKg/B,SAAWxxB,EACHBxN,KAAK2/B,MAAQ,IAAIvB,GAAGbzxB,IAGrCwd, GAAanb,UAAy,CACrB2mB,aAAa,EACb4B,IAAK,SAAU7X,GACX,OOAOvgB,KAAK63B,SAAS1pB,MAAMoS ,IAG/BmZ,iBAAKb,SAAUc,EAAUrD,GACIC,IAAIqD,EAASpM,qBAASBoM,EAAS5e,SAG5C,OOAO4e,GAG XK,qBAASb,SAAU4F,EAAWtJ,GAGvCsJ,EAAUviB,OAAS,IAGvBwiB,YAAa,SAAUc,EAAYxJ,KAGnCyJ,aA Ac,SAAUc,EAAa1J,GACjC,IAAI0J,EAAYzS,qBAASByS,EAAY1jB,SAAStc,KAAKg/B,UAGhE,OOAOgB,GA

GX1F,WAAY,SAASC,EAAWjE,GAC5B,IAAM+I,EAAGb9E,EAAUjb,MAAM,GAAGA,MAIzC,OAHAib,EAAU3nB,OOAO5S,KAAK63B,UACtBvB,EAAUhB,aAAc,EAejBt1B,KAAK2/B,MAAMM,kBAakB1F,EAAW8E,IA GnD/G,YAAa,SAAUC,EAAYjC,GAC/B,IAAIiC,EAAWhL,mBAGf,OOAOgL,GAGXsB,YAAa,SAASC,EAAYxD,GAC9B,OOAIwD,EAAXa,OAASwa,EAAXa,MAAMxgB,OAC9BkB,KAAKkgC,oBAAoBpG,EAAYxD,GA ErCt2B,KAAKmgC,uBAAuBrG,EAAYxD,IAIvD8J,eAAgB,SAASC,EA Ae/J,GACpC,IAAK+J,EAAC9S,mBAEf,O ADA8S,EAACztB,OOAO5S,KAAK63B,UACnBwI,GAIfH,oBAAqB,SAASpG,EAAYxD,GakBtC,IAAM+I,EAX N,SAASBvF,GACIB,IAAMwG,EAAYxG,EAAXa,MAC7B,OANJ,SAAwBwa,GACpB,IAAMoF,EAAYpF,EAAXa,MAC7B,OOA4B,IAArB4f,EAUpGc,UAAkBoGc,EAU,GAAgNiB,OOAuC,IAA9BmiB,EAU,GAAgNiB ,MAAMje,QAIxEyhC,CAAezG,GACRwG,EAU,GAAGhhB,MAGjBghB,EAKWE,CAAa1G,GAQnC,OAPAA,EA AWlnB,OOAO5S,KAAK63B,UACvBvB,EAAUhB,aAAc,EAEnBt1B,KAAK2/B,MAAM7xB,QAAQgsB,IACpB 95B,KAAKirB,YAAy6O,EAAXa,MAAM,GAAGA,OAGlCtf,KAAK2/B,MAAMM,kBAakBnG,EAAYuF,IAGp Dc,uBAAwB,SAASrG,EAAYxD,GACzC,IAAIwD,EAAXwM,mBAAf,CAIA,GAAwB,aAApBuM,EAAXnf,KAA qB,CAIhC,GAAI3a,KAAKygC,QAAS,CACd,GAAI3G,EAAX5e,UAAW,CACtB,IAAMw1B,EAU,IAAIInM,GA AKpY,QAAQ,MAAM2d,EAAX3pB,MAAMnQ,KAAKg/B,UAAU7hC,QAAQ,MAAO,aAEtF,OADAUjC,EAAX IB,UAAy4e,EAAX5e,UACxB1b,KAAK63B,SAAS1pB,MAAMuyB,GAE/B,OAeJ1gC,KAAKygC,SAAU,EAgn B,OOAO3G,IAGX6G,gBAAiB,SAASrhB,EAAXoshB,GAC7B,GAAKthB,EAIL,IAAK,IAAI5e,EAAI,EAAGA,EA AI4e,EAAMxgB,OOAQ4B,IAAK,CACnC,IAAMq8B,EAAXzd,EAAM5e,GACvB,GAAIkGc,GAAU7D,aAAoBxI ,GAAK7Z,cAAgBqiB,EAAShiB,SAC5D,KAAM,CAAe9D,QAAS,wEACbpJ,MAAOkvB,EAAShwB,WAAYxL,S AAUw7B,EAASjwB,YAAciwB,EAASjwB,WAAWvL,UAEzF,GAAIw7B,aAAoBxI,GAAKtK,KACzB,KAAM,C AAehT,QAAS,aAAa81B,EAASpiB,oCACn9M,MAAOkvB,EAAShwB,WAAYxL,SAAUw7B,EAASjwB,YAAci wB,EAASjwB,WAAWvL,UAEzF,GAAIw7B,EAASn8B,OAASm8B,EAASziB,UAC3B,KAAM,CAAERD,QAAY8 IB,EAASn8B,sDACzBiN,MAAOkvB,EAAShwB,WAAYxL,SAAUw7B,EAASjwB,YAAciwB,EAASjwB,WAAW vL,YAKjG44B,aAAc,SAAUC,EAAX9D,GAEjC,IAAIpW,EAEEwC,EAAX,GAIjB,GAFa1iB,KAAK2gC,gBAAg BvG,EAAY9a,MAAO8a,EAAY5Z,WAE/C4Z,EAAY7Z,KA6Bb6Z,EAAYxnB,OOAO5S,KAAK63B,UACxBvB,EA AUhB,aAAc,MA9BL,CAEnBt1B,KAAK6gC,qBAAqBzG,GAM1B,IAHA,IAAMkG,EAAYIG,EAAY9a,MAE1B whB,EAACr,EAAYA,EAAXhC,OAAS,EACxC4B,EAAI,EAAGA,EAAIogC,IACHB5gB,EAAXoogB,EAAXU5/B, KACLwf,EAACKZ,OAEBOD,EAASliB,KAAKR,KAAK63B,SAAS1pB,MAAM+R,IACICogB,EAAXU3/B,OOAOD, EAAG,GACpBogC,KAGJpgC,IKAogC,EAAC,EACd1G,EAAYxnB,OOAO5S,KAAK63B,UAXBuC,EAAY9a, MAAQ,KAExBgX,EAAXhB,aAAc,EAiB5B,OAXI8E,EAAY9a,QACZtf,KAAKirB,YAAymP,EAAY9a,OAC7Btf ,KAAK+gC,sBAASB3G,EAAY9a,QAIvCtf,KAAK2/B,MAAMqB,iBAAiB5G,KAC5BA,EAAYO,mBACZjY,EAAS/hB,OOAO,EAAG,EAAGy5B,IAGF,IAApB1X,EAAS5jB,OACF4jB,EAAS,GAEBa,GAGXme,qBAASB,SAASz G,GACvBA,EAAYrd,QACZqd,EAAYrd,MAAQqd,EAAYrd,MAC3BqE,QA AO,SAAAGP,GACJ,IAAI1vB,EAII,I AH0C,MAAtC0vB,EA AE,GAAG7X,SAAS,GAAGjG,WAAWrE,QAC5BmiB,EA AE,GAAG7X,SAAS,GAAGjG, WAAa,IAAIiB,GA Ae,WAAE,KAElD7zB,EA AI,EAAGA,EAAX0vB,EA AEtxB,OOAQ4B,IACtB,GAAI0vB,EA AE1vB,GAAGgjB,aAAe0M,EA AE1vB,GAAGoZ,cACzB,OOAO,EAAGf,OOAO,OAKvBinB,sBAAuB,SAASzhB,G AC5B,GAAKA,EAAL,CAGA,IAEI2hB,EACA/gB,EACAxF,EAJEwgC,EAAY,GAMlB,IAAKxgC,EA AI4e,EAAM xgB,OAAS,EAAG4B,GA AK,EA AIA,IAEHc,IADAwf,EA AOZ,EAAM5e,cACO6zB,GA AK7Z,YACrB,GA AKwm B,EAAXhhB,EA AKvF,MAEb,EACHsmB,EAAXWC,EAAXhhB,EA AKvF,iBACF4Z,GA AK7Z,cACzBumB,EAAX WC,EAAXhhB,EA AKvF,MAAQ,CAACumB,EAAXhhB,EA AKvF,MAAMxK,MAAMnQ,KAAKg/B,YAEvE,IA AMmC,EAAXjhB,EA AK/P,MAAMnQ,KAAKg/B,WACG,IAA/BiC,EAASvwb,QAAQywb,GACjB7hB,EAAM3e ,OOAOD,EAAG,GA EHbugC,EAASzgc,KAAK2gC,QAVIBD,EAAXhhB,EA AKvF,MAAQuf,IAiBvC+K,YAAa, SAAS3L,GACIB,GA AKA,EAAL,CAOA,IAHA,IAAM8hB,EAAY,GACZC,EAAY,GAET3gC,EA AI,EAAGA,EA AI4e,EAAMxgB,OOAQ4B,IAAK,CACnC,IAAMwf,EA AOZ,EAAM5e,GACnB,GAAIwf,EA AKrF,MAAO,CACZ ,IAAMpJ,EAAMyO,EA AKvF,KACjBymb,EA AO3vB,GAAO6N,EAAM3e,OOAOD,IAAK,GAC5B2gC,EAAXU7g C,KAAK4gC,EA AO3vB,GAAO,IACjC2vB,EA AO3vB,GA AKjR,KAAK0f,IAIzBmhB,EAAXh0B,SAAQ,SAAAO a,GACd,GAAIA,EAAM3oB,OAAS,EAAG,CACIB,IAAMwiC,EAAS7Z,EAAM,GACjB8Z,EAAS,GACPC,EAAS, CAAC,IAAIjN,GA AKtL,WAAWsy,IACpC9Z,EAAMpa,SAAQ,SAAAO6S,GACU,MAAfA,EA AKrF,OAAMB0mB ,EAAMziC,OAAS,GACxC0iC,EAAMhhC,KAAK,IAAI+zB,GA AKtL,WAAWsy,EA AQ,KA E3CA,EAAM/gC,K

AAK0f,EAAKjS,OACHBqzB,EAAO1mB,UAAy0mB,EAAO1mB,WAAAsF,EAAKtF,aAEhD0mB,EAAOrzB,MAAQ,IAAIsmB,GAACKxa,MAAMynB,iBC7V/B,CACXvL,WACAyB,iBACA+J,+BACAC,iBACA3C,uBACA/T,mC CVA,IACI7T,EAGArD,EAMA6tB,EAGAC,EAGAC,EAGAC,EAGAC,EafAC,EAAy,GaiBVC,EAAc,GAUpB,S AASC,EAAepjC,GAWPB,IAVA,IAMIoQ,EACAIzB,EACAZB,EARE0B,EAAOH,EAAyvhC,EACnB2hC,EAAOv uB,EACPwuB,EAAOL,EAAyvhC,EAAIqhC,EACvBQ,EAAWN,EAAyvhC,EAAIohC,EAAQhjC,OAASwjC,EA C5CE,EAAOP,EAAyvhC,GAACK5B,EACx2jC,EAAMtrB,EAKL8qB,EAAyvhC,EAAI6hC,EAAUN,EAAyvhC, IAACK,CAG9C,GAFawO,EAAIuzB,EAAIC,WAAWT,EAAyvhC,GAE3BuhC,EAAyU,mBAjBO,KAIbczzB,EAA 8B,CAE/D,GAaiB,OADjBizB,EAAWM,EAAI1vB,OOAOkvB,EAAyvhC,EAAI,IACHB,CACIBggC,EAAU,CAA C7yB,MAAOo0B,EAAyvhC,EAAG0b,eAAe,GACHD,IAAIwmB,EAAcH,EAAI/xB,QAAQ,KAAMuxB,EAAyvh C,EAAI,GACHDkiC,EAAc,IACdA,EAAcL,GAElBN,EAAyvhC,EAAIkiC,EACHBIC,EAAQmC,KAAOJ,EAAIpq B,OOAOqoB,EAAQ7yB,MAAOo0B,EAAyvhC,EAAIggC,EAAQ7yB,OACjEo0B,EAAyA,aAAatiC,KAAKkgC, GAC9B,SACG,GAaiB,MAAbyB,EAakB,CACzB,IAAMY,EAAGBN,EAAI/xB,QAAQ,KAAMuxB,EAAyvhC,E AAI,GACxD,GAaiqiC,GAaiB,EAAG,CACpBrC,EAAU,CACN7yB,MAAOo0B,EAAyvhC,EACnBmiC,KAAmJ ,EAAIpqB,OOAO4pB,EAAyvhC,EAAGqiC,EAAGB,EAAId,EAAyvhC,GACHe0b,eAAe,GAEnB6lB,EAAyvhC, GAACKggC,EAAQmC,KAAK/jC,OAAS,EACvCmjC,EAAyA,aAAatiC,KAAKkgC,GAC9B,UAGR,MAGJ,GAnDe, KAmDVxxB,GAjDO,KAI dmBA,GAIDIB,IAkDyCA,GAhD1C,KAGdKEA,EAC1E,MAOR,GAHA4yB,EAAUA,E AAQnwB,MAAM7S,EAASmjC,EAAyvhC,EAAI8hC,EAAMF,GACvDP,EAAaE,EAAyvhC,GAEPBohC,EAAQH jC,OOAQ,CACjB,GAaiGv,EAAI+tB,EAAO/iC,OAAS,EAAGpB,OAFAGjC,EAAUD,IAAS/tB,GACnBouB,EAAe,I ACR,EAEXD,EAAyJE,UAAW,EAG3B,OOAOe,IAASH,EAAyvhC,GAACK2hC,IAASvuB,EAoS9C,OAjSAmuB ,EAAyE,KAAO,WACfjB,EAAaE,EAAyvhC,EACzBshC,EAAUxhC,KAAAM,CAAEshC,UAAASphC,EAAguhC,E AAYvhC,EAAGoT,OAejDmuB,EAAyGB,QAAU,SAAAC,IAedjB,EAAyvhC,EAAIihC,GAAaM,EAAyvhC,IA AMihC,GAAyUB,IAAyBtB,KACpFD,EAAMW,EAAyvhC,EACvBkhC,EAA+Bsb,GAEnC,IAAMC,EAAQnB,E AAU/IB,MACxB6lB,EAAUqB,EAAMrB,QACHBC,EAAaE,EAAyvhC,EAAIyiC,EAAMziC,EACnCoT,EAAIqvB ,EAAMrvB,GAEdmuB,EAAymB,OAAS,WACjBpB,EAAU/IB,OAEdgmB,EAAyOB,aAAe,SAAAC,GACvB,IAA MC,EAAMtB,EAAyvhC,GAACK4iC,GAAU,GACjCE,EAAOrsB,EAAMurB,WAAWa,GAC9B,OA5FmB,KA4FX C,GAzFQ,KAYFmBA,GA3FIB,IA2F0CA,GA1F3C,KA0FoEA,GAIFvB,EAAyWB,IAAM,SAAAC,GACVzB,EA AYvhC,EAAIqhC,IACHBD,EAAUA,EAAQnwB,MAAMswB,EAAyvhC,EAAIqhC,GACxCA,EAAaE,EAAyvhC, GAG7B,IAAMyK,EAAIu4B,EAAIC,KAAK7B,GACnB,OOAK32B,GAIL+2B,EAAe/2B,EAAE,GAAGrM,QACH ,iBAANqM,EACAA,EAGS,IAAbA,EAERm,OOAEqM,EAAE,GAACA,GARpB,MAWf82B,EAAy2B,MAAQ,S AAaf,GACHB,OOAIvsB,EAAMPe,OOAOkvB,EAAyvhC,KAAOgjC,EACzB,MAEXxB,EAAe,GACRwB,IAGX zB,EAAy4B,KAAO,SAAAH,GAIf,IAHA,IAAMI,EAAyJ,EAAI5kC,OAGb4B,EAAI,EAAGA,EAAIoJc,EAAWpj C,IAC3B,GAaiYw,EAAMPe,OOAOkvB,EAAyvhC,EAAIA,KAAOgjC,EAAI3wB,OOAOrS,GAC/C,OOAO,KA Kf,OADAWHc,EAAe4B,GACRJ,GAGXzB,EAAy8B,QAAU,SAAA1sB,GACIB,IAAMksB,EAAMIsB,GAO4qB ,EAAyvhC,EACzBsjC,EAAy7sB,EAAMPe,OOAOwwB,GAEB/GAakB,MAAdS,GAAoC,MAAdA,EAA1B,CA MA,IAHA,IAAMIIC,EAASqY,EAAMrY,OACfmlC,EAakBV,EAef7iC,EAAI,EAAGA,EAAIujC,EAakBnlC,EA AQ4B,IAAK,CAE/C,OADiByW,EAAMPe,OOAOrS,EAAIujC,IAE9B,IAAK,KACDvjC,IACA,SACJ,IAAK,KAC L,IAAK,KACD,MACJ,KAAKsjC,EACD,IAAM7rB,EAAMhB,EAAMkB,OOAO4rB,EAAiBvjC,EAAI,GAC9C,O AAK2W,GAAe,IAARA,EAIL,CAAC2sB,EAAW7rB,IAHf+pB,EAAexhC,EAAI,GACZyX,IAMvB,OOAO,OAox 8pB,EAAyIC,YAAc,SAAAR,GACtB,IAWIS,EAXA3Y,EAAQ,GACR4Y,EAAy,KACZC,GAAY,EACZC,EAAa, EACXC,EAAa,GACbC,EAAc,GACd1IC,EAASqY,EAAMrY,OACf2IC,EAAWxC,EAAyvhC,EACzBgkC,EAAU zC,EAAyvhC,EACtBA,EAAIuhC,EAAyvhC,EACHBikC,GAAO,EAIPR,EADe,iBAART,EACI,SAAakB,GAAQ, OAAAA,IAASIB,GAejB,SAAakB,GAAQ,OOAAlB,EAAInoB,KAAKqpB,IAGhC,EAAG,CAEC,IAAIzC,EAAW hrB,EAAMPe,OOAOrS,GAC5B,GAAMb,IAAf4jC,GAAoBH,EAAShC,IAC7BiC,EAAyjtB,EAAMkB,OOAOqsB ,EAAShC,EAAIgkC,IAElCF,EAAyHkC,KAAK4jC,GAGjBI,EAAyHkC,KAAK,KAERb4jC,EAAyI,EACZtC,EA AexhC,EAAI+jC,GACnBE,GAAO,MACJ,CACH,GAAIN,EAAW,CACM,MAAbIC,GACwB,MAAxBhrB,EAAMP e,OOAOrS,EAAI,KACjBA,IACA4jC,IACAD,GAAY,GAehB3jC,IACA,SAEJ,OOAQyhC,GACJ,IAAK,KACDz hC,IACayhC,EAAWhrB,EAAMPe,OOAOrS,GACxB8jC,EAAyHkC,KAAK2W,EAAMkB,OOAOqsB,EAAShC, EAAIgkC,EAAU,IACrDA,EAAUhkC,EAAI,EACd,MACJ,IAAK,IAC2B,MAAxByW,EAAMPe,OOAOrS,EAAI,

KACjBA,IACA2jC,GAAY,EACZC,KA EJ,MACJ,IAAK,IACL,IAAK,KACD9Y,EAAQyW,EAAY8B,QAAQrjC,K  
AExB8jC,EAAYhkC,KAAK2W,EAAMkB,OAAOqsB,EAAShkC,EAAlgkC,GAAUIZ,GAERdKz,GADAhkC,GA  
AK8qB,EAAM,GAAG1sB,OAAS,GACT,IAGdojC,EAExhC,EAAl+jC,GACnBL,EAAYjC,EACZwC,GAAO,GA  
EX,MACJ,IAAK,IACDJ,EA AW/jC,KAAK,KACHB8jC,IACA,MACJ,IAAK,IACDC,EA AW/jC,KAAK,KACHB8j  
C,IACA,MACJ,IAAK,IACDC,EA AW/jC,KAAK,KACHB8jC,IACA,MACJ,IAAK,IACL,IAAK,IACL,IAAK,IACD  
,IAAMO,EAAWN,EA AWtoB,MACxBkmB,IAAa0C,EACbP,KAGApC,EAExhC,EAAl+jC,GACnBL,EAAYS,E  
ACZF,GAAO,KAGnBjkC,EACQ5B,IACJ6lC,GAAO,UAIVA,GAET,OAAOP,GAAwB,MAGnCnC,EAAYU,mBA  
AoB,EACHCV,EAAYa,aAAe,GAC3Bb,EAAYjE,UAAW,EAIvBiE,EAAY6C,KAAO,SAAApB,GACf,GAAMb,iB  
AARA,EAakB,CAEzB,IAAK,IAAIhjC,EAAl,EAAGA,EAAlgjC,EAAl5kC,OAAQ4B,IAC5B,GAAlYw,EAAMp  
E,OAAOkvB,EAAYvhC,EAAlA,KAAOgjC,EAAl3wB,OAAOrS,GAC/C,OAAO,EAGf,OAAO,EAEP,OAAOgjC,  
EAAlnoB,KAAKumB,IAMxBG,EAAY8C,SAAW,SAAArB,GAAO,OAAAvsB,EAAMpE,OAAOkvB,EAAYvhC,  
KAAOgjC,GAE9DzB,EAAY+C,YAAc,WAAM,OAAA7tB,EAAMpE,OAAOkvB,EAAYvhC,IAEzDuhC,EAAYg  
D,SAAW,WAAM,OAAA9tB,EAAMpE,OAAOkvB,EAAYvhC,EAAl,IAE1DuhC,EAAYiD,SAAW,WAAM,OAA  
A/tB,GAE7B8qB,EAAYkD,eAAiB,WACzB,IAAMj2B,EAAlI,EAAMurB,WAAWT,EAAYvhC,GAEvC,OAAQw  
O,EApTO,IAoTWA,EA vTR,IAES,KAqTqBA,GAT7B,KAsT6DA,GAGpF+yB,EAAYmD,MAAQ,SAACjtB,EA  
KktB,EAAYC,GACICnuB,EA AQgB,EACR8pB,EAAYvhC,EAAlot,EAAlIuB,EAAlA,EA AW,EAaxCE,EADAw  
D,WCVWaluB,EA AOuB,GAC5B,IAGIC,EACAC,EACAC,EACAC,EAGAC,EACAC,EACAC,EACAC,EACAlI,  
EA bEpK,EAAMtC,EAAMrY,OACdknC,EA AQ,EACRC,EAAlA,EAKXpE,EAAS,GACXqE,EA AW,EAOf,SAAS  
C,EA AUC,GACf,IAAM3sB,EAAMmsB,EAAsBM,EAC5BzsB,EAAM,MAAS2sB,IAAW3sB,IAGhCooB,EAOr  
hC,KAAK2W,EAAMxF,MAAMu0B,EA AUN,EAAsB,IACxDM,EAAWN,EAAsB,GAGrC,IAAKA,EAAsB,EA  
GA,EAAsBnsB,EA AKmsB,IAErD,MADAE,EA AK3uB,EAAMurB,WAAWkD,KACV,IAAQE,GAAM,KAAUA,E  
AAK,IAKzC,OAAQA,GACJ,KAAK,GACDG,IACAR,EA AmBG,EACnB,SACJ,KAAK,GACD,KAAMK,EAAlA,E  
ACf,OAAOV,EA AK,sBA AuBK,GAEvC,SACJ,KAAK,GACIK,GAACe,IACnB,SACJ,KAAK,IACDH,IACAR,EA  
AcI,EACd,SACJ,KAAK,IACD,KAAMI,EA AQ,EACV,OAAOT,EA AK,sBA AuBK,GAELCI,GAAUC,GAACe,IAC  
7B,SACJ,KAAK,GACD,GA AIP,EAAsBnsB,EAAM,EAAG,CAAEmsB,IA AuB,SAC5D,OAAOL,EA AK,iBA AkB  
K,GACIC,KAAK,GACL,KAAK,GACL,KAAK,GAGD,IAFA/H,EA AU,EACVgI,EA AyBD,EACpBA,GAA4C,EA  
AGA,EAAsBnsB,EA AKmsB,IAE3E,MADAG,EAAM5uB,EAAMurB,WAAWkD,IACb,IAAV,CACA,GA AIG,GA  
AOD,EAAl,CAAEjI,EA AU,EAAG,MAC9B,GA AW,IAAPkI,EA AW,CACX,GA AIIH,GA AuBnsB,EAAM,EAC7B,  
OAAO8rB,EA AK,iBA AkBK,GAELCA,KAGR,GA Al/H,EA AW,SACf,OAAO0H,EA AK,cAAejd,OAAO+d,aAAaP  
,OAASD,GAC5D,KAAK,GACD,GA AII,GA AeL,GA AuBnsB,EAAM,EAAM,SAEtD,GA AW,KADXssB,EAAM5  
uB,EAAMurB,WAAWkD,EAAsB,IAGzC,IAAKA,GAA4C,EAAGA,EAAsBnsB,OACtEssB,EAAM5uB,EAAMur  
B,WAAWkD,KACX,KAAgB,IAAPG,GAAsB,IAAPA,GA FuCH,UAI5E,GA AW,IAAPG,EA AW,CAGIB,IADAL,  
EA AmBG,EA AyBD,EACvCA,GAA4C,EAAGA,EAAsBnsB,EAAM,IAEjE,MADXssB,EAAM5uB,EAAMurB,W  
AAWkD,MACLD,EA A2BC,GACIC,IAAPG,GAC6C,IAA7C5uB,EAAMurB,WAAWkD,EAAsB,IAJoCA,KAMnF  
,GA AlA,GA AuBnsB,EAAM,EAC7B,OAAO8rB,EA AK,uBA AwBM,GA ExCD,IAEJ,SACJ,KAAK,GACD,GA AK  
A,EAAsBnsB,EAAM,GA AoD,IAA7CtC,EAAMurB,WAAWkD,EAAsB,GAC3E,OAAOL,EA AK,iBA AkBK,GA E  
IC,SAIZ,OA Ac,IAAVI,EA EWT,EADNG,EA AmBF,GA AiBG,EA A2BD,EACpD,8BAEA,sBAF+BF,GA IzB,IA Af  
S,EACAV,EA AK,sBA AuBE,IA GvCU,GA AU,GACHtE,GDiPUyE,CAAQnuB,EA AKmtB,GA Eb,CAACntB,GAG  
d2pB,EA AUD,EA AO,GA EjBK,EA Ae,IA GnBD,EA YsE,IAAM,WACd,IA AItvB,EACEohB,EA AlA4J,EAAYvhC,  
GA AKyW,EAAMrY,OAM1C,OAJImjC,EAAYvhC,EA AlIhC,IACHB1qB,EA AU2qB,EACVK,EAAYvhC,EA AlIh  
C,GA Eb,CACHtJ,aACAsJ,SA AUM,EAAYvhC,EACtBkhC,6BAA8B3qB,EAC9BuvB,mBA AoBvE,EAAYvhC,GA  
AKyW,EAAMrY,OAAS,EACpD2nC,aAActvB,EAAM8qB,EAAYvhC,KAIjCuhC,GE5VlyE,GAAS,SAASA,EA  
AOI5B,EAAS4L,EAAStM,GAC7C,IAAI65B,EACE1E,EA Ac2E,KA EpB,SAAS9mC,EAAMC,EA AKa,GACHB,M  
AAM,IAAIkW,EACN,CACIJ,MAAOo0B,EAAYvhC,EACnBa,SA AUuL,EAASvL,SACnBX,KAAMA,GAAQ,SA  
CdqW,QAASIX,GA EbqZ,GAIR,SAASytB,EA OpW,EA AK1wB,GA EjB,IAAM4W,EA AU8Z,aAAe7Y,SAAY6Y  
,EA Alnd,KAAKqzB,GA AW1E,EAAYwB,IA AlHt,GAC/E,GA Al9Z,EACA,OAAOA,EAGX7W,EAAMC,IA AuB,i  
BAAR0wB,EACf,aAAaA,YAAawR,EAAY+C,kBACtC,qBAIV,SAAS8B,EA AWrW,EA AK1wB,GACrB,GA Alki  
C,EAAY2B,MAAMnT,GACIB,OAAOA,EAEX3wB,EAAMC,GAAO,aAAa0wB,YAAawR,EAAY+C,mBAGvD,S

AAS3oB,EAAaxO,GACIB,IAAMtM,EAAWuL,EAASvL,SAE1B,MAAO,CACH4Z,WAAY7D,EAakBzJ,EAAOo  
0B,EAAYiD,YAAY7vB,KAAO,EACpE+F,SAAU7Z,GAyDIB,MAAO,CACH0gC,cACA7oB,UACAtM,WACAO  
M,UAjDJ,SAAmBf,EAAK4uB,EAAWC,EAACl6B,EAAUya,GACvD,IAAI5Q,EACEswB,EAAC,GACdC,EAASjF  
,EAef,IACliF,EAAO9B,MAAMjtB,GAAK,GAAO,SAACpY,EAAK8N,GACxC0Z,EAAS,CACLtQ,QAASIX,EAC  
T8N,MAAOA,EAAQm5B,OAGvB,IAAK,IAAI11B,EAAl,EAAG8e,SAAG1vB,SAAI0vB,EAAl2W,EAAUz1B,G  
AAKA,IAGtC,GAFa5Q,EAAIwmC,EAAOxmC,EACXiW,EAASgwB,EAAQvW,KACL,CACR,IACIzZ,EAAOrJ,  
OAAS5M,EAAIsmC,EACpBrwB,EAAOpJ,UAAyT,EACrB,MAAOOrN,IACtwnC,EAAyZmC,KAAKmwW,QAGjB  
swB,EAAyZmC,KAAK,MAIT0mC,EAAOX,MACXIO,WACR9Q,EAAS,KAAM0f,GAGf1f,GAAS,EAAM,MAEr  
B,MAAO9nB,GACL,MAAM,IAAIqX,EAAU,CACHBjJ,MAAOpO,EAAEoO,MAAQm5B,EACjB/vB,QAASxX,E  
AAEwX,SACZmC,EAAStM,EAASvL,YAkBzB5D,MAAO,SAAUwa,EAAKoP,EAAU4f,GAC5B,IAAI5mB,EAE  
A6mB,EACAC,EACAC,EAHANuB,EAAM,KAINouB,EAAU,GAed,GAZIJ,GAakBA,EAaeK,oBACjCb,EAAQ/  
R,OAAS,WACHqN,EAAyWb,IAAI,iBAEtB3jC,EAAM,8EAKIBsnC,EAACd,GAakBA,EAaeC,WAAiBV,EAA  
Oe,cAAcN,EAaeC,iBAakB,GACtHC,EAACf,GAakBA,EAaeE,WAAc,KAAKX,EAAOe,cAAcN,EAaeE,YAAg  
B,GAElH75B,EAAQ5L,cAER,IADA,IAAM8IC,EAAGbl6B,EAAQ5L,cAAc+1C,mBACnCjnC,EAAl,EAAGA,EA  
AlgnC,EAAC5oC,OAAQ4B,IACtCyX,EAAMuvB,EAACHnC,GAAGknC,QAAQzvB,EAAK,CAAE3K,UAAS4L,U  
AAStM,cAI5Ds6B,GAaeD,GAakBA,EAaeU,UACHDN,GAAYJ,GAakBA,EAaeU,OAAUV,EAaeU,OAAS,IA  
AMT,GACrFE,EAAUluB,EAAQ0uB,sBACVh7B,EAASvL,UAAy+1C,EAAQx6B,EAASvL,WAAa,EAC3D+1C,E  
AAQx6B,EAASvL,WAAagmC,EAAQzoC,QAK1CqZ,EAAMovB,GAFNpvB,EAAMA,EAAlhb,QAAQ,SAAU,O  
AERA,QAAQ,UAAW,IAAMkqC,EAC7CjuB,EAAQhC,SAAStK,EAASvL,UAAy4W,EAMtC,IACI8pB,EAAyM  
D,MAAMjtB,EAAK3K,EAAQ63B,YAAy,SAActC,EAAK8N,GAC1D,MAAM,IAAIiJ,EAAU,CACHBjJ,QACAj  
N,KAAAM,QACNqW,QAASIX,EACTwB,SAAUuL,EAASvL,UACpB6X,MAGPmb,GAAK1nB,KAAKgd,UAAUI  
S,MAAQqC,KAC5BugB,EAAO,IAAIgU,GAAKnV,QAAQ,KAAMpf,KAAK2mC,QAAQoB,WAC3CxT,GAAK1  
nB,KAAKgd,UAAUnD,SAAW6T,EAC/BA,EAACA,MAAO,EACZA,EAACK,WAAy,EACjBD,EAAKG,iBAA  
mBA,EAaiB3B,UAE3C,MAAOtf,GACL,OAAO8nB,EAAS,IAAIzQ,EAAUrX,EAAG2Z,EAAStM,EAASvL,WA  
WvD,IAAMymC,EAAU/F,EAAYsE,MAC5B,IAAKyB,EAAQ3P,WAAy,CAErB,IAAIphB,EAAU+wB,EAAQpG,  
6BAEjB3qB,IACDA,EAAU,qBACmB,MAAZB+wB,EAAQvB,aACRxxB,GAAW,iCACqB,MAAZB+wB,EAAQv  
B,aACfxvB,GAAW,iCACJ+wB,EAAQxB,qBACfvB,GAAW,iCAInBkC,EAAM,IAAIrC,EAAU,CACHBIW,KAA  
M,QACNqW,UACApJ,MAAOm6B,EAAQrG,SACfpG,SAAUuL,EAASvL,UACpB6X,GAGP,IAAMwe,EAAS,S  
AAAn4B,GAGX,OAFaa,EAAlOZ,GAAO1Z,GAAK2Z,EAAQtZ,QAGdL,aAAaqX,IACfrX,EAAl,IAAIqX,EAAU  
rX,EAAG2Z,EAAStM,EAASvL,WAGpCgmB,EAAS9nB,IAGT8nB,EAAS,KAAMhH,IAI9B,IAA+B,IAA3B/S,E  
AAQy6B,eAIR,OAAOrQ,IAHP,IAAI7M,GAAS2M,cAActe,EAASwe,GAC/BQ,IAAI7X,IAMCjBomB,QAASA,E  
AAU,CAGbfoB,QAAS,WAKL,IAJA,IAEI76B,EAFekkb,EAAQpxB,KAAKoxB,MACf7Q,EAAO,KAGE,CACT,  
KACIrT,EAAOlN,KAAK0gC,WAEZngB,EAAK/f,KAAK0M,GAGd,GAAI+0B,EAAYjE,SACZ,MAEJ,GAAIiE,E  
AAy6C,KAAK,KACjB,MAIJ,GADA53B,EAAOlN,KAAKkoC,aAER3nB,EAAOA,EAAKrf,OAAOgM,QAMvB,  
GAFaa,EAAOkkB,EAAM+W,cAAgBnoC,KAAKooC,eAAiBhX,EAAM9d,MAAK,GAAO,IACjEtT,KAAKqgB,  
WAAargB,KAAKqoC,gBAakBroC,KAAKsoC,SAASh1B,QAAUtT,KAAKuoC,SAEtEhoB,EAAK/f,KAAK0M,O  
ACP,CAEH,IADA,IAAI7B,GAAiB,EACdvG,EAAY2B,MAAM,MACrB4E,GAAiB,EAERB,IAAKA,EACD,OAK  
Z,OAAOjoB,GAKXmgB,QAAS,WACL,GAAIuB,EAAYa,aAAahkC,OAAQ,CACjC,IAAM4hC,EAAUuB,EAAYa  
,aAAanpB,QACzC,OAAO,IAAI4a,GAAY,QAAEmM,EAAQmC,KAAAMnC,EAAQtKB,cAAeskB,EAAQ7yB,MA  
AOof,KAOOrF7B,SAAU,CACNG,YAAa,WACT,OAAO9B,EAAQvV,MAAM9d,MAAK,GAAM,IAOpCo1B,OAA  
Q,SAAUc,GACd,IAAIxwB,EACetK,EAAQo0B,EAAYvhC,EACtBkoC,GAAY,EAGhB,GADA3G,EAAYe,OAC  
Rf,EAAY2B,MAAM,KACIBgF,GAAY,OACT,GAAID,EAEP,YADA1G,EAAYgB,UAKhB,GADA9qB,EAAM8p  
B,EAAY8B,UAOIB,OAFa9B,EAAYmB,SAEL,IAAI7O,GAAW,OAAEpc,EAAlpF,OAAO,GAAIoF,EAAlE,OAA  
O,EAAGF,EAAlrZ,OAAS,GAAI8pC,EAAW/6B,EAAOf,GALpFm1B,EAAYgB,WAapBzxB,QAAS,WACL,IAA  
MqC,EAAlouB,EAAY2B,MAAM,MAAQ3B,EAAYwB,IAAI,2DACpD,GAAI5vB,EACA,OAAO0gB,GAAK3IB,  
MAAM2C,YAAysC,IAAM,IAAI0gB,GAAY,QAAE1gB,IAW9DP,KAAAM,WACF,IAAIqH,EACAnK,EACAmH,  
EACE9J,EAAQo0B,EAAYvhC,EAG1B,IAAIuhC,EAAY6C,KAAK,WAOrB,GAHA7C,EAAYe,OAEZroB,EAAO  
snB,EAAYwB,IAAI,kCACvB,CAOA,GAFa9oB,EAAOA,EAAK,IACzhD,EAAO3X,KAAK6oC,eAAeluB,MAEv

BnK,EAAOmH,EAAKha,UACAgA,EAAMxB,KAEB,OADa7G,EAAYmB,SACL5yB,EAMf,GAFAA,EAAOxQ, KAAK4T,UAAUpD,GAejByxB,EAAY2B,MAAM,KAovB,OAFa3B,EAAYmB,SAEL,IAAI7O,GAAS,KAAE5Z ,EAAMnK,EAAM3C,EAAOf,GANrCm1B,EAAYgB,QAAQ,sDAjBpBhB,EAAYmB,UAmCpByF,eAAgB,SAAU uB,GAItB,MAAO,CACHvL,MAASmiB,EAAEoV,EAAQoC,SAAS,GAC5BC,QAASzX,EAAE9Y,GACXwwB,G AAS1X,EAAE9Y,IACbkC,EAAKjJ,eAEP,SAAS6f,EAAE5zB,EAAOmrC,GACd,MAAO,CACHnrC,QACAmrC,Q AKR,SAASrwB,IACL,MAAO,CAACouB,EAAOF,EAAQluB,UAAW,yBAI1C7E,UAAW,SAAU1B,GACjB,IAE IC,EACAI7B,EAHAM7B,EAAYF,GAAY,GACTBG,EAAGB,GAMtB,IAFAPh,EAAYe,SAEC,CACT,GAAlkG,EA CAA,GAAW,MACR,CAEH,KADAJ7B,EAAQ04B,EAAQIX,mBAaQbZvB,KAAKspC,cAAgB3C,EAAQ5Y,cAE 9D,MAGA9f,EAAMA,OAA+B,GAAtBA,EAAMA,MAAMnP,SAC3BmP,EAAQA,EAAMA,MAAM,IAGxBm7B, EAAU5oC,KAAKyN,GAGfg0B,EAAY2B,MAAM,OAIIB3B,EAAY2B,MAAM,MAAQuF,KAC1BA,GAaUB,EA CvB17B,EAASm7B,EAAUtqC,OAAS,EAASqC,EAAU,GACrC,IAAI7U,GAAXa,MAAMqvB,GACrBC,EAAC7 oC,KAAKyN,GACnBm7B,EAAY,IAKpB,OADAnH,EAAYmB,SACL+F,EAAuBE,EAAGBD,GAELDG,QAAS,W ACL,OAAOvpC,KAAKwpC,aACLxpC,KAAKqQ,SACLrQ,KAAK0oC,UACL1oC,KAAKypC,qBAShBH,WAAy ,WACR,IAAI73B,EACAxD,EAGJ,GAFAg0B,EAAYe,OACZvxB,EAAMwwB,EAAYwB,IAAI,iBAKtB,GAAX B,EAAY2B,MAAM,KAAvB,CAKA,GADA31B,EAAQ04B,EAAQ+C,SAGZ,OADAZH,EAAYmB,SACL,IAAI7O ,GAAE,WAAE9iB,EAAXD,GAejCg0B,EAAYgB,eARZhB,EAAYgB,eAJZhB,EAAYgB,WAUbPpQ,IAAK,W ACD,IAAI5kB,EACEJ,EAAQo0B,EAAYvhC,EAI1B,GAFAuhC,EAAYU,mBAaOB,EAE3BV,EAAY4B,KAAK, QAYtB,OAPA51B,EAAQjO,KAAK0oC,UAAy1oC,KAAK+a,YAAc/a,KAAKqiB,YAcZc4f,EAAYwB,IAAI,mC AAQc,GAe7DxB,EAAYU,mBAaOB,EAehCmE,EAAW,KAeJ,IAAIvS,GAAQ,IAAkB,MAAftmB,EAAMA,OAC xBA,aAAiBsmB,GAAK/J,UACtBvc,aAAiBsmB,GAAK3J,SACTB3c,EAAQ,IAAIsmB,GAAC,UAAEtmB,EAAOJ, GAAQA,EAAOf,GAdlDm1B,EAAYU,mBAaOB,GAyBxC5nB,SAAU,WACN,IAAI4uB,EACAhvB,EACE9M,EA AQo0B,EAAYvhC,EAG1B,GADAuhC,EAAYe,OACsB,MAA9Bf,EAAY+C,gBAA0BrqB,EAAOsN,EAAYwB,I AAI,eAAgB,CAE7E,GAAW,OADXkG,EAAK1H,EAAY+C,gBACQ,MAAP2E,IAAE1H,EAAYgD,WAAWj2B,M AAM,OAAQ,CAEIE,IAAM2H,EAASgwB,EAAQ0B,aAAa1tB,GACpC,GAAlhE,EAEA,OADAsrB,EAAYmB,SA CLzsB,EAIf,OADAsrB,EAAYmB,SACL,IAAI7O,GAaA,SAAE5Z,EAAM9M,EAAOf,GAe3Cm1B,EAAYgB,WA lhB2G,cAAe,WACX,IAAIC,EACEh8B,EAAQo0B,EAAYvhC,EAE1B,GAakC,MAA9BuhC,EAAY+C,gBAA0B6 E,EAAQ5H,EAAYwB,IAAI,mBAC9D,OAAO,IAAIIP,GAaA,SAAE,IAAIsv,EAAM,GAAMh8B,EAAOf,IAQzDu V,SAAU,WACN,IAAI1H,EACE9M,EAAQo0B,EAAYvhC,EAE1B,GAakC,MAA9BuhC,EAAY+C,gBAA0BrqB, EAAOsN,EAAYwB,IAAI,cAC7D,OAAO,IAAIIP,GAaA,SAAE5Z,EAAM9M,EAAOf,IAK/Cg9B,cAAe,WACX,I AAID,EACEh8B,EAAQo0B,EAAYvhC,EAE1B,GAakC,MAA9BuhC,EAAY+C,gBAA0B6E,EAAQ5H,EAAYw B,IAAI,oBAC9D,OAAO,IAAIIP,GAaA,SAAE,IAAIsv,EAAM,GAAMh8B,EAAOf,IAUzDuD,MAAO,WACH,IA AIxB,EAGJ,GAFAozB,EAAYe,OAESB,MAA9Bf,EAAY+C,gBAA0Bn2B,EAAMozB,EAAYwB,IAAI,oEACvD5 0B,EAAI,GAEL,OADAOzB,EAAYmB,SACL,IAAI7O,GAAU,MAAE11B,EAAI,QAAIrC,EAAWqC,EAAI,IAgtD ozB,EAAYgB,WAGhB8G,aAAc,WACV9H,EAAYe,OACZ,IAAML,EAAoBV,EAAYU,kBACtCV,EAAYU,mBA AoB,EACHC,IAAM9uB,EAIouB,EAAYwB,IAAI,6BAE1B,GADAxB,EAAYU,kBAaOBa,EAC3B9uB,EAAL,C AIAouB,EAAYgB,UACZ,IAAM5yB,EAAQkkB,GAAK31B,MAAM2C,YAAYsC,GACrC,OAAIXD,GACA4xB,E AAY4B,KAAKhWb,GACVxD,QAFX,EALI4xB,EAAYmB,UAgBpBoG,UAAW,WACP,IAAIvH,EAAYkD,iBAA hB,CAIA,IAAMI3B,EAAQg0B,EAAYwB,IAAI,kCAC9B,OAAIX1B,EACO,IAAIsmB,GAAC,UAAEtmB,EAAM, GAAIA,EAAM,SAD/C,IAUJw7B,kBAAmB,WACf,IAAIO,EAGJ,GADAA,EAAK/H,EAAYwB,IAAI,uCAEjB,O AAO,IAAIIP,GAASB,kBAAEyV,EAAG,KAS9CC,WAAy,WACR,IAAIC,EACEr8B,EAAQo0B,EAAYvhC,EAE1 BuhC,EAAYe,OAeZ,IAAMmH,EAASII,EAAY2B,MAAM,KAGjC,GAfgB3B,EAAY2B,MAAM,KAELC,CAMA, GADAsG,EAAKjI,EAAYwB,IAAI,WAGjB,OADAxB,EAAYmB,SACL,IAAI7O,GAAE,WAAE2V,EAAG7xB,O AAO,EAAG6xB,EAAGprC,OAAS,GAAI0b,QAAQ2vB,GAASt8B,EAAOf,GAERfM1B,EAAYgB,QAAQ,sCATH BhB,EAAYgB,YAKbXBlOB,SAAU,WACN,IAAIJ,EAEJ,GAakC,MAA9BsnB,EAAY+C,gBAA0BrqB,EAAOsN, EAAYwB,IAAI,mBAAsB,OAAO9oB,EAAK,IAWvG0tB,aAAc,SAAU+B,GACpB,IAAIxa,EACElvB,EAIuhC,E AAYvhC,EACHB2pC,IAAYD,EACdzvB,EAAOyvB,EAIx,GAFAAnI,EAAYe,OAERroB,GAaUC,MAA9BsnB,EA AY+C,gBACjBrqB,EAAOsN,EAAYwB,IAAI,yBAA2B,CAItD,KAFa7T,EAAU5vB,KAAKoxB,MAAMkZ,iBA EHD,GAAsC,OAA3BpI,EAAY4B,KAAK,OAAgC,OAAZlpB,EAAK,IAEnE,YADAsnB,EAAYgB,QAAQ,2CAIn

BoH,IACD1vB,EAAOA,EAAK,IAGhB,IAAMrH,EAAO,IAAIhB,GA AK/E,aAAa7U,EAAMja,EAAGoM,GAC5C ,OAAKu9B,GA AW1D,EAAQJ,OACpBtE,EAAYmB,SACL9vB,IAGP2uB,EAAYmB,SACL,IAAI7O,GA AK7E,e AAepc,EAAMsc,EAASlvB,EAAGoM,IAIzDm1B,EAAYgB,WAMhBppB,OAAQ,SAAS0wB,GACb,IAAIhyB,EA CA9Y,EA EAqvB,EACAtW,EACAqB,EAHEhM,EAAQo0B,EAAYvhC,EAK1B,GA AKuhC,EAAY4B,KAAK0G, EAAS,YAAc,YAA7C,CAIA,EAAG,CAGC,IAFAzb,EAAS,KACTvW,EA AW,OACFuW,EAASmT,EAAYwB,IA AI,0BAC9BhkC,EA AIO,KAAKokB,YAIL7L,EACAA,EAAS/X,KAAKf,GAEd8Y,EA AW,CAA E9Y,GA IrBqvB,E AASA,GAAUA,EAAO,GACrBvW,GACDzY,EAAM,0CAEV+Z,EAAS,IAAI0a,GAAW,OAAE,IAAIA,GAAa,SA AEhc,GAAWuW,EA AQjhB,EA AOf,GACnE0L,EACAA,EA AW hY,KAAKqZ,GA EhBrB,EA Aa,CAA EqB,SA Edo oB,EAAY2B,MAAM,MAQ3B,OANAiD,EAAO,OA EH0D,GACA1D,EAAO,MAGJruB,IAMX0vB,WAA Y,WAC R,OAAOloC,KAAK6Z,QAAO,IAMvBuX,MAAO,CAiBH9d,KAA M,SAAU+2B,EAASG,GACrB,IAEI5a,EA EA r X,EACA/H,EACAI6B,EA NE9+B,EA AIs2B,EAAY+C,cACIBpqB,GAAY,EA EV/M,EA AQo0B,EAAYvhC,EAK1 B,GAAU,MAANiL,GA AmB,MAANA,EA AjB,CAMA,GAJAs2B,EAAYe,OA EZzqB,EA AWvY,KAAKuY,WA EF ,CAUV,GATI0pB,EAAY2B,MAAM,OACIBpzB,EAAOxQ,KAAKwQ,MAAK,GAAMA,KACvBs2B,EA AW,KA CX2D,GAAY,IAGE,IAAdD,IACA5a,EA AU5vB,KAAKsqC,gBAED,IAAdE,IAAU5a,EA EVB,YADAqS,EAAYg B,UAIhB,GA AIoH,IAAYza,IAAY6a,EAGxB,YADAxI,EAAYgB,UA QhB,IAJKoH,GAAW1D,EA AQ/rB,cACpB A,GAAY,GAGZyvB,GAAW1D,EA AQJ,MAAO,CAC1BtE,EAAYmB,SACZ,IAAMhS,EA AQ,IAAI mD,GAAKnD ,MAAU,KAAE7Y,EA AU/H,EAAM3C,EA AOf,GAAW8iB,GAAWhV,GACHF,OAAIgv,EACO,IAAI2E,GA AK7E ,eAAe0B,EA AOxB,GAG/BwB,GAKnB6Q,EAAYgB,YAMhB1qB,SAAU,WAON,IANA,IAAIA,EACA9Y,EACA yp,EACA w7B,EACAC,EACEC,EAAK,wDAEPD,EAAY1I,EAAYvhC,EACxBjB,EA AIwiC,EAAYwB,IAAI mH,IA AKpBF,EA AO,IAAI nW,GAAY,QAAErIb,EAAGzP,GAAG,EA AOkrC,EA AW79B,GAC7CyL,EACAA,EAAS/X, KAAKkqC,GAEdnyB,EA AW,CAA EmyB,GA EjBx7B,EA AI+yB,EAAY2B,MAAM,KAE1B,OAAOrB,GA EX/H, KAAM,SAAUq6B,GACZ,IAKI1B,EACA2B,EACAnwB,EACAowB,EACA98B,EACAwiB,EACA wB,EA XEqW, EA AW3B,EA AQ2B,SACnB9U,EA AW,CAA EhjB,KAAK,KAAMwf,UAAU,GACpCgb,EA Ac,GACZ3B,EA AgB, GACHBD,EAAY,GA Qd6B,GAAS,EA Ib,IAFAhJ,EAAYe,SAEC,CACT,GA AI6H,EACApA,EAAMkW,EA AQIX,m BAAqBkX,EA AQ5Y,iBACxC,CAEH,GADaK,U,EAAYa,aAAahkC,OAAS,EAC9BmjC,EAAY4B,KAAK,OAAQ, CACzBrQ,EAASxD,UAAW,EACHBiS,EAAY2B,MAAM,OA ASuF,IAC3BA,GAAuB,IAE1BA,EA AUBE,EA AgB D,GACnC5oC,KAAK,CAA EwvB,UAAU,IACtB,MAEJS,EAAM6X,EAASvtB,YAAcutB,EAASjmB,YAAcimB,E AASiB,WAAajB,EAAS92B,WAAaxR,KAAKsT,MAAK,GAG9G,IAAKmd,IAAQwa,EACT,MAGJF,EA AW,KAC Pta,EA AIH,mBACJkH,EA AIH,oBAERtb,EA AQwiB,EACR,IAAIvE,EAAM,KAWV,GATI2e,EA EIpa,EA AIxiB, OAA6B,GA ApBwiB,EA AIxiB,MAAMnP,SACvBotB,EAAMuE,EA AIxiB,MAAM,IAGpBie,EAAMuE,EAGNvE, IAAQA,aAAeqI,GA AK/J,UAAY0B,aAAeqI,GA AK3J,UAC5D,GA AIqX,EAAY2B,MAAM,KAAM,CAUxB,GAT IoH,EAAYlsC,OAAS,IACjBqqC,GACArpC,EAAM,yCAEVgrC,GAA0B,KAG9B78B,EA AQ04B,EA AQIX,mBA AqBkX,EA AQ5Y,cAEjC,CACR,IAAI8c,EAKA,OAFA5I,EAAYgB,UACZzP,EAAShjB,KAAO,GACTgjB,EAJPI zB,EAAM,iDAOdirC,EAAYpwB,EA AOuR,EA AIvR,UACpB,GA AISnB,EAAY4B,KAAK,OAAQ,CACHc,IAAKg H,EA AQ,CACTrX,EAASxD,UAAW,EACHBiS,EAAY2B,MAAM,OA ASuF,IAC3BA,GAAuB,IAE1BA,EA AUBE, EA AgBD,GACnC5oC,KAAK,CAA Ema,KAAM8V,EA AI9V,KAAMqV,UAAU,IACtC,MAEAIc,GAAS,OAEL4Y ,IACRlwB,EA AOowB,EA AW7e,EA AIvR,KACtB1M,EA AQ,MAIZA,GACA+8B,EAAYxqC,KAAKyN,GAGrBm 7B,EA AU5oC,KAAK,CAA Ema,KAAKowB,EA AU98B,QAAOgkB,WA ENcgQ,EAAY2B,MAAM,KACIBqH,GA AS,IAGbA,EA AoC,MAA3BhJ,EAAY2B,MAAM,OA EbuF,KAEN2B,GACAhrc,EAAM,yCAGVqpC,GAAuB,EA ENb6B,EAAYlsC,OAAS,IACrBmP,EA AQ,IAAIsmB,GAAU,MAAEyW,IAE5B3B,EA Ac7oC,KAAK,CAA Ema,O AAM1M,QAAOgkB,WAEICtX,EAAO,KACPqwB,EA Ac,GACdF,GAA0B,GAMIC,OAFA7I,EAAYmB,SACZ5P, EAASHjB,KAAO24B,EA AUBE,EA AgBD,EACHd5V,GAqBX2U,WAA Y,WACR,IAAIxtB,EA EA3L,EACAqR,E ACA6qB,EA HAnb,EAAS,GAITC,GAAW,EACf,KAAMc,MAA9BiS,EAAY+C,eAAuD,MAA9B/C,EAAY+C,eA CID/C,EAAY6C,KAAK,aAO rB,GAHA7C,EAAYe,OA EZh0B,EA AQizB,EAAYwB,IAAI,gEACb,CACP9oB,EA A O3L,EAAM,GA Eb,IAAMm8B,EA AU nrC,KAAKwQ,MAAK,GAS1B,GARaUF,EAASob,EA AQ36B,KACjBwf,E AAWmb,EA AQnb,UA OdiS,EAAY2B,MAAM,KA ENb,YADA3B,EAAYgB,QAAQ,uBAYxB,GARAhB,EAAYa,a AAahkC,OAAS,EA E9BmjC,EAAY4B,KAAK,UACjBqH,EA AO rE,EA AOF,EA AQyE,WAA Y,uBAGtC/qB,EA A UsmB,EA AQ0E,QA Id,OADApJ,EAAYmB,SACL,IAAI7O,GA AKnD,MA AgB,WAAEzW,EA AMoV,EA AQ1P,E



AAS6qB,EAAMlb,GAE/DiS,EAAYgB,eAGhBhB,EAAYgB,WAIpBqH,YAAa,WACT,IAAIpqB,EAEE0P,EAAU,GAehB,GAakC,MAA9BqS,EAAY+C,cAAhB,CAIA,OAAa,CAIT,GAHA/C,EAAYe,SAEZ9iB,EAAOlG,KAak srC,gBACU,KAATprB,EAAa,CACtB+hB,EAAYgB,UACZ,MAEJrT,EAAQpvB,KAak0f,GACb+hB,EAAYmB,SAehB,OAAIxT,EAAQ9wB,OAAS,EACV8wB,OADX,IAKJ0b,YAAa,WAGT,GAFArJ,EAAYe,OAEPf,EAAY2B,MAAM,KAAvB,CAKA,IAAMjpB,EAAOsnB,EAAYwB,IAAI,gCAE7B,GAakxB,EAAY2B,MAAM,KAKvB,OAAljpB,GAAiB,KAATA,GACRsnB,EAAYmB,SACLzoB,QAGXsnB,EAAYgB,UATRhB,EAAYgB,eAPZhB,EAAYgB,YAuBxByG,OAAQ,WACJ,IAAMpB,EAAWtoC,KAaksoC,SAEtB,OAAOtoC,KAak0gC,WAAa4H,EAASiB,WAAajB,EAASvtB,YAAcutB,EAASzV,OAC3EyV,EAASjmB,YAAcimB,EAASh1B,QAAUg1B,EAAS92B,WAAaxR,KAakoxB,MAAM9d,MAAK,IACHfg1B,EAAS2B,cAQjB1D,IAAK,WACD,OAAOtE,EAAY2B,MAAM,MAAQ3B,EAAY6C,KAak,MAQtDiE,QAAS,WACL,IAAI96B,EAGJ,GAakg0B,EAAYwB,IAAI,cAOrB,OANA x1B,EAAQg0B,EAAYwB,IAAI,WAGpBx1B,EAAQ,MADRA,EAAQ44B,EAAOF,EAAQ2B,SAASvtB,SAAU,0BACvBJ,KAakhJ,MAAM,QAEICm1B,EAAW,KACJ,IAAIvS,GAakIJ,OAAO,GAAI,iBAAiBpd,QAehDmW,QAAS,WACL,IAAI3kB,EACAyP,EACAK,EACE1B,EAAQo0B,EAAYvhC,EAwB1B,GAtBAwO,EAaiP,KAakSs,cAET7S,EAaiwiC,EAAYwB,IAAI,uBACHbxB,EAAYwB,IAAI,+EACHbxB,EAAY2B,MAAM,MAAQ3B,EAAY2B,MAAM,MAAQ5jC,KAakurC,aACzDtJ,EAAYwB,IAAI,kBAaQbxB,EAAYwB,IAAI,iBACrDzjC,KAaksoC,SAASsB,mBAGd3H,EAAYe,OACRF,EAAY2B,MAAM,MACbr0B,EAaiVP,KAak6f,UAAS,KAawoiB,EAAY2B,MAAM,MACHDnkC,EAai,IAAI80B,GAAU,MAAEhlB,GACpB0yB,EAAYmB,UAEZnB,EAAYgB,QAAQ,uBAGxBhB,EAAYmB,UAIhB3jC,EAak,OAAO,IAAI80B,GAAU,QAAEr1B,EAAGzP,EAAGA,aAAa80B,GAak/J,SAAU3c,EAAOf,IAY/EwF,WAAU,WACR,IAAIpD,EAai+yB,EAAY+C,cAEpB,GAAU,MAAN91B,EAAW,CACX+yB,EAAYe,OACZ,IAAMwI,EAAoBvJ,EAAYwB,IAAI,gBAC1C,GAAI+H,EAEA,OADAvJ,EAAYmB,SACL,IAAI7O,GAAe,WAAEiX,GAehCvJ,EAAYgB,UAGhB,GAAU,MAAN/zB,GAAMb,MAANA,GAAMb,MAANA,GAAMb,MAANA,GAAMb,MAANA,EAAW,CAM/D,IALA+yB,EAAYvhC,IACF,MAANwO,GAA2C,MAA9B+yB,EAAY+C,gBACzB91B,EAai,KACJ+yB,EAAYvhC,KAETuhC,EAAYoB,gBAakBpB,EAAYvhC,IACjD,OAAO,IAAI6zB,GAAe,WAAEr1B,GACzB,OAAI+yB,EAAYoB,cAAc,GAC1B,IAAI9O,GAAe,WAAE,KAERb,IAAIA,GAAe,WAAE,OAYpC1U,SAAU,SAAU4rB,GACHb,IACIlzB,EACAC,EACAtJ,EACAzP,EACAs7B,EACA2Q,EACAjzB,EAPE5K,EAAQo0B,EAAYvhC,EAS1B,IADA+qC,GAAoB,IAAXA,GACDA,IAAWjzB,EAaxY,KAAK6Z,WAAe4xB,IAAWC,EAAOzJ,EAAY4B,KAak,WAAcPkC,EAaiO,KAakokB,cACtGsnB,EACAjzB,EAAYouB,EAAO7mC,KAakorC,WAAU,sBAC7B3yB,EACP3Y,EAAM,qDACC0Y,EAehuiB,EADAA,EACaA,EA AW75B,OAAOsX,GAeIBA,GAGbuiB,GAacj7B,EAAM,kDACxBoP,EAai+yB,EAAY+C,cACZsB,EACAA,EAAS/X,KAakf,GAEd8Y,EAAW,CAAE9Y,GAejBA,EAai,MAEE,MAANyP,GAAMb,MAANA,GAAMb,MAANA,GAAMb,MAANA,GAAMb,MAANA,KAK5D,GAAIqJ,EAAY,OAAO,IAAIgc,GAAa,SAAEhc,EAauwiB,EAAYtiB,EAAW5K,EAAOf,GAC9EiuB,GAacj7B,EAAM,2EAE5Buf,UAAW,WAGP,IAFA,IAAI1T,EACA0T,GAEA1T,EAai3L,KAak6f,cAILR,EACAA,EAAU7e,KAakmL,GAef0T,EAAY,CAAE1T,GAeIBs2B,EAAYa,aAAahkC,OAAS,EAC9B6M,EAAE8M,WAAa4G,EAAUvgB,OAAS,GACICgB,EAAM,2DAELmiC,EAAY2B,MAAM,OACnBj4B,EAAE8M,WACF3Y,EAAM,2DAEVmiC,EAAYa,aAAahkC,OAAS,EAETC,OAAOugB,GAEXksB,UA AW,WACP,GAakTJ,EAAY2B,MAAM,KAAvB,CAEA,IACInyB,EACaya,EACA9d,EAKAgd,EAREkd,EAAWtoC,KAaksoC,SAwBtB,OAdM72B,EAAM62B,EAASsB,mBACjBn4B,EAAMo1B,EAAO,oDAGjBz4B,EAak6zB,EAAYwB,IAAI,iBAEjBvX,EAAMoc,EAASI,UAAyzG,EAAYwB,IAAI,aAAexB,EAAYwB,IAAI,YAAc6E,EAASsB,mBAE7Fxe,EAAM6W,EAAYwB,IAAI,YAI9BqD,EAAW,KAeJ,IAAIvS,GAAC,UAAE9iB,EAakrD,EAai8d,EAakd,KAO7CigB,MAAO,WACH,IAAI/f,EACJ,GAAI2W,EAAY2B,MAAM,OAAStY,EAUtrB,KAak+nC,YAAc9F,EAAY2B,MAAM,KAC1E,OAAOtY,GAIfqgB,aAAc,WACV,IAAIN,EAAQrrC,KAakqrC,QAKjB,OAIIA,IACAA,EAAQ,IAAI9W,GAaknV,QAAQ,KAAMisB,IAE5BA,GAGX5b,gBAaiB,WACb,IAAI0b,EACApB,EACAC,EAGJ,GADaiS,EAAYe,QACRF,EAAYwB,IAAI,aAQhB1T,GADAob,EAUnrC,KAakoxB,MAAM5gB,MAAK,IACtA,KACjBwf,EAAWmb,EAAQnb,SACdiS,EAAY2B,MAAM,MAV3B,CAeA,IAAM+H,EAae3rC,KAAK2rC,eAC1B,GAAIA,EAEA,OADAIJ,EAAYmB,SACRrT,EACO,IAAIwE,GAaknD,MAAMtB,WAAW,KAAAMC,EAAQ4b,EAAC,KAAM3b,GAehE,IAAIuE,GAak/N,gBAAGbmlB,GAEPc1J,EAAYgB,eAZJhB,EAAYgB,WakBxB5iB,QAAS,WACL,IAAIhB,EACAC,EACApE,EAUJ,GARA+mB,EAAYe,OAERx1B,EAAQiO,kBACRP,EAAYmB,EAAa4IB,EAAYvhC,KAGzC2e,EAAYrf,KAakqf,eAECC,EAAQtf,KAakqrC,SAAU,CACrCpJ,EA

AYmB,SACZ,IAAM/iB,EAAU,IAAIkU,GAAY,QAAEIV,EAAWC,EAAO9R,EAAQ+R,eAI5D,OAHI/R,EAAQiO  
,kBACR4E,EAAQnF,UAYYA,GAEjBmF,EAEP4hB,EAAYgB,WAGpBmF,YAAa,WACT,IAAIztB,EACA1M,EA  
EA29B,EAEAhxB,EACAC,EACAtI,EALE1E,EAAQo0B,EAAYvhC,EAEPbW0,EAAl+yB,EAAY+C,cAKtB,GA  
AU,MAAN91B,GAAMb,MAANA,GAAMb,MAANA,GAAMb,MAANA,EAK3C,GAHA+yB,EAAYe,OAEZroB,  
EAAO3a,KAAK+a,YAAc/a,KAAK6rC,eACrB,CAWN,IAVAt5B,EAA6B,iBAAToI,KAGhB1M,EAAQjO,KAAK  
yvB,qBAETmc,GAAQ,GAIhB3J,EAAYa,aAAahkC,OAAS,GAC7BmP,EAAO,CAEr,GAXA4M,GAAStI,GAACoI  
,EAAK7b,OAAS,GAAK6b,EAAKsB,MAAMhO,MAIjDA,EADA0M,EAAK,GAAG1M,OAAuC,OAA9B0M,EAA  
K,GAAG1M,MAAM0D,MAAM,EAAG,GACCh3R,KAAK8rC,kBAKL9rC,KAAK+rC,iBAKb,OAFa9J,EAAYm  
B,SAEL,IAAI7O,GAAGb,YAAE5Z,EAAM1M,GAAO,EAAO4M,EAAOhN,EAAOf,GAG9DmB,IACDA,EAAQj  
O,KAAKiO,SAGbA,EACA2M,EAAY5a,KAAK4a,YACVrI,IAEPtE,EAAQjO,KAAK8rC,mBAIrB,GAAl79B,IAA  
UjO,KAAKumC,OAASqF,GAExB,OADA3J,EAAYmB,SACL,IAAI7O,GAAGb,YAAE5Z,EAAM1M,EAAO2M,E  
AAWC,EAAOhN,EAAOf,GAGnEm1B,EAAYgB,eAGhBhB,EAAYgB,WAGpB8I,eAAgB,WACZ,IAAMl+B,EA  
AQo0B,EAAYvhC,EACpBsO,EAAQizB,EAAYwB,IAAI,6BAC9B,GAAlz0B,EACA,OAAO,IAAIulB,GAAC,UA  
AEvlB,EAAM,GAAlnB,IAAY7Ci+B,gBAAiB,SAAUe,GACvB,IAAItrC,EACAjB,EACawsC,EACAh+B,EACEy1  
B,EAAMsI,GA Ae,IACrBn+B,EAAQo0B,EAAYvhC,EACpBiW,EAAS,GAEf,SAASu1B,IACL,IAAMtH,EAAO3  
C,EAAY+C,cACzB,MAAMb,iBAARtB,EACakB,IAASlB,EAETA,EAAInoB,KAAKqpB,GAGxB,IAAIsh,IAAJ,  
CAGAj+B,EAAQ,GACR,KACIxO,EAAIO,KAAK0gC,aAKTjhC,EAAIO,KAAK0pC,YAHLz7B,EAAMzN,KAA  
Kf,SAOVA,GAIT,GAFAwsC,EAAOC,IAEHj+B,EAAMnP,OAAS,EAAG,CAEIB,GADAmP,EAAQ,IAAIsmB,G  
AAe,WAAETmB,GACzBg+B,EACA,OAAOh+B,EAGP0I,EAAOnW,KAAKyN,GAGe,MAA3Bg0B,EAAYgD,YA  
CZtuB,EAAOnW,KAAK,IAAI+zB,GAAKpa,UAAU,IAAKtM,IAO5C,GAJAo0B,EAAYe,OAEZ/0B,EAAQg0B,E  
AAAYiC,YAAAYR,GAERB,CAIP,GAHQb,iBAAVz1B,GACPnO,EAAM,aAAamO,MAAU,SAEZ,IAAjBA,EAAMnP  
,QAA6B,MAAbmP,EAAM,GAE5B,OADAg0B,EAAYmB,SACL,IAAI7O,GAAKpa,UAAU,GAAltM,GAEIC,IAA  
I8b,SACJ,IAAKjpB,EAAl,EAAGA,EAAluN,EAAMnP,OAAQ4B,IAE1B,GADAIpB,EAAO1b,EAAMvN,GACTy  
M,MAAMC,QAAQuc,GAEdhT,EAAOnW,KAAK,IAAI+zB,GAAKIJ,OAAO1B,EAAK,GAAlA,EAAK,IAAI,EA  
AM9b,EAAOf,QAE1D,CACGpM,IAAMuN,EAAMnP,OAAS,IACrB6qB,EAAOA,EAAKxX,QAGhB,IAAMqZ,E  
AAQ,IAAI+I,GAAKIJ,OAAO,IAAM1B,GAAM,EAAM9b,EAAOf,GACvD0e,EAAMC,cAAgB,aActBD,EAAME  
,UAAy,cACIB/U,EAAOnW,KAAKgrB,GAIPb,OADAYW,EAAYmB,SACL,IAAI7O,GAAKtL,WAAWtS,GAQ,  
GAEvCsrB,EAAYgB,YAahBkJ,OAAU,WACN,IAAIjvB,EACAoP,EACEze,EAAQo0B,EAAYvhC,EAEPb0rC,E  
AAMnK,EAAYwB,IAAI,eAE5B,GAAl2I,EAAK,CACL,IAAM/uC,GAAW+uC,EAAMpsC,KAAKqsC,gBAaKB,  
OAAS,GAEvD,GAAKnvB,EAAOId,KAAKsoC,SAASI,UAAy1oC,KAAKsoC,SAASzV,MAQHd,OPAPvG,EAA  
WtsB,KAAKssC,gBAEXrK,EAAY2B,MAAM,OACnB3B,EAAYvhC,EAAImN,EACHb/N,EAAM,gEAEVwsB,E  
AAWA,GAAY,IAAlI,GAAl,MAAEjI,GACCh,IAAlI,GAAW,OAAErX,EAAMoP,EAAUjvB,EAASwQ,EAAOf,  
GAGxDm1B,EAAYvhC,EAAImN,EACHb/N,EAAM,gCAKIBusC,cAAe,WACX,IAAIE,EAEAC,EACAv+B,EAF  
E5Q,EAAU,GAKhB,IAAK4kC,EAAY2B,MAAM,KAAQ,OAAO,KACtC,GAEl,GADA2I,EAAlvsC,KAAKysC,e  
ACF,CAGH,OADAx+B,GAQ,EADRU+B,EAAaD,GAGT,IAAK,MACDC,EAAa,OACbv+B,GAQ,EACR,MA  
CJ,IAAK,OACDu+B,EAAa,WACbv+B,GAQ,EAlhB,GADA5Q,EAAQmVc,GAACv+B,GACjBg0B,EAAY2B,M  
AAM,KAAQ,aAE9B2I,GAET,OADAZF,EAAW,KACJzpC,GAGXovC,aAAc,WACV,IAAMlvC,EAAM0kC,EA  
AYwB,IAAI,uDAC5B,GAAlmC,EACA,OAAOA,EAAl,IAInmvC,aAAc,WACV,IAEljtC,EACA2wB,EAHEKY,E  
AAWtoC,KAAKsoC,SACHbt7B,EAAQ,GAGdi1B,EAAYe,OACZ,IAClvjC,EAAl6oC,EAAS92B,WAAa82B,EA  
ASvtB,YAAcutB,EAASG,eAEtDz7B,EAAMxM,KAAKf,GACJwiC,EAAY2B,MAAM,OACzBxT,EAAlpwB,KA  
AKqib,WACT5iB,EAAIO,KAAKiO,QACLg0B,EAAY2B,MAAM,KACdxT,GAAK3wB,EACLuN,EAAMxM,KA  
AK,IAAI+zB,GAAl,MAAE,IAAlA,GAAGb,YAAEnE,EAAG3wB,EAAG,KAAM,KAAMwiC,EAAYvhC,EAAG  
oM,GAAl,KACrFrN,EACPuN,EAAMxM,KAAK,IAAI+zB,GAAl,MAAE90B,IAE3BK,EAAM,yCAGVA,EAA  
M,sBAAYb,gBAGICL,GAGT,GADAWiC,EAAYmB,SACRp2B,EAAMIO,OAAS,EACf,OAAO,IAAlY1B,GA Ae,  
WAAEvnB,IAIpCs/B,cAAe,WACX,IAEl7sC,EAFE6oC,EAAWtoC,KAAKsoC,SACHBhc,EAAW,GAEljB,GAEl,G  
ADA7sB,EAAIO,KAAK0sC,gBAGL,GADApG,EAAS9rB,KAAKf,IACTwiC,EAAY2B,MAAM,KAAQ,WAG/B,  
IADAnkC,EAAl6oC,EAASvtB,YAAcutB,EAASG,iBAEhCnc,EAAS9rB,KAAKf,IACTwiC,EAAY2B,MAAM,M  
AAQ,YAGICnkC,GAET,OAAO6sB,EAASxtB,OAAS,EAAlwtB,EAAW,MAG5C7tB,MAAO,WACH,IAAl6tB,E

ACAhN,EACA7gB,EACAyc,EACErN,EAAQo0B,EAAYvhC,EAQ1B,GANI8M,EAAQiO,kBACRP,EAAYmB,EAAaxO,IAG7Bo0B,EAAYe,OAERf,EAAY4B,KAAK,UAGBjB,OafAvX,EAAWtsB,KAAKssC,iBAEhBhtB,EAAQtf,KAAKqrC,UAGTvrC,EAAM,iEAGVmiC,EAAYmB,SAEZ3kC,EAAQ,IAAI81B,GAAU,MAAEjV,EAAOgN,EA AUze,EAAOf,GAC5CU,EAAQiO,kBACRhd,EAAMyc,UAA YA,GAGfzc,EAGXwjC,EAAYgB,WAShBrO,OA AQ,WACJ,IAAI1X,EACA1M,EACAnT,EACEwQ,EAAQo0B,EAAYvhC,EAG1B,GAFCuhC,EAAYwB,IAAI,eAErB,CAaL,GATlpmC,GAHJmT,EAAOxQ,KAAK2sC,cAGE,CACNA,WAA Yn8B,EACZyc,UAAU,GAIJ,CAAEA,UAAU,GAGrB/P,EAAOld,KAAKsoC,SAASI,UAA Y1oC,KAAKsoC,SAASzV,MAMhD,OAJKoP,EAAY2B,MAAM,OACnB3B,EAAYvhC,EAAImN,EACHb/N,EAAM,kCAEH,IAAIy0B,GAAW,OA AErX,EAAM,KAAM7f,EAASwQ,EAAOf,GAGpDm1B,EAAYvhC,EAAImN,EACHb/N,EAAM,iCAKIB6sC,WAA Y,WAGR,GADA1K,EAAYe,QACPf,EAAY2B,MAAM,KAEnB,OADA3B,EAAYgB,UACL,KAEX,IAAMzyB,EAAOyxB,EAAYwB,IAAI,sBAC7B,OAAIjzB,EA AK,IACLyxB,EAAYmB,SACL5yB,EA AK,GAAG2B,SAGf8vB,EAAYgB,UACL,OASfsF,OAAQ,WACJ,IACI5tB,EACA1M,EACAqR,EACAstB,EACAC,EACAC,EACAC,EAPEl/B,EAAQo0B,EAAYvhC,EAQtBssC,GAAW,EACX9mB,GAAW,EA Ef,GAakC,MAA9B+b,EAAY+C,cAAhB,CAGA,GADA/2B,EAAQjO,KAAa,UAAOA,KAAK40B,UAA Y50B,KAAKvB,QA E9C,OAAOwP,EA OX,GAJAg0B,EAAYe,OA EZroB,EAAOsnB,EAAYwB,IAAI,aAEvB,CAOA,OALAmJ,EA AwBjyB,EACF,KAAIBA,EA AK5H,OAAO,IAAa4H,EA AKjK,QAAQ,IAAK,GA AK,IACHDk8B,EA AwB,IAAIjyB,EA AKhJ,MAAMgJ,EA AKjK,QAAQ,IAAK,GA AK,IAG1Dk8B,GACJ,IAAK,WACDC,GAAgB,EACHBG,GAAW,EACX,MACJ,IAAK,aACDF,GAAgB,EACHBE,GAAW,EACX,MACJ,IAAK,aACL,IAAK,iBACDH,GAAgB,EACHB,MACJ,IAAK,YACL,IAAK,YACDE,GAAa,EACb7mB,GAAW,EACX,MACJ,QACI6mB,GAAa,EAiCrB,GA7BA9K,EAAYa,aAAahkC,OAAS,EA E9B+tC,GACA5+B,EA AQjO,KAAK0pC,WAET5pC,EAAM,YAAY6a,iBAEfmyB,GACP7+B,EA AQjO,KAAK+tB,eAETjuB,EAAM,YAAY6a,iBAEfofB,IACP9+B,EA AQjO,KAAK8rC,gBAAGB,SAC7BkB,EAAOC,MAA9B/K,EAAY+C,cACnB/2B,EA KKA,EAAMA,QACZA,EAAQ,MALH++B,GAA0C,MAA9B/K,EAAY+C,eACzBIIC,EAAS6a,kDAQjBqyB,IAC A1tB,EA AQtf,KAAK2rC,gBAGbrsB,IAAW0tB,GAAY/+B,GAASg0B,EAAY2B,MAAM,KA EID,OADA3B,EAAYmB,SACL,IAAI7O,GAAW,OA AE5Z,EAAM1M,EAAOqR,EAAOzR,EAAOf,EAC/CU,EAAQiO,gBAakBY,EA AaxO,GAAS,KACHDqY,GAIR+b,EAAYgB,QAAQ,qCAWxBh1B,MAAO,WACH,IAAIxO,EACEurC,EAAC,GA Cdn9B,EAAQo0B,EAAYvhC,EA E1B,GAEL,IADAjB,EA AIO,KAAK+tB,gBAELid,EAAYxqC,KAAKf,IACZwiC,EAAY2B,MAAM,MAAQ,YAE9BnkC,GAET,GA AIurC,EAAYlsC,OAAS,EACrB,OAAO,IAAIy1B,GAAU,MAAEyW,EAAan9B,IAG5C+M,UAAW,WACP,GA AKC,MAA9BqnB,EAAY+C,cACZ,OAAO/C,EAAYwB,IAAI,kBAG/BwJ,IAAK,WACD,IAAI5+B,EACA5O,EAGJ,GADAwic,EAAYe,OACRf,EAAY2B,MAAM,KA EIB,OADA v1B,EA AIrO,KAAKktC,aACAjL,EAAY2B,MAAM,MACvB3B,EAAYmB,UACZ3jC,EA AI,IAAI80B,GAAe,WAA E,CAAClmB,KACxB+a,QAAS,EACJ3pB,QAEXwiC,EAAYgB,QAAQ,gBAGxBhB,EAAYgB,WA EhBkK,eAAgB,WACZ,IAAIhIC,EACAKD,EACAD,EACAg/B,EACApkB,EA EJ,GADA7d,EA AI nL,KAAKqtC,UACF,CAEH,IA DArkB,EA AWiZ,EAAYoB,cAAc,IAE7BpB,EAAY6C,KAAK,aADZ,CAST,GAJA7C,EAAYe,SAEZ50B,EA AK6zB,EAAY2B,MAAM,MAAQ3B,EAAY2B,MAAM,MAAQ3B,EAAY4B,KAAK,OA EJE,CAAE5B,EAAYmB,SA AU,MAIjC,KAFa/0B,EA AIrO,KAAKqtC,WAED,CAAEpL,EAAYgB,UAAW,MACjChB,EAAYmB,SAEZj4B,EA AEme,YAAa,EACfjb,EA AEib,YAAa,EACf8jB,EAAY,IAAI7Y,GAAC,UAAEnmB,EA AI,CAACg/B,GAAajiC,EAAGkD,GA AI2a,GACzDA,EA AWiZ,EAAYoB,cAAc,GA EzC,OAAO+J,GAAajiC,IAG5B+hC,SAAU,WACN,IA AI/hC,EACAKD,EACAD,EACAg/B,EACApkB,EA EJ,GADA7d,EA AI nL,KAAKmtC,iBACF,CAEH,IADAnkB,EA AWiZ,EAAYoB,cAAc,IAEjCj1B,EA AK6zB,EAAYwB,IAAI,cAAiBza,IAAaiZ,EAAY2B,MAAM,MAAQ3B,EAAY2B,MAAM,SAI/Fv1B,EA AIrO,KAAKmtC,mBAKThiC,EA AEme,YAAa,EACfjb,EA AEib,YAAa,EACf8jB,EAAY,IAAI7Y,GAAC,UAAEnmB,EA AI,CAACg/B,GAAajiC,EAAGkD,GA AI2a,GACzDA,EA AWiZ,EAAYoB,cAAc,GA EzC,OAAO+J,GAAajiC,IAG5BigC,WAA Y,WACR,IAAI/8B,EACAC,EA EAmK,EADE5K,EAAQo0B,EAAYvhC,EAI1B,GADA2N,EA AIrO,KAAKyY,WAAU,GACZ,CACH,KACSwpB,EAAY6C,KAAK,qBA AwB7C,EAAY2B,MAAM,OAGhEt1B,EA AIrO,KAAKyY,WAAU,KAI nBA,EAAY,IAAI8b,GAAC,UAAE,KAAM9b,GAAa pK,EAAGC,EAAGT,GA E7D,OAAO4K,GAAApK,IAG5BoK,UAAW,SAAU60B,GACjB,IAAI32B,EACA42B,EA CAC,EAMJ,GADA72B,EAAS3W,KAAKyY,cAAaH,GAC3B,CAIA,GADAC,EAPWtL,EAAY4B,KAAK,MAQf,CAET,KADA2J,EAAOxtC,KAAKyY,UAAU60B,IAIIB,OAFa32B,EAAS,IAAI4d,GAAC,UAAEgZ,EAAS52B,EA AQ62B,GAKiD,OAAO72B,IAEX82B,aAAc,SAAUH,GACpB,IAAI32B,EACA42B,EACAC,EAGMtC,EA FJn8

B,EAAO/O,KAab,GADA2W,GAVUu0B,EAAOn8B,EAAK2+B,iBAaBiBJ,IAAgBv+B,EAAK4+B,qBAAqBL,KA  
C/DA,EAGPpC,EAFIn8B,EAAK6+B,gBAAgBN,GASpC,CAIA,GADAC,EAPWtL,EAAY4B,KAAK,OAQf,CAE  
T,KADA2J,EAAOxtC,KAAKytC,aAAaH,IAIrB,OAFa32B,EAAS,IAAI4d,GAAC,UAAEgZ,EAAS52B,EAAQ62B  
,GAKtD,OAAO72B,IAEX+2B,iBAakB,SAAUJ,GACxB,GAAIrL,EAAY4B,KAAK,OAAQ,CACzB,IAAMtB,EA  
AS3W,KAAK2tC,qBAAqBL,GAIzC,OAHI32B,IACAA,EAAO6X,QAAU7X,EAAO6X,QAERb7X,IAGfg3B,qBA  
AsB,SAAUL,GAIb5B,IAAIO,EAEJ,GADA5L,EAAYe,OACPf,EAAY4B,KAAK,KAAtB,CAKA,GADAgK,EAAtB  
A,SAA2CC,GACvC,IAAID,EAGJ,GAFa5L,EAAYe,OACZ6K,EAAOC,EAAGr1B,UAAU60B,GACpB,CAIA,G  
AAKrL,EAAY2B,MAAM,KAKvB,OADA3B,EAAYmB,SACLyK,EAJH5L,EAAYgB,eAJZhB,EAAYgB,UAIbB8  
K,CAAKc/tC,MAGrC,OADAiC,EAAYmB,SACLyK,EAIX,GADAA,EAAO7tC,KAAK4tC,gBAAgBN,GAC5B,C  
AIA,GAACrL,EAAY2B,MAAM,KAKvB,OADA3B,EAAYmB,SACLyK,EAJH5L,EAAYgB,QAAQ,qBAAqBhB,  
EAAY+C,wBAJrD/C,EAAYgB,eAXZhB,EAAYgB,WaQpB2K,gBAAiB,SAAUN,GACvB,IAEIJ/B,EACAC,EA  
CAY,EACAd,EALek6B,EAAWtoC,KAAKsoC,SACbZ6B,EAAQo0B,EAAYvhC,EAM1B,SAASwqC,IACL,OA  
AOlrC,KAAKktC,YAAc5E,EAAS92B,WAAa82B,EAASI,UAAyj,EAASG,cAKIF,GADAp6B,GAFa68B,EAAO  
A,EAAK7pC,KAAKrB,SAqCb,OAjClIiC,EAAY2B,MAAM,KAEdx1B,EADA6zB,EAAY2B,MAAM,KACb,KA  
E,AIAGT3B,EAAY2B,MAAM,KAEdx1B,EADA6zB,EAAY2B,MAAM,KACb,KAEA,IAGT3B,EAAY2B,MAAM,  
OAEdx1B,EADA6zB,EAAY2B,MAAM,KACb,KACE3B,EAAY2B,MAAM,KACpB,KAEA,KAGTx1B,GACAE,  
EAAI48B,KAEAh8B,EAAI,IAAIqLB,GAAC,UAAEnmB,EAAIC,EAAGC,EAAGT,GAAO,GAEZC/N,EAAM,uBA  
GVoP,EAAI,IAAIqLB,GAAC,UAAE,IAAKlmB,EAAG,IAAIkmB,GAAy,QAAE,QAAS1mB,GAAO,GAE/DqB,G  
AQfm+B,QAAS,WACL,IACI7e,EADE8Z,EAAWtoC,KAAKsoC,SAGIBrG,EAAY6C,KAAK,eACjBtW,EAASyT,  
EAAY2B,MAAM,MAG/B,IAAI2I,EAAIvsC,KAAKitC,OAAS3E,EAASkB,aACvBIB,EAASj4B,SAAW4B,EA  
SvtB,YAC7ButB,EAASjmB,YAAcimB,EAASh1B,QACHcg1B,EAASI,QAAO,IAASJ,EAASyB,gBACICzB,EA  
SG,cAOjB,OALiJa,IACA+d,EAEEjjB,YAAa,eACfijB,EAAI,IAAIhY,GAAa,SAAEgY,IAGpBA,GAUXxe,WAA  
Y,WACR,IACItuB,EACAUuC,EAFE1F,EAAW,GAGXz6B,EAAQo0B,EAAYvhC,EAElB,IACIjB,EAAIO,KAAK  
0gC,WAE4LH,EAAS9nC,KAAKf,KAGIBA,EAAIO,KAAKktC,YAAc1tC,KAAK0pC,oBAEXnV,GAAPY,UACI  
B1c,EAAI,MAGJA,IACA6oC,EAAS9nC,KAAKf,GAETwiC,EAAY6C,KAAK,cACIBkI,EAAQ/L,EAAY2B,MA  
AM,OAETB0E,EAAS9nC,KAAK,IAAI+zB,GAAC,UAAEyZ,EAAOngC,YAIhDpO,GACT,GAAI6oC,EAASxpC,O  
AAS,EACIB,OAAO,IAAIy1B,GAAe,WAAE+T,IAGpCjmB,SAAU,WACN,IAAM1H,EAAOsnB,EAAYwB,IAAI,  
8BAC7B,GAAI9oB,EACA,OAAOA,EAAK,IAGpBkxB,aAAc,WACV,IAEIlgC,EACAKI,EAHA8G,EAAO,GACL  
9M,EAAQ,GAIdo0B,EAAYe,OAeZ,IAAMiL,EAAiBhM,EAAYwB,IAAI,yBACvC,GAAIwK,EAGA,OAFAtzB,E  
AAO,CAAC,IAAI4Z,GAAy,QAAE0Z,EAae,KACzChM,EAAYmB,SACLzoB,EAGX,SAAS3L,EAAM47B,GAC  
X,IAAMlqC,EAAIuhC,EAAYvhC,EACHBkN,EAAQq0B,EAAYwB,IAAIhM,H,GAC9B,GAAIh9B,EAEA,OADAC,  
EAAMrN,KAAKE,GACJia,EAAKna,KAAKoN,EAAM,IAK/B,IADAoB,EAAM,UAEGA,EAAM,uCAKf,GAAK2  
L,EAAK7b,OAAS,GAAMkQ,EAAM,sBAAuB,CASID,IARaizB,EAAYmB,SAII,KAAZzoB,EAAK,KACLA,EA  
AKhB,QAACL9L,EAAM8L,SAEL9F,EAAI,EAAGA,EAAI8G,EAAK7b,OAAQ+U,IACzBII,EAAIgp,EAAK9G,G  
ACT8G,EAAK9G,GAASB,MAAhBII,EAAEoH,OAAO,IAA8B,MAAhBpH,EAAEoH,OAAO,GACvC,IAAIwhB,G  
AAy,QAAE5oB,GACD,MAAhBA,EAAEoH,OAAO,GACN,IAAIwhB,GAAa,SAAE,IAAI5oB,EAAEgG,MAAM,  
GAAI,GAAM9D,EAAMgG,GAAI/G,GACnD,IAAIynB,GAAa,SAAE,IAAI5oB,EAAEgG,MAAM,GAAI,GAAM9  
D,EAAMgG,GAAI/G,GAE/D,OAAO6N,EAEXsnB,EAAYgB,cCt2E5B,SAASiL,GAAG1gC,EAASiL,EAAW01B,  
EAAWC,GACvC,OAAO31B,EAAU5G,KAAKrE,GAAW2gC,EAAUt8B,KAAKrE,GACzC4gC,EAAaA,EAAWv8  
B,KAAKrE,GAAW,IAAI2M,EAIvD,SAASk0B,GAAU7gC,EAASuN,GACxB,IAEI,OADAA,EAASIJ,KAAKrE,G  
ACPwM,EAAQC,KACjB,MAAOxa,GACL,OAAOua,EAQQE,ODg2EvBwsB,GAAOe,cAAgB,SAAA11B,GACnB  
,IAAIpW,EAAI,GAER,IAAK,IAAMqW,KAAQD,EACf,GAAInV,OAAOnP,eAAe6V,KAAKyO,EAAMC,GAAO,  
CACxC,IAAM/T,EAAQ8T,EAAKC,GACnBrW,IAASB,MAAZqW,EAAK,GAAC,GAAC,KAAOA,OAAS/T,GAA  
qC,MAA5Bqa,OAAOra,GAAO0D,OAAO,GAAC,GAAC,KAI3G,OAAOhG,GcJ3EXuiC,GAAGzkB,UAAW,EA  
Wd4kB,GAAU5kB,UAAW,MCpBjB6kB,MDsBW,CAAED,aAAWrF,QAzB5B,SAAiBvwB,GACb,OAAOA,EAAYu  
B,EAAQC,KAAOD,EAAQE,OAwbT+uB,GAAMiF,ICpB3C,SAAS5+B,GAAM4c,GACX,OAAOngB,KAAK0D,I  
AAI,EAAG1D,KAAKyD,IAAI,EAAG0c,IAEnC,SAASqiB,GAAC,EAAWC,GACrB,IAAMp+B,EAQI+B,GAA  
eC,KAAKE,EAAI79B,EAAG69B,EAAI9iC,EAAG8iC,EAAI59B,EAAG49B,EAAIpgC,GAC3D,GAAIgc,EAOA,

OANIm+B,EAUVgC,OACV,aAAasN,KAACKizB,EAUVgC,OAC5BoC,EAAMPc,MAAQugC,EAUVgC,MAE  
xBoC,EAAMPc,MAAQ,MAEXoC,EAGf,SAASM,GAAMN,GACX,GAAIA,EAAMM,MACN,OAAON,EAAMM  
,QAEb,MAAM,IAAIjR,MAAM,2CAIxB,SAAS0R,GAAMf,GACX,GAAIA,EAAMe,MACN,OAAOf,EAAMe,QA  
Eb,MAAM,IAAI1R,MAAM,2CAIxB,SAASgvC,GAAOt5B,GACZ,GAAIA,aAAa4S,GACb,OAAOE,WAAW9S,E  
AAE6S,KAACKhB,GAAG,KAAO7R,EAEnH,MAAQ,IAAMmH,EAEnH,OACID,GAAiB,iBAANmH,EACd,O  
AAOA,EAEP,KAAM,CACFxU,KAAM,WACNqW,QAAS,qDAWrBq3B,GAAiB,CACbz/B,IAAK,SAAUmB,EA  
AGC,EAAG3B,GACjB,IAAID,EAAl,EAKR,GAAI2B,aAAaiZ,GAAy,CACzB,IAAMiD,EAAMlc,EAAE/B,MAQ  
d,GAPA+B,EAAlkc,EAAl,GACRjc,EAAlc,EAAl,IACR5d,EAAl4d,EAAl,cAKSpD,GAAW,CACxB,IAAM1a,EA  
AKE,EACXA,EAAlf,EAAG2a,SAAS,GACHb1a,EAAlD,EAAG2a,SAAS,IAGxB,IAAM1Y,EAAlQ+B,GAAeK,K  
AAK3+B,EAAGC,EAAG3B,EAAGD,GAC3C,GAAIgc,EAEA,OADAA,EAAMPc,MAAQ,MACPoC,GAGfs+B,  
KAAM,SAAU3+B,EAAGC,EAAG3B,EAAGD,GACrB,IACI,GAAI2B,aAAapB,EAMb,OAJIP,EADA4B,EACIy+  
B,GAAOz+B,GAEPD,EAEEZ,MAEH,IAAIR,EAAMoB,EAEnB,IAAKR,EAAG,QAE/B,IAAMQ,EAAM,CAA  
CmB,EAAGC,EAAG3B,GAAGW,KAAl,SAAC,GAAK,OA7CxBo/B,EA6CkC,KA7CrCx5B,EA6CkCiG,aA5C7  
B8Y,IAAa5S,EAEE6S,KAACKhB,GAAG,KAC7BiB,WAAW9S,EAEnH,MAAQ2gC,EAAO,KAE5BF,GAAOt5B  
,GAJtB,IAAgBA,EAAGw5B,KA+CP,OADAvGc,EAAlqGc,GAAOrgC,GACJ,IAAIO,EAAMC,EAAKR,EAAG,Q  
AE7B,MAAO5O,MAEXgvC,IAAK,SAAU79B,EAAGjF,EAAGkF,GACjB,IAAIxC,EAAl,EACR,GAAIuC,aAAaq  
Y,GAAy,CACzB,IAAMiD,EAAMtb,EAEE3C,MAKd,GAJA2C,EAAlsb,EAAl,GACRvgB,EAAlugB,EAAl,IACR  
rb,EAAlqb,EAAl,cAESPd,GAAW,CACxB,IAAM1a,EAAlkyC,EACXA,EAAlzC,EAAG2a,SAAS,GACHb1a,EA  
AlD,EAAG2a,SAAS,IAGxB,IAAM1Y,EAAlQ+B,GAAeK,KAACK39B,EAAGjF,EAAGkF,EAAGxC,GAC3C,GAAI  
gc,EAEA,OADAA,EAAMPc,MAAQ,MACPoC,GAGfk+B,KAAM,SAAU39B,EAAGjF,EAAGkF,EAAGxC,GAC  
rB,IACI,GAAIuC,aAAahC,EAMb,OAJIP,EADA1C,EACI+iC,GAAO/iC,GAEPiF,EAExB,MAEH,IAAIR,EAAM  
gC,EAAE/B,IAAKR,EAAG,QAG/B,IAAlwgC,EACAC,EAEl,SAASC,EAAln+B,GAET,OAAQ,GADRA,EAAlA,  
EAAl,EAAlA,EAAl,EAAlKA,EAAl,EAAlA,EAAl,EAAlA,GACzB,EACDi+B,GAAMC,EAAlKD,GAAMj+B,EA  
Al,EAEnB,EAAlJA,EAAlQ,EACNk+B,EAEE,EAAlJ+B,EAAlQ,EACNi+B,GAAMC,EAAlKD,IAAO,EAAl,EAAlJ+  
B,GAAK,EAG/Bi+B,EAIfj+B,EAAlK89B,GAAO99B,GAAK,IAAO,IACxBjF,EAAl2D,GAAMo/B,GAAO/iC,IAA  
IkF,EAAlvB,GAAMo/B,GAAO79B,IAAIxC,EAAlIb,GAAMo/B,GAAOrgC,IAG3DwgC,EAAS,EAAlJh+B,GADL  
i+B,EAAlKj+B,GAAK,GAAMA,GAAlKIF,EAAl,GAAlKkF,EAAlIF,EAAlkF,EAAlIF,GAG1C,IAAMkD,EAAM,C  
ACS,IAAljBkgC,EAAln+B,EAAl,EAAl,GACG,IAAlfm+B,EAAln+B,GACa,IAAljBm+B,EAAln+B,EAAl,EAAl,IA  
GhB,OADAvC,EAAlqgC,GAAOrgC,GACJ,IAAIO,EAAMC,EAAlKR,EAAG,QAE7B,MAAO5O,MAGXuvC,IAA  
K,SAASp+B,EAAGjF,EAAG4D,GACHb,OAAO++B,GAAeW,KAAlKr+B,EAAGjF,EAAG4D,EAAG,IAGxC0/B,  
KAAM,SAASr+B,EAAGjF,EAAG4D,EAAGIB,GAIPb,IAAl3N,EACA6wB,EAAlJ3gB,EAAM89B,GAAO99B,GA  
AK,IAAO,IAAO,IACHcJF,EAAl+iC,GAAO/iC,GAAG4D,EAAlm/B,GAAOn/B,GAAGIB,EAAlqgC,GAAOrgC,G  
AOvC,IAAM6gC,EAAlK,CAAC3/B,EACRA,GAAK,EAAl5D,GACT4D,GAAK,GAAlTgiB,EAAlK3gB,EAAl,IADT  
IQ,EAAlqL,KAAlKojC,MAAOv+B,EAAl,GAAM,KAKTjF,GACb4D,GAAK,GAAK,EAAlgiB,GAAK5IB,IACjBy  
jC,EAAlO,CAAC,CAAC,EAAG,EAAG,GACjB,CAAC,EAAG,EAAG,GACP,CAAC,EAAG,EAAG,GACP,CAAC,  
EAAG,EAAG,GACP,CAAC,EAAG,EAAG,GACP,CAAC,EAAG,EAAG,IAEX,OAAOd,GAAeK,KAASb,IAAljB  
O,EAAGE,EAAlK1uC,GAAG,IACjB,IAAljBwuC,EAAGE,EAAlK1uC,GAAG,IACM,IAAljBwuC,EAAGE,EAAlK1  
uC,GAAG,IACX2N,IAGR0gC,IAAK,SAAU1+B,GACX,OAAO,IAAl2X,GAAUrX,GAAMN,GAAOO,IAEtCy+B,  
WAAY,SAAUh/B,GACIB,OAAO,IAAl2X,GAA2B,IAAljBrX,GAAMN,GAAO1E,EAAS,MAE/C2jC,UAAW,SAA  
Uj/B,GACjB,OAAO,IAAl2X,GAA2B,IAAljBrX,GAAMN,GAAOQ,EAAS,MAE/C0+B,OAAQ,SAASl/B,GACb,O  
AAO,IAAl2X,GAAU5W,GAAMf,GAAOO,IAEtC4+B,cAAe,SAAUn/B,GACrB,OAAO,IAAl2X,GAA2B,IAAljB5  
W,GAAMf,GAAO1E,EAAS,MAE/C8jC,SAAU,SAAUp/B,GACHb,OAAO,IAAl2X,GAA2B,IAAljB5W,GAAMf,  
GAAOd,EAAS,MAE/ChG,IAAK,SAAU8G,GACX,OAAO,IAAl2X,GAAU3X,EAAMxB,IAAl,KAEnCvJ,MAAO,  
SAAU+K,GACb,OAAO,IAAl2X,GAAU3X,EAAMxB,IAAl,KAEnCrM,KAAM,SAAU6N,GACZ,OAAO,IAAl2X  
,GAAU3X,EAAMxB,IAAl,KAEnCO,MAAO,SAAUiB,GACb,OAAO,IAAl2X,GAAUrX,GAAMN,GAAOhC,IAEt  
C0B,KAAM,SAAUM,GACZ,OAAO,IAAl2X,GAAU3X,EAAMN,OAASM,EAAMjB,MAAQ,IAAK,MAE3DsgC,  
UAAW,SAAUr/B,GACjB,IAAMq/B,EACD,MAASr/B,EAAMxB,IAAl,GAAK,IACpB,MAASwB,EAAMxB,IAAl  
,GAAK,IACxB,MAASwB,EAAMxB,IAAl,GAAK,IAEjC,OAAO,IAAlmZ,GAAU0nB,EAAYr/B,EAAMjB,MAA

Q,IAAK,MAExDugC,SAAU,SAAUt/B,EAAOu/B,EAAQC,GAG/B,IAAKx/B,EAAMxB,IACP,OAAO,KAEX,IAAM4/B,EAAM99B,GAAMN,GASIB,YAPsB,IAAXw/B,GAA2C,aAAjBA,EAAO5hC,MACxCwgC,EAAI9iC,GAM8iC,EAAI9iC,EAAIkC,EAAO3hC,MAAQ,IAGjCwgC,EAAI9iC,GAAKikC,EAAO3hC,MAAQ,IAE5BwgC,EAAI9iC,EAAI2D,GAAMm/B,EAAI9iC,GACX4iC,GAAKI+B,EAAOo+B,IAEvBqB,WAAy,SAAUz/B,EAAOu/B,EAAQC,GACjC,IAAMpB,EAAM99B,GAAMN,GASIB,YAPsB,IAAXw/B,GAA2C,aAAjBA,EAAO5hC,MACxCwgC,EAAI9iC,GAAM8iC,EAAI9iC,EAAIkC,EAAO3hC,MAAQ,IAGjCwgC,EAAI9iC,GAAKikC,EAAO3hC,MAAQ,IAE5BwgC,EAAI9iC,EAAI2D,GAAMm/B,EAAI9iC,GACX4iC,GAAKI+B,EAAOo+B,IAEvBsB,QAAS,SAAU1/B,EAAOu/B,EAAQC,GAC9B,IAAMpB,EAAM99B,GAAMN,GASIB,YAPsB,IAAXw/B,GAA2C,aAAjBA,EAAO5hC,MACxCwgC,EAAI59B,GAAM49B,EAAI59B,EAAI++B,EAAO3hC,MAAQ,IAGjCwgC,EAAI59B,GAAK++B,EAAO3hC,MAAQ,IAE5BwgC,EAAI59B,EAAIvB,GAAMm/B,EAAI59B,GACX09B,GAAKI+B,EAAOo+B,IAEvBuB,OAAQ,SAAU3/B,EAAOu/B,EAAQC,GAC7B,IAAMpB,EAAM99B,GAAMN,GASIB,YAPsB,IAAXw/B,GAA2C,aAAjBA,EAAO5hC,MACxCwgC,EAAI59B,GAAM49B,EAAI59B,EAAI++B,EAAO3hC,MAAQ,IAGjCwgC,EAAI59B,GAAK++B,EAAO3hC,MAAQ,IAE5BwgC,EAAI59B,EAAIvB,GAAMm/B,EAAI59B,GACX09B,GAAKI+B,EAAOo+B,IAEvBwB,OAAQ,SAAU5/B,EAAOu/B,EAAQC,GAC7B,IAAMpB,EAAM99B,GAAMN,GASIB,YAPsB,IAAXw/B,GAA2C,aAAjBA,EAAO5hC,MACxCwgC,EAAIpgC,GAAMogC,EAAIpgC,EAAIuhC,EAAO3hC,MAAQ,IAGjCwgC,EAAIpgC,GAAKuhC,EAAO3hC,MAAQ,IAE5BwgC,EAAIpgC,EAAIiB,GAAMm/B,EAAIpgC,GACXkgC,GAAKI+B,EAAOo+B,IAEvByB,QAAS,SAAU7/B,EAAOu/B,EAAQC,GAC9B,IAAMpB,EAAM99B,GAAMN,GASIB,YAPsB,IAAXw/B,GAA2C,aAAjBA,EAAO5hC,MACxCwgC,EAAIpgC,GAAMogC,EAAIpgC,EAAIuhC,EAAO3hC,MAAQ,IAGjCwgC,EAAIpgC,GAAKuhC,EAAO3hC,MAAQ,IAE5BwgC,EAAIpgC,EAAIiB,GAAMm/B,EAAIpgC,GACXkgC,GAAKI+B,EAAOo+B,IAEvB0B,KAAM,SAAU9/B,EAAOu/B,GACnB,IAAMnB,EAAM99B,GAAMN,GAIIB,OAFaO+B,EAAIpgC,EAAIuhC,EAAO3hC,MAAQ,IACvBwgC,EAAIpgC,EAAIiB,GAAMm/B,EAAIpgC,GACXkgC,GAAKI+B,EAAOo+B,IAEvB2B,KAAM,SAAU//B,EAAOu/B,GACnB,IAAMnB,EAAM99B,GAAMN,GACZ0+B,GAAON,EAAI79B,EAAIg/B,EAAO3hC,OAAS,IAIrc,OAFawgC,EAAI79B,EAAIm+B,EAAM,EAAI,IAAMA,EAAMA,EAEvBR,GAAKI+B,EAAOo+B,IAMvB4B,IAAK,SAAUc,EAAQC,EAAQC,GACtBA,IACDA,EAAS,IAAIxoB,GAAU,KAE3B,IAAMoI,EAAIogB,EAAOviC,MAAQ,IACnBwiC,EAAQ,EAAJrgB,EAAQ,EACZ/hB,EAAIsC,GAAM2/B,GAAQjiC,EAAIsC,GAAM4/B,GAAQliC,EAEPcqiC,IAAQD,EAAIpiC,IAAM,EAAKoiC,GAAKA,EAAIpiC,IAAM,EAAIoiC,EAAIpiC,IAAM,GAAK,EACzDsiC,EAAK,EAAID,EAET7hC,EAAM,CAACyhC,EAAOzhC,IAAI,GAAK6hC,EAAKH,EAAO1hC,IAAI,GAAK8hC,EAC9CL,EAAOzhC,IAAI,GAAK6hC,EAAKH,EAAO1hC,IAAI,GAAK8hC,GAENcvhC,EAAQkhC,EAAOlhC,MAAQghB,EAAImgB,EA AOnhC,OAAS,EAAIghB,GAERd,OAAO,IAAIxhB,EAAMC,EAAKO,IAE1BwhC,UAAW,SAAUvgC,GACjB,OA AOi+B,GAAewB,WAAWz/B,EAAO,IAAI2X,GAAU,OAE1D6oB,SAAU,SAAUxgC,EAAOygC,EAAMC,EAAO C,GAGpC,IAAK3gC,EAAMxB,IACP,OAAO,KASX,QAPqB,IAAVkiC,IACPA,EAAQzC,GAAeK,KAAK,IAAK,IAAK,IAAK,SAE3B,IAATmC,IACPA,EAAOxC,GAAeK,KAAK,EAAG,EAAG,EAAG,IAGpCmC,EAAK/gC,OA ASghC,EAAMhhC,OAAQ,CAC5B,IAAMkhC,EAAIF,EACVA,EAAQD,EACRA,EAAOG,EAOX,OAJID,OADqB,IAAdA,EACK,IAEAtC,GAAOsC,GAEnB3gC,EAAMN,OAASihC,EACRD,EAEAD,GAYCfI,KAAM,SAAU7gC, GACZ,OAAO,IAAI8J,EAAU9J,EAAMgB,WAE/BhB,MAAO,SAASnB,GACZ,GAAKA,aAAamc,IACb,uDAuD 9P,KAAKrM,EAAEjB,OAAS,CACxE,IAAMie,EAAMhd,EAAEjB,MAAM0D,MAAM,GAC1B,OAAO,IAAI/C,EAAMsd,OAAK1f,EAAW,IAAI0f,GAeZC,GAAKhd,aAAAn,IAAWM,EAAIN,EAAM2C,YAAyrc,EAAEjB,QAEj D,OADAiB,EAAEjB,WAAQzB,EACH0C,EAEX,KAAM,CACfO,KAAS,WACTqW,QAAS,oEAGjBk6B,KAAM ,SAAS9gC,EAAOu/B,GACIB,OAAOtB,GAAe+B,IAAI/B,GAAez/B,IAAI,IAAK,IAAK,KAAMwB,EAAOu/B,IA ExEwB,MAAO,SAAS/gC,EAAOu/B,GACnB,OAAOtB,GAAe+B,IAAI/B,GAAez/B,IAAI,EAAG,EAAG,GAAIw B,EAAOu/B,KC1btE,SAASyB,GAAWC,EAAMhB,EAAQC,GAC9B,IAGIgb,EAKAC,EAEAXnB,EACAYnB,EA XEC,EAAKpB,EAAOlhC,MAKZuiC,EAAKpB,EAAOnhC,MAOZY,EAAI,GAEVga,EAAK2nB,EAAKD,GAAM, EAAIC,GACpB,IAAK,IAAIjxC,EAAI,EAAGA,EAAI,EAAGA,IAGnB+wC,EAAKH,EAFLC,EAAKjB,EAAOzh C,IAAIInO,GAAK,IACrB8wC,EAAKjB,EAAO1hC,IAAIInO,GAAK,KAEjBspB,IACAYnB,GAAME,EAAKH,EA AKE,GAAMH,EACHBI,GAAMJ,EAAKC,EAAKC,KAAQznB,GAElCha,EAAEtP,GAAU,IAAL+wC,EAGX,OAAO ,IAAI7iC,EAAMoB,EAAGga,GAGxB,IAAM4nB,GAA0B,CAC5BC,SAAU,SAASN,EAAIC,GACnB,OAAOD,E

AAKC,GAehBM,OAAQ,SAASP,EAAIC,GACjB,OAAOD,EAAKC,EAAKD,EAAKC,GAElBO,QAAS,SAASR,  
EAAIC,GAElB,OADAD,GAAM,IACQ,EACVK,GAawBC,SAASN,EAAIC,GACrCI,GAawBE,OAAOP,EAAC,  
EAAGC,IAE/CQ,UAAW,SAAST,EAAIC,GACpB,IAAIrgC,EAAl,EACJlR,EAAl8xC,EAMR,OALIC,EAAC,KA  
CL/xC,EAAl,EACJ0R,EAAKogC,EAAK,IAAQxlC,KAAKkmC,KAAKV,KACpB,GAACA,EAAK,IAAMA,EA  
K,GAACA,GAEl/BA,GAAM,EAAl,EAAIC,GAAM/xC,GAAK0R,EAAl0gC,IAExCW,UAAW,SAASX,EAAIC,G  
ACpB,OAAOI,GAawBG,QAAQP,EAAID,IAE/CY,WAAy,SAASZ,EAAIC,GACrB,OAAOzlC,KAAKqmC,IAAI  
b,EAAKC,IAEzBa,UAAW,SAASd,EAAIC,GACpB,OAAOD,EAAKC,EAAK,EAAID,EAAKC,GAI9Bc,QAAS,S  
AASf,EAAIC,GACIB,OAAQD,EAAKC,GAAM,GAEvBe,SAAU,SAAShB,EAAIC,GACnB,OAAO,EAAlzlC,KA  
AKqmC,IAAIb,EAAKC,EAAK,KAItC,IAAK,IAAMjgB,MAAKqgB,GACRA,GAawBn0C,eAAe8zB,MACvC8f,  
GAAW9f,IAAK8f,GAAWhwC,KAAK,KAAMuwC,GAawBrgB,UCpEhEihB,GAAMB,SAAAtlC,GAMrB,OAHC  
C,MAAMC,QAAQF,EAAKe,OAC7Bf,EAAKe,MAAQd,MAAMD,OAKZ,CACXulC,MAAO,SAASr9B,GACZ,O  
AAOA,GAEXs9B,IAAK,eAAS,aAAAC,mBAAAA,IAAAC,kBACV,OAAoB,IAAhBA,EAAK9zC,OACE8zC,EA  
AK,GAET,IAAI74B,EAAM64B,IAErB76B,QAAS,SAAS86B,EAQhlC,GAItB,OFAA,EAAQA,EAAMI,MA  
Q,EAefukC,GAAlBK,GAQhlC,IAEpC/O,OAAQ,SAAS+zC,GACb,OAAO,IAAI7qB,GAUwqB,GAAlBK,GA  
AQ/zC,SAUIDg0C,MAAO,SAAS1N,EAAMb,EAAKwM,GACxB,IAAIjpB,EACAD,EACampB,EAAY,EACV  
C,EAAO,GACT1M,GACA1c,EAAK0c,EACLzc,EAAOsb,EAAMn3B,MACT8kC,IACAC,EAAYD,EAAK9kC,SA  
IrB6b,EAAO,EACPD,EAAKub,GAGT,IAAK,IAAI1kC,EAAl0pB,EAAMppB,GAAKmpB,EAAG5b,MAAOvN,G  
AAKsyC,EACnCC,EAAKzyC,KAAK,IAAIwnB,GAUtnB,EAAGmpB,EAAG5B,OAGIC,OAAO,IAAIgB,GA  
WgqB,IAE1BC,KAAM,SAASD,EAAME,GAaf,IAEE/gB,EACaghB,SAFE9zB,EAAQ,GAIR+zB,EA AU,SAAAn  
nB,GACZ,OAAIA,aAAerf,EACRqf,EAAlra,KAAK+M,EAAKpR,SAElB0e,GAUPknB,GAPAH,EAAKhlC,OA  
WglC,aAAgBK,GAMzBL,EAAK5yB,QACDgzB,EAAQJ,EAAK5yB,SAASf,MAC1B2zB,EAAK3zB,MACD2zB,  
EAAK3zB,MAAMrQ,IAAIokC,GACnBlmC,MAAMC,QAAQ6lC,GACVA,EAAKhkC,IAAIokC,GAET,CAACA,  
EAAQJ,IAZhB9lC,MAAMC,QAAQ6lC,EAAKhlC,OACRglC,EAAKhlC,MAAMgB,IAAIokC,GAef,CAACA,EA  
AQJ,EAAKhlC,QAYjC,IAAlslC,EAAY,SACZC,EA AU,OACVC,EAAY,SAEZN,EAAGpjB,QACHwjB,EAAYJ,E  
AAGpjB,OAAO,IAAMojB,EAAGpjB,OAAO,GAAGpV,KACzC64B,EAAUL,EAAGpjB,OAAO,IAAMojB,EA  
GpjB,OAAO,GAAGpV,KACvC84B,EAAYN,EAAGpjB,OAAO,IAAMojB,EAAGpjB,OAAO,GAAGpV,KACzCw  
4B,EAAKA,EAAG7zB,OAER6zB,EAAKA,EAAG9yB,QAGZ,IAAK,IAAI3f,EAAl,EAAGA,EAAl0yC,EAASt0C,  
OAAQ4B,IAAK,CACtC,IAAI+Q,SACAxD,SACE0b,EAAOypB,EAAS1yC,GAClBipB,aAAgBjP,GACHbjJ,EA2  
B,iBAAdkY,EAAKhP,KAAoBgP,EAAKhP,KAAOgP,EAAKhP,KAAK,GAAG1M,MAC/DA,EAAQ0b,EAAK1b,  
QAEbwD,EAAM,IAAIuW,GAUtnB,EAAl,GACxBuN,EAQ0b,GAGRA,aAAgBxN,IAIpBiW,EA AW+gB,EA  
G7zB,MAAM3N,MAAM,GACTb4hC,GACAnhB,EAAS5xB,KAAK,IAAIka,EAAY64B,EAC1BtlC,GACA,GA AO  
,EA AOjO,KAAK6N,MAAO7N,KAAKwS,kBAEnCihC,GACArhB,EAAS5xB,KAAK,IAAIka,EAAY+4B,EAC1B,  
IAAIzrB,GAUtnB,EAAl,IACIB,GA AO,EAAOV,KAAK6N,MAAO7N,KAAKwS,kBAEnCghC,GAC AphB,EA  
S5xB,KAAK,IAAIka,EAAY84B,EAC1B/hC,GACA,GA AO,EA AOzR,KAAK6N,MAAO7N,KAAKwS,kBAGvC8  
M,EAAM9e,KAAK,IAAI4e,EAAQ,CAAE,MAAc,CAAE,IAAI/M,EAAQ,GAAl,QACrD+f,EACA+gB,EAAG5zB,  
cACH4zB,EAAG1gC,oBAIX,OAAO,IAAI2M,EAAQ,CAAE,MAAc,CAAE,IAAI/M,EAAQ,GAAl,QACjDiN,EA  
CA6zB,EAAG5zB,cACH4zB,EAAG1gC,kBACLZ,KAAK7R,KAAKwN,WcZJdkmC,GA Aa,SAACC,EAAl1rB,E  
AAM7S,GAC1B,KAAMA,aAAa4S,IACf,KAAM,CAAEPnB,KAAM,WAAyqW,QAAS,6BAOVc,OALY,MAARg  
R,EACAA,EA AO7S,EAAE6S,KAET7S,EAAla,EA AEoT,QA EH,IAAIR,GA AU2rB,EAAGzrB,WAAW9S,EA AE  
nH,QAASga,ICT5C2rB,GAAGB,CAElBC,KAAO,KACP1E,MAAO,KACP8C,KAAO,KACPG,IAAO,KACP5nC,I  
AAO,GACPspC,IAAO,GACPC,IAAO,GACPC,KAAO,MACPC,KAAO,MACPC,KAAO,OAGX,IAAK,IAAM3iB,  
MAAKqiB,GACRA,GAACn2C,eAAe8zB,MAC7BqiB,GAACriB,IAAK4iB,GA AW9yC,KAAK,KAAM0K,KAAK  
wlB,IAAIqiB,GAACriB,MAIxEqiB,GAACjkC,MAAQ,SAACyF,EAAGmc,GACTb,IAAM6iB,OAAwB,IAAN7iB,E  
AAoB,EAAla,EA AEtjB,MACID,OAAOkmC,IAAW,SAAAE,GA AO,OAAAA,EAAl3lC,QAAQ0lC,KAAW,KAA  
Mh/B,ICpB1D,IAAMk/B,GAAS,SAAUC,EA AO/jC,GA E5B,QADAA,EA AO rD,MAAM0C,UAAU8B,MAAM2B,  
KAAK9C,IACrB1R,QACT,KAAK,EAAG,KAAM,CAA E8B,KAAM,WAAyqW,QAAS,kCAE/C,IAAIvW,EACA  
oT,EACAgUB,EACA0S,EACAC,EACAxSb,EACAYSb,EACAC,EAGAC,EAAS,GAEP/B,EAAS,GAef,IAAKnyC,  
EAAl,EAAGA,EAAl8P,EAAK1R,OAAQ4B,IAEZB,IADAOhC,EA AUtxB,EAAK9P,cACUsnB,GA WzB,GAHA0s

B,EAAsB,MADtBsB,EAA0C,MAD1CusB,EAA6C,KAA5B1S,EAAQ7Z,KAAKrY,iBAAmCpD,IAAdmoC,EAA0B,IAAI3sB,GAAU8Z,EAAQ7zB,MAAO0mC,GAAWnsB,QAAUsZ,EAAQtZ,SACjHP,KAAKrY,iBAAoCpD,IAAfkoC,EAA2BA,EAAaF,EAAevsB,KAAKrY,kBACjEpD,IAAfkoC,GAAqC,KAATzsB,GAAoD,KAArC2sB,EAA M,GAAGpsB,QAAQP,KAAKrY,WAAoBqY,EAAOysB,EACxHC,EAAqB,KAAT1sB,QAA6Bzb,IAAdmoC,EAA0B7S,EAAQ7Z,KAAKrY,WAAa+kC,OAERenoC,KADVsH,OAAmBtH,IAAfqmC,EAAO,KAA8B,KAAT5qB,GA AeA,IAASysB,EAAa7B,EAAO,IAAMA,EAAO5qB,IASzFwsB,EAAGD,KAA7BG,EAAM9gC,GAAgmU,KAAKr Y,iBAAmCpD,IAAdmoC,EAA0B,IAAI3sB,GAAU4sB,EAAM9gC,GAAg7F,MAAO0mC,GAAWnsB,QAAUosB, EAAM9gC,GAAg0U,SACvI+rB,GAASC,EAAevmC,MAAQwmC,EAAiBxmC,QACjDsmC,GAASC,EAAevmC, MAAQwmC,EAAiBxmC,SACID2mC,EAAM9gC,GAAGkuB,OAXf,CACI,QAAmBt1B,IAAfkoC,GAA4BzsB,IA ASysB,EACrC,KAAM,CAAe9zC,KAAM,WAAyqW,QAAS,sBAEvC47B,EAAO5qB,GAAQ2sB,EAAM91C,OA CrB81C,EAAMp0C,KAAKshC,QAfP30B,MAAMC,QAAQoD,EAAK9P,GAAGuN,QACtBd,MAAM0C,UAAUrP ,KAAK6gB,MAAM7Q,EAAMrD,MAAM0C,UAAU8B,MAAM2B,KAAK9C,EAAK9P,GAAGuN,QAuBhF,OAA oB,GAAhB2mC,EAAM91C,OACC81C,EAAM,IAEjBpkC,EAAOokC,EAAM31C,KAAI,SAAUZ,GAAG,OAAOA ,EAAE8B,MAAMnQ,KAAKwN,YAAaO,KAAK/N,KAAKwN,QAAQ+C,SAAW,IAAM,MAC7F,IAAI4J,GAAao 6B,EAAQ,MAAQ,WAAS/jC,YAGtC,CACXf,IAAK,eAAS,aAAAkjC,mBAAAA,IAAAniC,kBACV,IACI,OAAO8 jC,IAAO,EAAM9jC,GACtB,MAAO/Q,MAEb+P,IAAK,eAAS,aAAAmjC,mBAAAA,IAAAniC,kBACV,IACI,OA AO8jC,IAAO,EAAM9jC,GACvB,MAAO/Q,MAEbo1C,QAAS,SAAU3oB,EAAKjE,GACpB,OAAOiE,EAAI3D,U AAUN,EAAKha,QAE9B6mC,GAAI,WACA,OAAO,IAAI9sB,GAAUjC,KAAKc,KAE9B+oC,IAAK,SAAS1mC,E AAGC,GACb,OAAO,IAAI0Z,GAAU3Z,EAAEJ,MAAQK,EAAEL,MAAOI,EAAE4Z,OAE9C/X,IAAK,SAASoB, EAAG0jC,GACb,GAAiB,iBAAN1jC,GAA+B,iBAAN0jC,EACHC1jC,EAAL,IAAI0W,GAAU1W,GACIB0jC,EAA I,IAAIhtB,GAAUgtB,QACf,KAAM1jC,aAAa0W,IAAGbgtB,aAAhtB,IACnD,KAAM,CAAepnB,KAAM,WAAy qW,QAAS,6BAGvC,OAAO,IAAI+Q,GAAUjC,KAAKmE,IAAIoB,EAAErD,MAAO+mC,EAAE/mC,OAAQqD,E AAE2W,OAEvDgtB,WAAy,SAAU7/B,GAGIB,OAFe++B,IAAW,SAAAE,GAAO,OAAM,IAANA,IAAW,IAAKj /B,QCpF1C,CACX3V,EAAG,SAAU0Y,GACT,OAAO,IAAIkT,GAAO,IAAKIT,aAAeiW,GAAajW,EAAI+8B,UA AY/8B,EAAIik,OAAO,IAEIFk8B,OAAQ,SAAUhyB,GACd,OAAO,IAAIgC,EACPg7B,UAAUh9B,EAAIik,OAA O9Q,QAAQ,KAAM,OAAOA,QAAQ,KAAM,OAAOA,QAAQ,KAAM,OAAOA,QAAQ,KAAM,OAC7FA,QAAQ ,MAAO,OAAOA,QAAQ,MAAO,SAEIDA,QAAS,SAAUkxB,EAAQ+mB,EAAS9iB,EAAa+iB,GAC7C,IAAI1+B, EAAS0X,EAAOpgB,MAIpB,OAHAqkB,EAAoC,WAArBA,EAAY1xB,KACvB0xB,EAAYrkB,MAAQqkB,EAA YniB,QACpCwG,EAASA,EAAOxZ,QAAQ,IAAIkqB,OAAO+tB,EAAQnnC,MAAOonC,EAAQA,EAAMpnC,M AAQ,IAAKqkB,GACTe,IAAIjH,GAAOgD,EAAO7C,OAAS,GAAI7U,EAAQ0X,EAAO9C,UAEzD+pB,IAAK,SA AUjnB,GAIX,IAHA,IAAM7d,EAAOrD,MAAM0C,UAAU8B,MAAM2B,KAAKM,UAAW,GAC/C+C,EAAS0X, EAAOpgB,iBAEXvN,GAELiW,EAASA,EAAOxZ,QAAQ,WAAW,SAAAo4C,GAC/B,IAAMtnC,EAA2B,WAAj BuC,EAAK9P,GAAGE,MACpB20C,EAAMvmC,MAAM,MAASwB,EAAK9P,GAAGuN,MAAQuc,EAAK9P,G AAGyP,QACjD,OAAOo1C,EAAMvmC,MAAM,UAAywmC,mBAAMBvnC,GAASA,MAL1DvN,EAAL,EAAGA, EAAL8P,EAAL1R,OAAQ4B,MAAxBA,GAST,OADAiW,EAASA,EAAOxZ,QAAQ,MAAO,KACxB,IAAIkuB,G AAOgD,EAAO7C,OAAS,GAAI7U,EAAQ0X,EAAO9C,WcxBvDkqB,GAAM,SAACrgC,EAAGsgC,GAAS,OAA CtgC,aAAasgC,EAAQ17B,EAAQC,KAAOD,EAAQE,OACHey7B,GAAS,SAACvgC,EAAG6S,GACf,QAAazb,IA ATyb,EACA,KAAM,CAAERNB,KAAM,WAAyqW,QAAS,mDAGvC,GAAoB,iBADpBgR,EAA6B,iBAaFA,EAA Kha,MAAQbga,EAAKha,MAAQga,GAejD,KAAM,CAAERNB,KAAM,WAAyqW,QAAS,2DAEvC,OAAQ7B,aA Aa4S,IAAc5S,EAAE6S,KAAKhB,GAAGgB,GAAQjO,EAAQC,KAAOD,EAAQE,UAGjE,CACX07B,UAAW,SA AUxgC,GACjB,OAAOqgC,GAAIrgC,EAAGoR,KAEIBqvB,QAAS,SAAUzgC,GACf,OAAOqgC,GAAIrgC,EAA GxG,IAEIBknC,SAAU,SAAU1gC,GACHb,OAAOqgC,GAAIrgC,EAAG4S,KAEIB+tB,SAAU,SAAU3gC,GACHB ,OAAOqgC,GAAIrgC,EAAGiW,KAEIB2qB,UAAW,SAAU5gC,GACjB,OAAOqgC,GAAIrgC,EAAG4E,IAEIBi8 B,MAAO,SAAU7gC,GACb,OAAOqgC,GAAIrgC,EAAG6W,KAEIBiqB,QAAS,SAAU9gC,GACf,OAAOugC,GA AOvgC,EAAG,OAERb+gC,aAAc,SAAU/gC,GACpB,OAAOugC,GAAOvgC,EAAG,MAERbghC,KAAM,SAAUhh C,GACZ,OAAOugC,GAAOvgC,EAAG,OAERbugC,UACA1tB,KAAM,SAAUie,EAAKjE,GACjB,KAAMie,aAA eIE,IACjB,KAAM,CAAepnB,KAAM,WACVqW,QAAS,+CAA8CiV,aAAepD,GAAY,oCAAsC,KAWHl,OAPQb, EAFJA,EACIA,aAAgBjO,EACTiO,EAAKha,MAELga,EAAK9X,QAGT,GAej,IAAI6X,GAAUke,EAAIje,MAA



Oga,IAEpCouB,WAAY,SAAUjhC,GACIB,OAAO,IAAI+E,EAAU/E,EAAE6S,oBCpDhBxmB,GACX,IAAMR,EAAY,CAAeyf,mBAakB8I,mBAetC,OAZA9I,EAAiBhC,YAAysqB,IAC7BtoB,EAAiB/S,IAAI,UAAWqR,EAAynN,KAAKxQ,KAAK2d,IACtD0B,EAAiBhC,YAAyrO,IAC7BqQ,EAAiBhC,YAAy43B,IAC7B51B,EAAiBhC,qBCIBNjd,GAEX,IAAM80C,EAAW,SAACC,EAActpC,GAAS,OAAA,IAAI+e,GAAl/e,EAAMspC,EAAa3oC,MAAO2oC,EAAahkC,iBAaiBX,KAAK2kC,EAAahpC,UAE3H,MAAO,CAAepC,WAAY,SAASC,EAAcC,GAEnCA,IACDA,EAAeD,EACfA,EAAe,MAGnB,IAAIE,EAAWF,GAAGBA,EAAazoC,MACxC4oC,EAAWF,EAAa1oC,MACtBuE,EAAkBsS,KAAKwS,gBACvBhR,EAAmBgR,EAAgBgE,YACrChE,EAAgBhR,iBAAmBgR,EAAgBskC,UAEjDC,EAAgBF,EAAStmC,QAAQ,KACnCic,EAAW,IACQ,IAAnBoqB,IACApqB,EAAWkqB,EAASiIC,MAAMoIC,GAC1BF,EAAWA,EAASiIC,MAAM,EAAGoIC,IAEjC,IAAMvpC,EAAUwpC,EAYh3C,KAAKwN,SACjCA,EAAQypC,WAAY,EAepB,IAAMn1C,EAAcL,EAYy1C,eAAeL,EAAUr1C,EAAkBgM,EAAS/L,GAAa,GA EjG,IAAKK,EACD,OAAOy0C,EAASv2C,KAAM22C,GAG1B,IAAIQ,GAAY,EAGhB,GAAKT,EAcDS,EAAy, WAAW57B,KAAKq7B,OAdB,CAIf,GAAiB,mBAFjBA,EAAWn1C,EAAy21C,WAAWP,IAG9BM,GAAY,MAC T,CAEH,IAAM1W,EAAUh/B,EAAy41C,cAAcT,GAC1CO,EAAy,CAAC,WAAY,SAASzmC,QAAQ+vB,GAA W,EAERD0W,IAAaP,GAAY,WAMjC,IAAMU,EAAWx1C,EAYy1C,aAAaV,EAAUr1C,EAAkBgM,EAAS/L,G AC/E,IAAK61C,EAASlgC,SAEV,OADAzV,EAAOzB,KAAK,iCAAiC22C,6BACtCN,EAASv2C,KAAM22C,GA AgBD,GAE1C,IAAIc,EAAMF,EAASlgC,SACnB,GAAl+/B,IAAc11C,EAAy2C,aAC1B,OAAOIB,EAASv2C,K AAM22C,GAK1B,IAAMe,EAAM,QAAQd,OAFpBY,EAAML,EAAy11C,EAAy2C,aAAaD,GAAOhC,mBAAM BgC,IAE/B7qB,EAETC,OAAO,IAAIV,GAAl,IAAIZ,GAAO,IAAIqsB,MAAQA,GAAK,EAAO13C,KAAK6N,MA AO7N,KAAKwS,iBAakBsS,KAAK6N,MAAO7N,KAAKwS,mBDhD7EmIC,CAAQ12C,IACrCif,EAAiBhC,YAA Yu0B,IAC7BvyB,EAAiBhC,YAAyrI,IAC7BqK,EAAiBhC,YAAygwB,IAC7BhuB,EAAiBhC,YAAy2P,IAC7B3 N,EAAiBhC,YErBV,CAAek5B,eAAgB,SAASC,GAC9B,IAAIC,EACAC,EAIAvkB,EAEA9yB,EACA2P,EACA2 nC,EACAC,EACA7oC,EATA8oC,EAAe,SACfC,EAAqB,mCACnBC,EAAy,CAAC7nC,UAAU,GAEvB8nC,EAA iBR,EAAU1nC,MAAMioC,GAOvC,SAASE,IACL,KAAM,CAAe13C,KAAM,WACVqW,QAAS,yIAejB,OAXwB ,GAAPBrD,UAAU9U,QACN8U,UAAU,GAAG3F,MAAMnP,OAAS,GAC5Bw5C,IAEJR,EAAQIkC,UAAU,GAA G3F,OACd2F,UAAU9U,OAAS,EAC1Bw5C,IAEAR,EAAQ3qC,MAAM0C,UAAU8B,MAAM2B,KAAKM,UAA W,GAG1CycC,GACJ,IAAK,YACDN,EAAuB,oCACvB,MACJ,IAAK,WACDA,EAAuB,oCACvB,MACJ,IAAK,k BACDA,EAAuB,sCACvB,MACJ,IAAK,eACDA,EAAuB,sCACvB,MACJ,IAAK,UACL,IAAK,oBACDG,EAAe,S ACfH,EAAuB,4BACvBI,EAAqB,2CACrB,MACJ,QACI,KAAM,CAAev3C,KAAM,WAAyqW,QAAS,oHAK3C, IAFAuc,EAAW,8DAA8D0kB,qBAA+BH,MAEnGr3C,EAAI,EAAGA,EAAIo3C,EAAMh5C,OAAQ4B,GAAK,E AC3Bo3C,EAAMp3C,aAAcuoB,IACpB5Y,EAAQynC,EAAMp3C,GAAGuN,MAAM,GACvB+pC,EAAWF,EAA Mp3C,GAAGuN,MAAM,KAe1BoC,EAAQynC,EAAMp3C,GACds3C,OAAWxrC,GAGT6D,aAAiBzB,KAAoB,I AANIO,GAAWA,EAAL,IAAMo3C,EAAMh5C,cAAwB0N,IAAbwrC,GAA6BA,aAAoBhwB,KACxHswB,IAEJL, EAAgBD,EAAWA,EAAS7nC,MAAMioC,GAAmB,IAAN13C,EAAU,KAAO,OACxE00,EAAQiB,EAAMjB,MA CdokB,GAAY,iBAaiBykB,mBAA8B5nC,EAAMS,aAAW1B,EAAQ,EAAL,kBAakBA,MAAW,SAOzH,OALaok B,GAAY,KAAK0kB,oBAA8BC,6BAE/C3kB,EAAWgiB,mBAAMbhiB,GAGvB,IAAIvH,GAAL,IAAIZ,GAAO,K AD1BmI,EAAW,sBAAsBA,OACUA,GAAU,EAAOxzB,KAAK6N,MAAO7N,KAAKwS,iBAakBsS,KAAK6N,M AAO7N,KAAKwS,oBFvDpHkO,EAAiBhC,YAAy65B,IAEtBt3C,eG3Basf,EAAMIjB,GAE1B,IAAI7C,EACA3 2B,GAFJxB,EAAUA,GAAW,IAEGwkB,UACIB42B,EAAU,IAAIj8B,EAASY,KAAK/f,GAET,iBAAdwkB,GAA 2B1U,MAAMC,QAAQyU,KACHDA,EAAyJv,OAAO+R,KAAKd,GAAW5S,KAAI,SAAU4E,GAC7C,IAAI5F, EAAQ4T,EAAUhO,GAQtB,ONM5F,aAAiBsmB,GAAKxa,QACIB9L,aAAiBsmB,GAAKtL,aACxBhb,EAAQ,I AAIsmB,GAAKtL,WAAW,CAAChb,KAEjCA,EAAQ,IAAIsmB,GAAKxa,MAAM,CAAC9L,KAERB,IAAIsmB,G AAK7Z,YAAy,IAAI7G,EAAK5F,GAAO,EAAO,KAAM,MAE7DwqC,EAAQp7B,OAAS,CAAC,IAAIkX,GAAK nV,QAAQ,KAAMyC,KAG7C,IAQItS,EACampC,EATE3tB,EAAW,CACb,IAAI7c,GAAQ6wB,oBACZ,IAAI7w B,GAAQuzB,6BAA4B,GACxC,IAAIvzB,GAAQwzB,cACZ,IAAIxzB,GAAQ8c,aAAa,CAACza,SAAUiK,QAAQn d,EAAQkT,aAGIDooC,EAAkB,GASxB,GAAl7C,EAAQuE,cAAe,CACvB82C,EAAkBr7C,EAAQuE,cAAcsM,U ACxC,IAAK,IAAIxN,EAAL,EAAGA,EAAL,EAAGA,IAEnB,IADAg4C,EAAgBE,QACRrpC,EAAImpC,EAAgB7 5B,OACpBtP,EAAEspC,iBACQ,IAANn4C,IAA2C,IAAhCi4C,EAAgBjoC,QAAQnB,KACnCopC,EAAgBn4C,K AAK+O,GACrBA,EAAE6oB,IAAI7X,IAIA,IAAN7f,IAAoC,IAAZBqqB,EAASra,QAAQnB,KACxBA,EAAEupC,

aACF/tB,EAASIK,QAAQtR,GAGjBwb,EAASvqB,KAAK+O,IAQtCipC,EAAYj4B,EAAK1O,KAAK4mC,GAEtB,IAAS/3C,EAAl,EAAGA,EAAlqqB,EAASjsB,OAAQ4B,IACjCqqB,EAASrqB,GAAG03B,IAAIogB,GAIpB,GAAIn7C,EAQEuE,cAER,IADA82C,EAAGBE,QACRrpC,EAImpC,EAAGB75B,QACK,IAAZBkM,EAASra,QAAQnB,KAA6C,IAAhCopC,EAAGBjoC,QAAQnB,IACtDA,EAEE6oB,IAAIogB,GAKIB,OAAOA,EC5FX,IA0JIO,iBAZJA,WAAyjuB,GACR9qB,KAAK8qB,KAAOA,EACZ9qB,KAAK+qB,SAAW,GACHB/qB,KAAK0nC,cAAgB,GACrB1nC,KAAK5C,eAAiB,GACtBh5C,KAAKi5C,iBAAmB,GACxBj5C,KAAKe,aAAe,GACpBf,KAAKozC,UAAY,EACjBpzC,KAAKk5C,YAAc,GACnB15C,KAAKm5C,OAAS,IAAIruB,EAAKsuB,aAAatuB,GA8I5C,OAvIIuB,uBAAA,SAAWkIB,GACP,GAAlA,EACA,IAAK,IAAIz0B,EAAl,EAAGA,EAAlY0B,EAQr2B,OAAQ4B,IAChCV,KAAK20B,UAAUQ,EAQz0B,KAUnC24C,sBAAA,SAAUzkB,EAQrzB,EAUmf,GACxB1gB,KAAKi5C,iBAAiBz4C,KAAKo0B,GACvBrzB,IACAvB,KAAKk5C,YAAy33C,GAAyqzB,GAe7BA,EA00kB,SACP1kB,EA00kB,QAAQt5C,KAAK8qB,KAAM9qB,KAAM0gB,GAAoB1gB,KAAK8qB,KAAK7pB,UAAUyf,mBAQHf24B,gBAAA,SAAI93C,GACA,OAAOvB,KAAKk5C,YAAy33C,IAQ5B83C,uBAAA,SAAWnrC,GACPIO,KAAK+qB,SAASvqB,KAAK0N,IAQvBmrC,4BAAA,SAAGBE,EAACc,GAC1B,IAAIC,EACJ,IAAKA,EAakB,EAAGA,EAakBz5C,KAAK0nC,cAAc5oC,UACvDkB,KAAK0nC,cAAc+R,GAAiBD,UAAyA,GADeC,KAKvEz5C,KAAK0nC,cAAc/mC,OAAO84C,EAAlB,EAAG,CAACF,eAAcC,cAQjEH,6BAAA,SAAlBK,EAeF,GAC5B,IAAIC,EACJ,IAAKA,EAakB,EAAGA,EAakBz5C,KAAK5C,eAAel6C,UACxDkB,KAAKg5C,eAAeS,GAAiBD,UAAyA,GADeC,KAKxEz5C,KAAKg5C,eAAer4C,OAAO84C,EAAlB,EAAG,CAACC,gBAeF,cAOnEH,2BAAA,SAAM,GAACX35C,KAAKe,aAAaP,KAAKm5C,IAQ3BN,6BAAA,WAEI,IADA,IAAM3R,EAAGB,GACbhnC,EAAl,EAAGA,EAAlV,KAAK0nC,cAAc5oC,OAAQ4B,IAC3CgnC,EAAClnC,KAAKR,KAAK0nC,cAAchnC,GAA64C,cAE7C,OAAO7R,GAQX2R,8BAAA,WAEI,IADA,IAAML,EAAlB,GACdt4C,EAAl,EAAGA,EAAlV,KAAKg5C,eAAel6C,OAAQ4B,IAC5Cs4C,EAaex4C,KAAKR,KAAKg5C,eAAet4C,GAAGg5C,eAE/C,OAAOV,GAQXK,wBAAA,WACI,OAAOr5C,KAAK+qB,UAGhBsuB,oBAAA,WACI,IAAMtqC,EA0/O,KACb,MAAO,CACH44C,MAAO,WAEH,OADA7pC,EAAKqkC,UAAy,EACVrkC,EAAKgc,SAASHc,EAAKqkC,WAE9Bv0B,IAAK,WAEH,OADA9P,EAAKqkC,UAAy,EACVrkC,EAAKgc,SAASHc,EAAKqkC,aAUtCiG,4BAAA,WACI,OAAOr5C,KAAKe,mBAMd64C,GAAuB,SAAS9uB,EAAM+uB,GAlxC,OAHA,GAAed,KACfA,GAAK,IAAIM,GAAcvuB,IAEpBiUB,ICHjX,ICfI17C,GACAsE,MDHJ,SAAOBmzB,GACxB,IAAI9IB,EAQ8IB,EAQ9IB,MAAM,mFAC1B,IAAKA,EACH,MAAM,IAAlP,MAAM,oBAAsBo1B,GAWxC,MARU,CACRglB,MAAO3qC,SAASH,EAAM,GAAl,IAC1B+qC,MAAO5qC,SAASH,EAAM,GAAl,IAC1BgrC,MAAO7qC,SAASH,EAAM,GAAl,IAC1BirC,IAAKjrC,EAAM,IAAM,GACjBkrC,MAAOlrC,EAAM,IAAM,iBEUCvN,EAaAV,GACjC,IAAlO5C,EAAlBC,EAakBC,EAAWC,EAKIDD,WczBoBE,GA4DpB,kBA1DI,WAAyH6B,EAAMnH,GACdpZ,KAAKugB,KAAOA,EACZvgB,KAAKoZ,QAAUA,EAsDvB,OAnDIohC,kBAAA,SAAMn9C,GACF,IAAI7C,EAEA4B,EADEZjC,EAAS,GAef,IACI6hC,EAAYiC,GAACz6C,KAAKugB,KAAMljB,GACvC,MAAOoC,GACL,MAAM,IAAlqX,EAUrx,EAAGO,KAAKoZ,SAGhC,IACI,IAAM7I,EAAWiK,QAAQnd,EAQkT,UAC7BA,GACA5O,EAAOzB,KAAK,mIAIhB,IAAMw6C,EAeA,CACjBnqC,WACAKL,gBAAlBpe,EAQoe,gBACzBsL,YAAavM,QAAQnd,EAQ0pB,aAC7BvY,aAAc,GAEdnR,EAQs9C,WACRP,EAAMb,IAAIG,EAAlB19C,EAQs9C,WACHdhkC,EAOMW,IAAMstB,EAAlBjqC,MAAMqoC,EAAWkC,EAAC16C,KAAKoZ,UAEIEzC,EAOMW,IAAM0rB,EAUroC,MAAMuqC,GAEnC,MAAOj7C,GACL,MAAM,IAAlqX,EAUrx,EAAGO,KAAKoZ,SAGhC,GAAl/b,EAQEuE,cAER,IADA,IAAMo3C,EAAlB37C,EAQEuE,cAAcg5C,oBACpCl6C,EAAl,EAAGA,EAAlS4C,EAel6C,OAAQ4B,IAcVciW,EAOMW,IAAMksB,EAet4C,GAAGknC,QAAQjxB,EAOMW,IAAK,CAAE6tB,UAAWP,EAakB/8C,UAAAS+b,QAASpZ,KAAKoZ,UAQjH,IAAK,IAAMyhC,KALPx9C,EAQs9C,YACRhcC,EA01H,IAAMmrC,EAAlBU,wBAGICnkC,EAAYC,QAAU,GACEpZ,KAAKoZ,QAAQ2hC,MACxB/6C,KAAKoZ,QAAQ2hC,MAAMt9C,eAAeo9C,IAASA,IAAS76C,KAAKoZ,QAAQ4hC,cACjErkC,EAAYC,QAAQ5Y,KAAKq6C,GAG5B,OAAlkC,QD/BH6jC,CADZJ,WE5BqBa,EAAlBx5C,GAGftC,kBA9EI,WAAyPe,GACR2C,KAAK3C,QAAUA,EA2EvB,OAxEIk9C,kBAAA,SAAM7tC,EAUrp,EAAS+b,GACrB,IAAM+gC,EAakB,IAAlc,EACxB,CACIC,wBAAYb9hC,EAQ0uB,qBACjCp7B,WACAyuC,YAAa/hC,EAQhC,SACrBgkC,kBAAMbp7C,KAAK3C,QAAQ+9C,kBACHCC,aAAcr7C,KAAK3C,QAAQg+C,aAC3BC,eAAgBt7C,KAAK3C,QAAQk+C,wBAC7BC,kBAAMbx7C,KAAK3C,QAAQm+C,kBACHCC,kBAAMbz7C,KAAK3C,QAAQo+C,kBACHCC,kBAAMb17C,KAAK3C,QAAQq+C,kBACHCC,mBAAOB37C,KAAK3C,QAAQs+C,mBACjCC,oBAAB57C,KAAK3C,QAAQu+C,oBACICC,

2BAA4B77C,KAAK3C,QAAQw+C,6BAG3C/uB,EAAMqtB,EAAGBhqC,MAAM9S,GASIC,OARA2C,KAAK26  
C,UAYR,EAAGBQ,UACjC36C,KAAKq7C,aAAelB,EAAGBkB,aAChCr7C,KAAK3C,QAAQy+C,yBACb97C,K  
AAK87C,uBAAyB3B,EAAGB4B,kBAAkB/7C,KAAK3C,QAAQy+C,8BAE1CtvC,IAAnCxM,KAAK3C,QAAQm  
+C,wBAAyDhvC,IAAtBxM,KAAKq7C,eACrDr7C,KAAKq7C,aAAelB,EAAGB6B,eAAeh8C,KAAKq7C,eAerDv  
uB,EAAM9sB,KAAKi8C,mBAGtB1B,4BAAA,WAEI,IAAIc,EAAer7C,KAAKq7C,aACxB,GAAIr7C,KAAK3C,  
QAAQu+C,oBAAqB,CACIC,QAAuBpvC,IAAnBxM,KAAK26C,UACL,MAAO,GAEXU,EAAe,gCAAAGC55C,EA  
AYg2C,aAAaz3C,KAAK26C,WAGjF,OAAI36C,KAAK3C,QAAQw+C,2BACN,GAGPR,EACO,wBAAwBA,QA  
E5B,IAGXd,iCAAA,WACI,OAAOv6C,KAAK26C,WAGhBJ,iCAAA,SAAqBI,GACjB36C,KAAK26C,UAYYA,  
GAGrBJ,qBAAA,WACI,OAAOv6C,KAAK3C,QAAQu+C,qBAGxBBr,4BAAA,WACI,OAAOv6C,KAAKq7C,cA  
GhBd,8BAAA,WACI,OAAOv6C,KAAK3C,QAAQk+C,yBAGxBhB,6BAAA,WACI,OAAOv6C,KAAK87C,6BFh  
DDvB,CADnBJ,WG3BqB14C,GAoJrB,kBAIJI,WAAyPE,GACR2C,KAAKk8C,KAAO,GACZl8C,KAAKm8C,U  
AAY9+C,EAAQqP,SACzB1M,KAAKo8C,aAAe/+C,EAAQ89C,YAC5Bn7C,KAAKq8C,yBAA2Bh/C,EAAQ69C,  
wBACpC79C,EAAQ+9C,oBACRp7C,KAAKs8C,mBAAqBj/C,EAAQ+9C,kBAAkBj+C,QAAQ,MAAO,MAEvE6  
C,KAAKu8C,gBAAkBI/C,EAAQi+C,eAC/Bt7C,KAAKq7C,aAAeh+C,EAAQg+C,aACxBh+C,EAAQm+C,oBAC  
Rx7C,KAAKw8C,mBAAqBn/C,EAAQm+C,kBAAkBr+C,QAAQ,MAAO,MAEnEE,EAAQo+C,mBACRz7C,KA  
AKy8C,mBAAqBp/C,EAAQo+C,kBAAkBt+C,QAAQ,MAAO,KACQ,MAAvE6C,KAAKy8C,mBAAmB1pC,OA  
AO/S,KAAKy8C,mBAAmB39C,OAAS,KACHekB,KAAKy8C,oBAAsB,MAG/Bz8C,KAAKy8C,mBAAqB,GAE9  
Bz8C,KAAK08C,mBAAqBr/C,EAAQq+C,kBACIC17C,KAAK28C,+BAAiC17C,EAAym7C,wBAEID58C,KAAK  
68C,YAAc,EACnB78C,KAAK88C,QAAU,EAuHvB,OApHI7B,2BAAA,SAAe/9B,GAQX,OAPild,KAAKw8C,oB  
AAgE,IAAIcT/B,EAAXM,QAAQ1Q,KAAKw8C,sBAEtB,QADvBt/B,EAAOA,EAAK2S,UAAU7vB,KAAKw8  
C,mBAAmB19C,SACrCiU,OAAO,IAAkC,MAAnBmK,EAANK,KAAO,KACvCmK,EAAOA,EAAK2S,UAAU,  
KAIvB3S,GAGX+9B,8BAAA,SAakB15C,GAGd,OAFAA,EAAWA,EAASpE,QAAQ,MAAO,KACnCoE,EAAW  
vB,KAAKg8C,eAAez6C,IACvBvB,KAAKy8C,oBAAsB,IAAMI7C,GAG7C05C,gBAAA,SAAIrtC,EAAOd,EAA  
Ue,EAAOuM,GAGxB,GAAXM,EAAL,CAIA,IAAI6J,EAAOlC,EAAAc,EAASC,EAAev8C,EAehD,GAAIoM,G  
AAYA,EAASvL,SAAU,CAC/B,IAAI27C,EAACl9C,KAAKo8C,aAAatvC,EAASvL,UAE7C,GAZivB,KAAKq8C,y  
BAAyBvvC,EAASvL,aAEvCsM,GAAS7N,KAAKq8C,yBAAyBvvC,EAASvL,WACpC,IAAKsM,EAAQ,GAezBq  
vC,EAACa,EAAYvrC,MAAM3R,KAAKq8C,yBAAyBvvC,EAASvL,iBAOvDiL,IAAhB0wC,EAEA,YADAI9C,K  
AAKk8C,KAAK17C,KAAKoN,GAMnBqvC,GADAF,GADAG,EAACa,EAAYrtB,UAAU,EAAGhiB,IACbwB,M  
AAM,OACJ0tC,EAAYj+C,OAAS,GAMrD,GAFak+C,GADAvIC,EAAQ7J,EAAMyB,MAAM,OACJoI,EAAM3Y  
,OAAS,GAE3BgO,GAAYA,EAASvL,SACrB,GAAK6Y,EAKD,IAAK1Z,EAAL,EAAGA,EAAI+W,EAAM3Y,OA  
AQ4B,IAC1BV,KAAKm9C,oBAAoBC,WAAW,CAAEC,UAAW,CAAehC,KAAMrV,KAAK68C,YAAcn8C,EA  
AI,EAAG4U,OAAC,IAAN5U,EAAUV,KAAK88C,QAAU,GACHpgC,SAAU,CAAERH,KAAM0nC,EAAYj+C,O  
AAS4B,EAAG4U,OAAC,IAAN5U,EAAUu8C,EAACn+C,OAAS,GACnFw+C,OAAQt9C,KAAK+7C,kBAAkBjvC  
,EAASvL,iBAPhDvB,KAAKm9C,oBAAoBC,WAAW,CAAEC,UAAW,CAAehC,KAAMrV,KAAK68C,YAAc,E  
AAGvnC,OAAQtV,KAAK88C,SACxFpgC,SAAU,CAAERH,KAAM0nC,EAAYj+C,OAAQwW,OAAQ2nC,EAAC  
n+C,QAC5Dw+C,OAAQt9C,KAAK+7C,kBAAkBjvC,EAASvL,YAU/B,IAAjBkW,EAAM3Y,OACnKB,KAAK88  
C,SAawe,EAAQI+C,QAExBkB,KAAK68C,aAAepIC,EAAM3Y,OAAS,EACnCbK,KAAK88C,QAAUE,EAAQI  
+C,QAG3BkB,KAAKk8C,KAAK17C,KAAKoN,KAGnBqtC,oBAAA,WACI,OAA4B,IAArBj7C,KAAKk8C,KAA  
Kp9C,QAGrBm8C,kBAAA,SAAMztC,GAGF,GAFAXN,KAAKm9C,oBAAsB,IAAI9C,KAAK28C,+BAA+B,CA  
AE9B,KAAM76C,KAAKu8C,gBAAiBgB,WAAy,OAEzGv9C,KAAK08C,mBACL,IAAK,IAAMn7C,KAAyVB,  
KAAKo8C,aACxB,GAAIp8C,KAAKo8C,aAAa3+C,eAAe8D,GAAW,CAC5C,IAAI+7C,EAASt9C,KAAKo8C,aA  
Aa76C,GAC3BvB,KAAKq8C,yBAAyB96C,KAC9B+7C,EAASA,EAAO3rC,MAAM3R,KAAKq8C,yBAAyB96C,  
KAExDvB,KAAKm9C,oBAAoBK,iBAAiBx9C,KAAK+7C,kBAAkBx6C,GAAW+7C,GAOXF,GAFAt9C,KAAK  
m8C,UAAUzuC,OAEOF,EAASxN,MAE3BA,KAAKk8C,KAAKp9C,OAAS,EAAG,CACtB,IAAIu8C,SACEoC,E  
AAmB//C,KAAKggD,UAAU19C,KAAKm9C,oBAAoBQ,UAE7D39C,KAAKq7C,aACLA,EAAer7C,KAAKq7C,a  
ACbr7C,KAAKs8C,qBACZjB,EAAer7C,KAAKs8C,oBAExBt8C,KAAKq7C,aAAeA,EAEPBr7C,KAAK26C,UA  
AY8C,EAGrB,OAAOz9C,KAAKk8C,KAAKnuC,KAAK,UHrHZktC,CADIBx5C,EAAC,IAAIH,EAAYG,EAAaV,  
IAEUU,IAErD64C,WIXBoB74C,GA+KpB,kBAPKI,WAAyqpB,EAAMtd,EAASowC,GACvB59C,KAAK8qB,KA

AOA,EACZ9qB,KAAKg7C,aAAe4C,EAAar8C,SACjCvB,KAAK+c,MAAQvP,EAAQuP,OAAS,GAC9B/c,KAAK  
oX,SAAW,GACHBpX,KAAK8nC,qBAAuB,GAC5B9nC,KAAK69C,KAAOrwC,EAAQqwC,KACpB79C,KAAKF  
,MAAQ,KACbE,KAAKwN,QAAUA,EAefxN,KAAK89C,MAAQ,GACb99C,KAAK+6C,MAAQ,GAuJrB,OA5IIg  
D,iBAAA,SAAK7gC,EAAMwV,EAAoBlgB,EAAiB65B,EAAe9kB,GAC3D,IAAM+yB,EAAGbt6C,KAAMg+C,E  
AAeh+C,KAAKwN,QAAQ5L,cAAcu3C,OAetEn5C,KAAK89C,MAAMt9C,KAAK0c,GAehB,IAAM+gC,EAAiB  
,SAAUx+C,EAAG8gB,EAAM6Y,GACtCkhB,EAacwD,MAAMn9C,OOAO25C,EAacwD,MAAMptC,QAAQwM  
,GAAO,GAe9D,IAAMghC,EAAqB9kB,IAAakhB,EAacU,aACID3O,EAac9S,UAAy95B,GAC1B8nB,EAAS,KA  
AM,CAACjI,MAAM,KAAK,EAAO,MACIC3d,EAAOxB,KAAK,YAAyI5B,iFAMnBkhB,EAacS,MAAM3hB,IA  
AciT,EAacvxB,SACjDw/B,EAacS,MAAM3hB,GAAY,CAAE7Y,OAAMljB,QAASgvC,IAEjD5sC,IAAM66C,E  
AAcx6C,QAASw6C,EAACx6C,MAAQL,GACvD8nB,EAAS9nB,EAAG8gB,EAAM29B,EAAoB9kB,KAIxC+kB,  
EAAC,CACHB3nC,YAAaxW,KAAKwN,QAAQgJ,YAC1BsgC,UAAWtkC,EAAGbSkC,UAC3B74B,SAAUzL,EA  
AgByL,SAC1B+8B,aAAcxoC,EAAGbwoC,cAG5B15C,EAacL,EAAyY1C,eAAeh6B,EAAM1K,EAAGbhr,iBAA  
kxB,KAAKwN,QAAS/L,GAERg,GAACK,EAAL,CAKA,IA4DIs8C,EACAC,EA7DEC,EAAMb,SAASF,GAC9B  
,IAAIXpB,EACE2pB,EAAMBH,EAAW78C,SAC9B6V,EAAWgnC,EAAMWhnC,SAASja,QAAG,UAAW,IAUxDgh  
D,EAAy38C,iBAAMBM,EAAykrB,QAAQuxB,GAC/CJ,EAAy3nC,cACZ2nC,EAAyIlgC,SAAWnc,EAAyIM,K  
AC9BusC,EAAC9sC,QAAGyQ,UAAy,GACnCnc,EAAy08C,SAASL,EAAy38C,iBAAB28C,EAAyRH,aAE9Dh  
1C,EAAy28C,eAAeN,EAAyIlgC,WAAanc,EAAy48C,4BACjEP,EAAyIlgC,SAAWnc,EAAyIM,KAAKowC,EA  
YrH,UAAWqH,EAAyIlgC,YAGnFkgC,EAAy58C,SAAWg9C,EAevB,IAAMI,EAAS,IAAInC,EAASM,MAAMw  
9B,EAAC9sC,SAEHdMxC,EAAO1W,gBAAiB,EACxBqS,EAacLjC,SAASmnC,GAAoBnnC,GAEvC5E,EAAGB0a,  
WAAamf,EAacnf,aAC3CixB,EAAyxB,WAAy,GAGxBmf,EAacpf,UACd2H,EAASopB,EAAY,WAAWxnC,E  
AAUunC,EAQR,EAAejO,EAACm,WAAyWR,cACtErnC,EACIBmnC,EAaerpB,EAAG,KAAM2pB,GAG7BN,  
EAae,KAAMrpB,EAAG2pB,GAe1BIS,EAacvxB,OACrBmjC,EAae,KAAM7mC,EAAMunC,IAI3BjE,EAACs,  
MAAMwD,IACHBjE,EAACs,MAAMwD,GAakBlhD,QAAQw7B,UAC9CwT,EAACxT,SAKIB,IAAI6N,GAAOiy  
,EAQR,EAAe6D,GAAaxgD,MAAMYz,GAAU,SAAU3X,EAAG8gB,GACxE09B,EAaex+C,EAAG8gB,EAAM  
g+B,MAJ5BN,EAae,KAAM3D,EAACs,MAAMwD,GAakBh+B,KAAMg+B,IAWvE/wC,EAAMwpC,EAAyH3C,  
KAAKwN,SAE7BkIB,IACAlB,EAAQilB,IAAM4Z,EAacpf,SAAW,MAAQ,SAG/Cof,EAacpf,UACdzf,EAAGq  
wC,KAAO,yBAEXrwC,EAAGqxC,WACRT,EAaAj,EAac,eAAe5hC,EAAM1K,EAAGbhr,iBAABgM,EAAS/  
L,EAaAK,GAEvGu8C,EAAL,EAae,WAAW7hC,EAAM1K,EAAGbhr,iBAABgM,EAAS/L,EAaAK,IAIHG0L  
,EAAGqxC,WACRT,EAaAt8C,EAAyY1C,aAAar6B,EAAM1K,EAAGbhr,iBAABgM,EAAS/L,GAEvF48C,EA  
AUv8C,EAAyK9C,SAAS9hC,EAAM1K,EAAGbhr,iBAABgM,EAAS/L,GAC5E,SAAC0X,EAAKilC,GACEjlC,  
EACA8kC,EAae9kC,GAefmlC,EAAiBF,MAKjCA,EACKA,EAAW78C,SAGZ+8C,EAAiBF,GAFjBH,EAAGG,G  
AIZC,GACPA,EAAGY,KAAKX,EAakBL,QaIG/BA,EAae,CAAEhnC,QAAS,qCAAqCiG,UJ5C3D6gC,CAAct8  
C,GAe9B,IAsCIwvC,EAtCEiO,WK9Bcz9C,EAAa+4C,EAAMwD,GAC5C,IAAMmB,EAAS,SAAU/nC,EAAG9Z,  
EAASkqB,GASrC,GARuB,mBAAZlqB,GACPkqB,EAAMwqB,EACXA,EAAM8hD,EAakBn/C,KAAK3C,QAAS,  
KAG1CA,EAAM8hD,EAakBn/C,KAAK3C,QAASA,GAAW,KAGpDkqB,EAAM,CACX,IAAM63B,EAAMOp/C,K  
ACb,OOAO,IAAIq/C,SAAQ,SAAUC,EAASC,GACICL,EAAG5rC,KAAK8rC,EAAMjoC,EAAG9Z,GAAS,SAAS  
8b,EAAKnL,GACxCmL,EACAomC,EAAMOpC,GAEPmmC,EAAGtxC,SAKpBhO,KAAKrc,MAAMwZ,EAAG9  
Z,GAAS,SAAS8b,EAAKoH,EAAMnH,EAAS/b,GACpD,GAAI8b,EAAG,OOAOoO,EAASpO,GAe3B,IAAIxC,E  
ACJ,IAEIA,EADkB,IAAI6jC,EAAMj6B,EAAMnH,GACnBjJ,MAAM9S,GAe7B,MAAG8b,GAAO,OOAOoO,EA  
ASpO,GAe9BoO,EAAS,KAAM5Q,OAK3B,OOAOuoC,ELPQM,CAAO/9C,EAAG44C,GAC7B18C,WM3Bc8D,E  
AAa+4C,EAAMwD,GAC5C,IAAMpgD,EAAG,SAAUwZ,EAAG9Z,EAASkqB,GAUpC,GARuB,mBAAZlqB,GA  
CPkqB,EAAMwqB,EACXA,EAAM8hD,EAakBn/C,KAAK3C,QAAS,KAG1CA,EAAM8hD,EAakBn/C,KAAK3C,  
QAASA,GAAW,KAGpDkqB,EAAM,CACX,IAAM63B,EAAMOp/C,KACb,OOAO,IAAIq/C,SAAQ,SAAUC,EAAS  
C,GACIC5hD,EAAM2V,KAAK8rC,EAAMjoC,EAAG9Z,GAAS,SAAS8b,EAAKnL,GACvCmL,EACAomC,EA  
AMOpC,GAEPmmC,EAAGtxC,SAKpB,IAAIyxC,EACA7B,SACE8B,EAAGB,IAAIrG,GAACr5C,MAAG3C,EAAG  
siD,oBAMvD,GAJAtID,EAAGuE,cAAGB89C,EAExBD,EAAM,IAAIjC,EAASM,MAAMzf,GAezBA,EAAGugD,  
aACRA,EAAGvD,EAAGugD,iBACpB,CACH,IAAMr8C,EAAMWIE,EAAGke,UAAy,QAC/Bu1C,EAAyV1C,EA  
ASpE,QAAG,YAAa,KACHdygD,EAae,CACXr8C,WACaiV,YAAaipC,EAAGjpC,YACrByH,SAAMwhC,EAAG

xhC,UAAy,GAC9Bzc,iBAaKbS1C,EACIBA,YACaKe,aAAcz5C,IAGD0c,UAAgD,MAApC2/B,EAAa3/B,SAAStM,OAAO,KACtDisC,EAAa3/B,UAAy,KAIjC,IAAM2hC,EAAU,IAAI7B,EAAC/9C,KAAMy/C,EAAS7B,GACjD59C,KAAKs6C,cAAgBsF,EAKjBviD,EAAQ83B,SACR93B,EAAQ83B,QAAQ9nB,SAAQ,SAASunB,GAC7B,IAAlirB,EAAyzoC,EACHb,GAAIwd,EAAOkRb,aAGP,GAFA1oC,EAAWwd,EAAOkRb,YAAy3iD,QAAQ,UAAW,KACjD0iD,EAAaH,EAAcvG,OAAOyF,WAAWxnC,EAAUqoC,EAASG,EAAShrB,EAAOv3B,QAASu3B,EAAOrzB,qBACtEuV,EACtB,OAAOyQ,EAASs4B,QAIpBH,EAAC/qB,UAAUC,MAKpC,IAAI8R,GAAO+Y,EAASG,EAAShC,GACxBjgD,MAAMwZ,GAAO,SAAU1X,EAAG8gB,GACvB,GAAI9gB,EAAK,OAAO8nB,EAAS9nB,GACzB8nB,EAAS,KAAMhH,EAAMq/B,EAASviD,KAC/BA,IAGf,OAAOM,ENpD0mf,CAAMrb,EAAa44C,EAAWC,GAEtC/qC,EAAIwwC,GAAa,UACjBC,EAAU,CACZlrB,QAAS,CAACvIB,EAEEuqC,MAAOvqC,EAEEwqC,MAAOxqC,EAEEyqC,OAC9BiG,OACA1rB,QACAjzB,cACAixB,uBACAsB,wBACApYB,cACAspB,YACA2b,UACAzIC,UAAWA,GAAUQ,GACrB+a,WACaY+B,gBAaIBd,EACjBI,iBAaKBH,EACIBI,UAAWH,EACX0D,cAAezD,EACf4E,SACAvhD,QACAmZ,YACA2jC,iBACA9a,QACA0Z,iBACA13C,UAKEu+C,EAAO,SAASjP,GACIB,OAAO,WACH,IAAMx7B,EAAM7I,OAAOoL,OAAOi5B,EAEEphC,WAE5B,OADAohC,EAEE5vB,MAAM5L,EAAKiI,MAAM0C,UAAU8B,MAAM2B,KAAKM,UAAW,IAC5C6B,IAIT0qC,EAAMvzC,OAAOoL,OAAOgoC,GAC1B,IAAK,IAAM5qC,KAAK4qC,EAAQzrB,KAGpB,GAAiB,mBADjB0c,EAAI+O,EAAQzrB,KAAKnf,IAEb+qC,EAAI/qC,EAEE1D,eAAiBwuC,EAAKjP,QAI5B,IAAK,IAAM1E,KADX4T,EAAI/qC,GAAXI,OAAOoL,OAAO,MACP15B,EAEZkP,EAAI/qC,GAAGm3B,EAEE76B,eAAiBwuC,EAAKjP,EAEE1E,IAC7C,OAHAyT,EAAQriD,MAAQqiD,EAAQriD,MAAM0D,KAAK8+C,GACnCH,EAAQd,OAASc,EAAQd,OAAO79C,KAAK8+C,GAE9BA,ED1FX,IAAIC,GAAY,GAGVlsB,GAAC,aACpBA,GAAYrkB,UAAyJD,OAAOkD,OAAO,IAAIyiB,GAAuB,CAC7DmsB,mCACI,OAAO,GAGX3wC,cAAK4kB,EAAUC,GACX,OAAKD,EAGE3yB,KAAKkzB,gBAAgBN,EAAWD,GAAUzV,KAFtC0V,GAKfytB,eAAMxtB,EAAKjyB,EAAM2mB,EAAU+4B,GACvB,IAAMC,EAAM,IAAIC,eACVC,GAAQpjD,GAAQqjD,gBAaIBrjD,GAAQsjD,UAU/C,SAASC,EAaeL,EAAKh5B,EAAU+4B,GAC/BC,EAAIM,QAAU,KAAON,EAAIM,OAAS,IACICt5B,EAASg5B,EAAIO,aACTP,EAAIQ,kBAaKB,kBACA,mBAAZT,GACdA,EAAQC,EAAIM,OAAQhuB,GAbQ,mBAAZB0tB,EAAS,kBACXT,EAAS,iBAaIB,YAEzBr/C,GAAOvB,MAAM,iBAaIByyB,OAC9B0tB,EAAIU,KAAK,MAAOpuB,EAAK4tB,GACrBF,EAAIW,iBAaIB,SAAUtgD,GAAQ,4CACvC2/C,EAAY,KAAK,MAWL9jD,GAAQqjD,iBAaIBrjD,GAAQsjD,UACHb,IAAfJ,EAAIM,QAAiBN,EAAIM,QAAU,KAAON,EAAIM,OAAS,IACvDt5B,EAASg5B,EAAIO,cAEbR,EAAQC,EAAIM,OAAQhuB,GAejB4tB,EACPF,EAAIa,mBAAqB,WACC,GAAlBb,EAALc,YACJT,EAaeL,EAAKh5B,EA AU+4B,IAItCM,EAaeL,EAAKh5B,EAAU+4B,IAItCgB,oBACI,OAAO,GAGXC,OBACInB,GAAY,IAGhBpB,kBAASz9C,EAAUC,EAakBnE,EAASoE,GAItCD,IAAQxB,KAAKy+C,eAAel9C,KACzCA,EAAWC,EAAMBD,GAGICA,EAAWIE,EAAQo1B,IAAMzyB,KAAK0yB,mBAAMbnxB,EAAUIE,EAAQo1B,KAAOlxB,EAElEIE,EA AUA,GAAW,GAIRb,IACMH,EADY8C,KAAKkzB,gBAAgB3xB,EAAU5B,OAAO6hD,SAAStkD,MACrC21B,IA CtB9jB,EAAy/O,KAElB,OAAO,IAAIq/C,SAAQ,SAACC,EAASC,GACzB,GAAILiD,EAAQokD,cAAgBrB,GAA UIjD,GACIC,IACI,IAAMwkD,EAAWtB,GAAUIjD,GAC3B,OAAOoiD,EAAQ,CAAEloC,SAAUsqC,EA AUngD,SA AUrE,EAAMykD,QAAS,CAAEc,aAAc,IAAIC,QACpF,MAAOpiD,GACL,OAAO8/C,EAAO,CAAEh+C,SAAU rE,EAAM+Z,QAAS,sBAAsB/Z,gBAaKBuC,EAEEwX,UAI3FII,EAAKsxC,MAAMnjD,EAAMG,EAAQwgD,MA AM,SAAUBoC,EAAM2B,GAExDxB,GAAUIjD,GAAQ+iD,EAGIBX,EAAQ,CAAEloC,SAAU6oC,EAAM1+C,SA AUrE,EAAMykD,QAAS,CAAEc,qBACtD,SAAOBf,EAAQhuB,GAC3B0sB,EAAO,CAAE3+C,KAAM,OAAQq W,QAAS,IAAI4b,qBAAsBguB,MAAW3jD,kCAMrEiZ,EAAM2rC,GAGIB,OAFazkD,GAAU8Y,EACVxU,GAA SmgD,EACF5tB,IQxGLkIB,GAAe,SAAStuB,GAC1B9qB,KAAK8qB,KAAOA,GAIHbsuB,GAAavpC,UAAyJD,O AAOkD,OAAO,IAAI+jB,GAAwB,CAC/DkrB,oBAAWx9C,EAAUoxB,EAAUnlB,EAAS/L,EAAaK,GACjD,OAA O,IAAIu9C,SAAQ,SAAC0C,EAASxC,GACzBz9C,EAAyK9C,SAASz9C,EAAUoxB,EAAUnlB,EAAS/L,GAC7C w9C,KAAK8C,GAASC,MAAMzC,yBCdrB5/C,EAAQmrB,EAAMztB,GAKK1B,MAAO,CACHsQ,IAXJ,SAAEIo, EAAGwiD,GACT5kD,EAAQ6kD,gBAA6C,SAA3B7kD,EAAQ6kD,eAED,YAA3B7kD,EAAQ6kD,eA7BvB,SAAS BziD,EAAGwiD,GACrB,IACM1gD,EAAW9B,EAEE8B,UAAy0gD,EACzBE,EAAS,GACX72B,GAAa7rB,EA AEmB,MAAQ,qBAaKBnB,EAEEwX,SAAW,+CAA6C1V,EAejG6gD,EAAy,SAAC3iD,EAAGiB,EAAG2hD,Q ACA71C,IAAjB/M,EAEEsY,QAAQRX,IACVyhD,EAAO3hD,KAPE,mBAOYrD,QAAQ,YAAagS,SAAS1P,EAEE4V,KAAAM,KAAO,IAAM3U,EAAI,IACvEvD,QAAQ,YAAakID,GACrBIID,QAAQ,cAAesC,EAEEsY,QAAQRX,

MAI1CjB,EAAE4V,OACF+sC,EAAU3iD,EAAG,EAAG,IACb2iD,EAAU3iD,EAAG,EAAG,QACb2iD,EAAU  
3iD,EAAG,EAAG,IACb6rB,GAAW,YAAy7rB,EAAE4V,kBAAGb5V,EAAE6V,OAAS,SAAO6sC,EAAOp0C,  
KAAK,OAeVtO,EAAEyX,QAAUzX,EAAEsY,SAAW1a,EAAQilD,UAAy,KAC7Ch3B,GAAW,kBAAkB7rB,E  
AAEyX,OAEnC4T,EAAKnP,B,AAA07B,MAAMwR,GAODi3B,CAAa9iD,EAAGwiD,GACyB,mBAA3B5kD,EA  
AQ6kD,gBACtB7kD,EAAQ6kD,eAAe,MAAOziD,EAAGwiD,GA5JzC,SAAMbxiD,EAAGwiD,GACIB,IAGIO,E  
ACA13B,EAJEtB,EAAK,sBAAsBE,EAAGb+jD,GAAY,IAEvDvX,EAAO/qC,EAAO9B,SAASU,cAAc,OAGrC4j  
D,EAAS,GACT5gD,EAAW9B,EAAE8B,UAAy0gD,EACzBQ,EAAbIhD,EAASyN,MAAM,oBAAoB,GAE1D07  
B,EAAK1sC,GAAYA,EACjB0sC,EAAKgY,UAAy,qBAEjBp3B,EAAU,QAAO7rB,EAAEmB,MAAQ,qBAAkBn  
B,EAAEwX,SAAW,wCACtD,uBAAuB1V,OAAakhD,UAExC,IAAML,EAAy,SAAC3iD,EAAGiB,EAAG2hD,Q  
ACA71C,IAAjB/M,EAAEsY,QAAQrX,IACVyhD,EAAO3hD,KAhBE,qEAgBYrD,QAAQ,YAAAgS,SAAS1P,EA  
AE4V,KAAM,KAAO,IAAM3U,EAAL,IACvEvD,QAAQ,YAAakID,GACrBlID,QAAQ,cAAesC,EAAEsY,QAAQr  
X,MAI1CjB,EAAE4V,OACF+sC,EAAU3iD,EAAG,EAAG,IACb2iD,EAAU3iD,EAAG,EAAG,QACb2iD,EA  
AU3iD,EAAG,EAAG,IACb6rB,GAAW,WAAW7rB,EAAE4V,kBAAGb5V,EAAE6V,OAAS,eAAa6sC,EAAOp0  
C,KAAK,aAE5EtO,EAAEyX,QAAUzX,EAAEsY,SAAW1a,EAAQilD,UAAy,KAC7Ch3B,GAAW,0BAA0B7rB,  
EAAEyX,MAAM7H,MAAM,MAAMsC,MAAM,GAAG5D,KAAK,UAE3E28B,EAAKiY,UAAyR3B,EAGjBs3B,  
EAAkBJjD,EAAO9B,SAAU,CAC/B,mDACA,yBACA,sBACA,kBACA,aACA,IACA,8BACA,mBACA,sBACA,k  
BACA,kBACA,IACA,4BACA,kBACA,kBACA,aACA,yBACA,IACA,iCACA,kBACA,IACA,2BACA,mBACA,q  
BACA,yBACA,aACA,IACA,0BACA,cACA,IACA,+BACA,cACA,qBACA,uBACA,iCACA,KACfKQ,KAAK,MA  
AO,CAAE9P,MAAO,kBAEvByC,EAAKmY,MAAMrjD,QAAU,CACjB,iCACA,yBACA,yBACA,qBACA,6BAC  
A,0BACA,cACA,gBACA,uBACFuO,KAAK,KAeA,gBAAhB1Q,EAAQylD,MACRN,EAAQO,aAAy,WACHB,IA  
AMlID,EAAW8B,EAAO9B,SACIBgwC,EAAOhwC,EAASgwC,KACIBA,IACIhwC,EAASO,eAAeJ,GACxB6vC,  
EAAKmV,aAAatY,EAAM7sC,EAASO,eAAeJ,IAEHd6vC,EAAKvuC,aAAaorC,EAAMmD,EAAK9uC,YAEjCkk  
D,cAAcT,MAEnB,KAqDHU,CAAUzjD,EAAGwiD,IAUjBkB,OAhDJ,SAAQBjmC,GACZ7f,EAAQ6kD,gBAA6C,  
SAA3B7kD,EAAQ6kD,eAED,YAA3B7kD,EAAQ6kD,gBAE0B,mBAA3B7kD,EAAQ6kD,gBACtB7kD,EAAQ6k  
D,eAAe,SAAUhlC,GAjBzC,SAAYBA,GACrB,IAAMhQ,EAAOVN,EAAO9B,SAASO,eAAe,sBAAsBF,EAAGBgf,  
IAC9EHq,GACAA,EAAK7N,WAAWE,YAAy2N,GAU5Bk2C,CAAgBlmC,MC9GtB7f,GCTK,CAEH4wB,mBA  
AmB,EAGnBo1B,SAAS,EAKT9yC,UAAU,EAGV+yC,MAAM,EAONvmC,MAAO,GAGP1M,OOAO,EAKPkP,e  
AAe,EAGfgkC,UAAU,EAKVtlC,SAAU,GAMVzH,aAAa,EAQbH,KAAM,EAGN0Q,aAAa,EAKbqgB,WAAy,KA  
IZC,WAAy,KAGZjb,QAAS,IdtDjB,GAAlzsB,OOAOmrB,KACP,IAAK,IAAMrZ,MAAO9R,OOAOmrB,KACjB  
nrB,OOAOmrB,KAAKrtB,eAAegU,MAC3BpU,GAAQoU,IAAO9R,OOAOmrB,KAAKrZ,eEbvB9R,EAAQtC,GA  
GpBD,EAAyC,EAASulD,EAAsBjD,SAEZ6M,IAA3BnP,EAAQqjD,iBACRrjD,EAAQqjD,eAAiB,yDAAYDnlC,  
KAAK5b,EAAO6hD,SAASgC,WAS3GnmD,EAAQojD,MAAQpjD,EAAQojD,QAAS,EACjCpjD,EAAQsjD,UAA  
YtjD,EAAQsjD,YAAa,EAGzCtjD,EAAQomD,KAAOpmD,EAAQomD,OAASpmD,EAAQqjD,eAAiB,IAAO,MA  
EHrjD,EAAQylD,IAAMzlD,EAAQylD,MAAOc,aAA5BnjD,EAAO6hD,SAASkC,UACd,WAA5B/jD,EAAO6hD,  
SAASkC,UACY,aAA5B/jD,EAAO6hD,SAASkC,UACf/jD,EAAO6hD,SAASmC,MACbhkD,EAAO6hD,SAASm  
C,KAAK7kD,OAAS,GAClCzB,EAAQqjD,eAAmC,cACzC,cAEN,IAAMjlC,EAAkB,6CAA6CkoB,KAAKhkC,EA  
AO6hD,SAAS1/B,MACtFrG,IACape,EAAQoe,gBAAkBA,EAAGB,SAGjBjP,IAAZBnP,EAAQokD,eACRpkD,EA  
AQokD,cAAe,QAGHj1C,IAApBnP,EAAQumD,UACRvmD,EAAQumD,SAAU,GAGlBvmD,EAAQkZ,eACRIZ,E  
AAQmZ,YAAc,OF1B9BqtC,CAAkBlkD,OOAQtc,IAE1BA,GAAQ83B,QAAU93B,GAAQ83B,SAAW,GAejCx1  
B,OOAOmkD,eACPzmD,GAAQ83B,QAAU93B,GAAQ83B,QAAQj0B,OOAOvB,OOAOmkD,mBAQhDh3B,GA  
CA7tB,GACA4jD,GAPE/3B,YGdUnrB,EAAQtC,GACpB,IAAMQ,EAAW8B,EAAO9B,SACIBitB,EAAOi5B,KA  
Ebj5B,EAAKztB,QAAUA,EACf,IAAMoE,EAACqpB,EAAKrpB,YACnByyB,EAAC8vB,GAAG3mD,EAASytB,E  
AAKnP,QAC/BG,EAAC,IAAlOyB,EACxBzyB,EAAywiD,eAAeniD,GAC3BgpB,EAAKoJ,YAAcA,EACnBpJ,E  
AAKsuB,aAAeA,YCxBrtuB,EAAMztB,GAYlBA,EAAQilD,cAAuC,IAArBjID,EAAQilD,SAA2BjID,EAAQilD,S  
AA4B,gBAAhBjID,EAAQylD,IAVnE,EAEC,EAUIBzlD,EAAQ6mD,UACT7mD,EAAQ6mD,QAAU,CAAC,CAC  
f9jD,MAAO,SAASL,GACR1C,EAAQilD,UAhBD,GAiBP6B,QAAQRc,IAAI/hD,IAGpBI,KAAM,SAASJ,GACP1  
C,EAAQilD,UApBF,GAqBN6B,QAAQRc,IAAI/hD,IAGpBG,KAAM,SAASH,GACP1C,EAAQilD,UAXBF,GAyB  
N6B,QAAQjkD,KAAKH,IAGrBD,MAAO,SAASC,GACR1C,EAAQilD,UA5BD,GA6BP6B,QAAQRkD,MAAMC,

OAK9B,IAAK,IAAIW,EAAl,EAAGA,EAAlrD,EAAQ6mD,QAAQplD,OAAQ4B,IACxCoqB,EAAKnpB,OAAOtB,YAAyhd,EAAQ6mD,QAAQxjD,IDb5C0jD,CAAy5B,EAAMztB,GACIB,IAAM8kD,EAASkC,GAAe1kD,EAQmrB,EAAMztB,GACtCinD,EAAQx5B,EAAKw5B,MAAQjnD,EAAQinD,gBE1BvB3kD,EAAQtC,EAASsE,GAC7B,IAAI2iD,EAAQ,KACZ,GAAoB,gBAAhBjnD,EAAQylD,IACR,IACIwB,OAawC,IAAxB3kD,EAAO4kD,aAAgC,KAAO5kD,EAAO4kD,aAcvE,MAAO3mD,IAEb,MAAO,CACH4mD,OAAQ,SAAStnC,EAAM0kC,EAAcva,EAAYvpC,GAC7C,GAAIwmD,EAAO,CACP3iD,EAAOxB,KAAK,UAAU+c,gBACtB,IACIonC,EAAMG,QAAQvnC,EAAMpf,GACpBwmD,EAAMG,QAAWvnC,eAAkB0kC,GAC/Bva,GACaid,EAAMG,QAAWvnC,UAAaxf,KAAKggD,UAAUrW,IAEnD,MAAO5nC,GAELkC,EAAO7B,MAAM,mBAAMbod,wCAI5CwnC,OAAQ,SAASxnC,EAAMykC,EAASta,GAC5B,IAAMva,EAAYw3B,GAASA,EAAMK,QAAQznC,GACnC0nC,EAAYN,GAAASA,EAAMK,QAAWznC,gBACxC6E,EAAYuiC,GAASA,EAAMK,QAAWznC,WAK1C,GAHAMqB,EAaAa,GAAc,GAC3BtlB,EAAOA,GAAQ,KAEX6iC,GAAajD,EAAQC,cACpB,IAAIC,KAAKF,EAAQC,cAAciD,YAC5B,IAAIhd,KAAK+C,GAAWC,WACxBnnD,KAAKggD,UAAUrW,KAAgBtlB,EAE/B,OAAO+K,IFVyBg4B,CAAMnlD,EAAQtC,EAASytB,EAAKnpB,oBgxBxE,SAASojD,IACL,KAAM,CACFnkD,KAAM,UACNqW,QAAS,qEAljB,IAAM+tC,EAaiB,CACnBC,aAAc,SAASto,GAEnB,OADAoO,KACQ,GAEZG,cAAe,SAASvo,GAEPB,OADAoO,KACQ,GAEZI,eAAgB,SAASxo,GAERB,OADAoO,KACQ,IAIhBrkC,EAaiBhC,YAAysmC,GHG7BI,CAAUt6B,EAAKrpB,aAGXpE,EAAQ4D,WACR6pB,EAAK7pB,UAAUyf,iBAaiBhC,YAAyrhB,EAAQ4D,WAGxD,IAAMokD,EAAC,oBAEPB,SAASxyC,EAAM4C,GACX,IAAMC,EAAS,GACf,IAAK,IAAMC,KAAQF,EACXA,EAAlhY,eAAekY,KACnBD,EAAOC,GAAQF,EAaiE,IAG3B,OAAOD,EAIX,SAASrU,EAAKsW,EAAM2iC,GACHb,IAAMC,EAAYp4C,MAAM0C,UAAU8B,MAAM2B,KAAKM,UAAW,GACxD,OAAO,WACH,IAAMpD,EA AO+0C,EAAUrD,OAAOiM,MAAM0C,UAAU8B,MAAM2B,KAAKM,UAAW,IACpE,OAAO+D,EAAK0J,MAAMikC,EAAS90C,IAInC,SAASg1C,EAAWne,GAihB,IAHA,IACIwb,EADE/kD,EAASD,EAASqB,qBAaqB,SA GpCwB,EAAl,EAAGA,EAAl5C,EAAOgB,OAAQ4B,IAE/B,IADAmiD,EAAQ/kD,EAAO4C,IACLE,KAAKoO,M AAMq2C,GAAc,CAC/B,IAAMI,EAakB5yC,EAAMxV,GAC9BooD,EAAGbpe,WAAaA,EAC7B,IAAMqa,EA AWmB,EAAMF,WAAa,GACpC8C,EAAGBlkD,SAAW1D,EAAS2jD,SAAStkD,KAAKC,QAAQ,OAAQ,IAIIE2tB, EAAKo0B,OAAOwC,EA AU+D,EACIBpkD,GAAK,SAACwhD,EAAPjD,EAAGkX,GACRIX,EACA0iD,EAAO x0C,IAAIIO,EAAG,WAEdojD,EAAMjiD,KAAO,WACTiiD,EAAMnkD,WACNmKD,EAAMnkD,WAAWc,QAA UmX,EAAOmW,IAEIC+1B,EAAMF,UAAyhsC,EAAOmW,OAGIC,KAAM+1B,KAKzB,SAAS6C,EA Ae3nD,EA AOwpB,EAAUo+B,EAAQC,EA AWve,GAExD,IAAMoe,EAakB5yC,EAAMxV,GAC9BD,EAAYqoD,EAaiB1n D,GAC7B0nD,EAAGb5H,KAAO9/C,EAAM6C,KA EZBymC,IACAOe,EAAGbpe,WAAaA,GA6CjCv1C,EAAYk9C ,SAASjhD,EAAMb,KAAAM,KAAMuoD,EAaiBhkD,GACnDw9C,MAAK,SAAB,IA3CV,SAaiCA,GAC7B,IAA M6B,EAAO7B,EAAWHnC,SACIB8F,EAAOkhC,EA AW78C,SACIBogD,EAAUvD,EA AWuD,QAERbxD,EAAC,CAChB38C,iBAakBM,EAAYkrB,QAAQ9P,GACtC3b,SAAU2b,EACV89B,aAAc99B,EACd1G,YAAaivC,EAAGbjvC,aAMjC,GAHA2nC,EAAYrH,UAAyqH,EAAY38C,iBACpC28C,EAAYlgC,SAAWwnC,EAAGbxnC,UAAykgC,EAAY38C,iBAE3DmgD,EAAS,CACtA,EAQIE,UAAyA,EAEPB,IAAM94B,EAAMw3B,EAAMI,OAAOxn C,EAAMykC,EAAS8D,EAAGbpe,YACxD,IAAKse,GAAU74B,EAGX,OFA60B,EAQKE,OAAQ,OACHbt+B, EAAS,KAAmuf,EAAMzB,EAAMliD,EAAO4jD,EAASzkC,GAOIDiC,EAAOgB,OAAOjmC,GAEDuoC,EAAG B7H,aAAeO,EAC/BrzB,EAAKo0B,OAAOe,EAAMwF,GAAiB,SAACHmD,EAAGkX,GAC/BIX,GACAA,EAAEv C,KAAOggB,EACTqK,EAAS9nB,KAET6kD,EAAME,OAAOzmD,EAAMb,KAAMykD,EAAQC,aAAc6D,EAAG bpe,WAAy1wB,EAAOmW,KACIFvF,EAAS,KAAm5Q,EAAOmW,IAAKmzB,EAAMliD,EAAO4jD,EAASzkC, OAOOrD4oC,CAAwb1H,MACzB4D,OAAM,SAAA7oC,GACLgrC,QAAQrC,IAAI3oC,GACZoO,EAASpO,MAKr B,SAAS4sC,EAAGbx+B,EAAUo+B,EAAQte,GACvC,IAAK,IAAI3mC,EAAl,EAAGA,EAAlqB,EAAKk7B,OA AOlnD,OAAQ4B,IACpCgID,EA Ae56B,EAAKk7B,OAAOtlD,GAAI6mB,EAAUo+B,EAAQ76B,EAAKk7B,OA AOlnD,QAAU4B,EAAl,GAAl2mC,GAmIvF,OA3GAvC,EAAMk7B,MAAU,WAMX,OALKn7B,EAAKo7B,YACN p7B,EAAKg4B,IAAM,cArBE,gBAAbh4B,EAAGk4B,MACLh4B,EAAGk7B,WAAapD,aAAY,WACTbj4B,EAAK o7B,YACLpkD,EAAYy/C,iBACZwE,GAAgB,SAACtmD,EAAGqtB,EAAKlvB,EAAGG,EAAO4jD,GAC3BliD,E ACA0iD,EAAOx0C,IAAIIO,EAAGA,EAAEvC,MAAQa,EAAMb,MACvB4vB,GACP81B,EAakBjjD,EAAO9B,SA AUivB,EAAK/ub,SAIrDV,EAAQomD,QAYfzjD,KAAKkmD,WAAy,GACV,GAGXP7B,EAAKs7B,QAAU,W AAQe,OAAxDnD,cAAcn4B,EAAKq7B,YAAanmD,KAAKkmD,WAAy,GAAc,GAM3Fp7B,EAaku7B,+BAaiC,

WACIC,IAAMC,EAAQzoD,EAASqB,qBAAqB,QAC5C4rB,EAAKk7B,OAAS,GAEd,IAAK,IAAItd,EAAI,EAA GA,EAAl4ID,EAAMxnD,OAAQ4B,KACT,oBAAjB4ID,EAAM5ID,GAAG6ID,KAA8BD,EAAM5ID,GAAG6ID,IA AIv3C,MAAM,eACzDs3C,EAAM5ID,GAAGE,KAAKoO,MAAMq2C,KACrBv6B,EAAKk7B,OAAOxID,KAA K8ID,EAAM5ID,KASnCoqB,EAAK07B,oBAAsB,WAAM,OAAA,IAAIInH,SAAQ,SAACC,EAASC,GACnDz0B, EAAKu7B,iCACL/G,QA0Jx0B,EAAKuc,WAAa,SAAOf,GAAU,OAAA37B,EAAK47B,SAAQ,EAAMD,GAAQ ,IAEvD37B,EAAK47B,QAAU,SAACf,EAQte,EAAYka,GAIhC,OAHKoE,GAAUpE,KAAcC,IAAnBA,GAC9Bz /C,EAAYy/C,iBAET,IAAIIC,SAAQ,SAACC,EAASC,GACzB,IAAIoH,EACAC,EACAC,EACAC,EACJH,EAAY C,EAAU,IAAI/E,KAKF,KAFxBiF,EAakBh8B,EAAKk7B,OAAOlnD,SAI1B8nD,EAAU,IAAI/E,KACdgF,EAAo BD,EAAUD,EAC9B77B,EAAKnpB,OAAOxB,KAAK,gDACjBm/C,EAAQ,CACJqH,YACAC,UACAC,oBACAb, OAAQI7B,EAAKk7B,OAAOlnD,UAKxBinD,GAAGb,SAACtmD,EAAGqtB,EAAKlvB,EAAGG,EAAO4jD,GAC /B,GAAlIiD,EAGA,OAFa0iD,EAAOx0C,IAAIIO,EAAGA,EAAEvC,MAAQa,EAAMb,WAC9BqiD,EAAO9/C,G AGPkID,EAAQkE,MACR/6B,EAAKnpB,OAAOxB,KAAK,WAAWpC,EAAMb,qBAEIC4tB,EAAKnpB,OAAOx B,KAAK,YAAYpC,EAAMb,uBAEvC0ID,EAakBjjD,EAAO9B,SAAUivB,EAAK/uB,GACxC+sB,EAAKnpB,OA AOxB,KAAK,WAAWpC,EAAMb,uBAAqB,IAAI2kD,KAA+S,E,SAM5C,MAHxBE,IAIID,EAAoB,IAAIhF,KAA S8E,EACjC77B,EAAKnpB,OAAOxB,KAAK,uCAAuC0mD,QACxDvH,EAAQ,CACJqH,YACAC,UACAC,oBAC Ab,OAAQI7B,EAAKk7B,OAAOlnD,UAG5B8nD,EAAU,IAAI/E,OACf8D,EAAQte,GAGfme,EAAWne,OAIInBvc ,EAAKi8B,cAAgBvB,EACd16B,EH/PEvK,CAAK5gB,OAAQtC,IAU1B,SAAS2pD,GAAGb/G,GACjBA,EAAK1 +C,UACL4iD,QAAQjkD,KAAK+/C,GAEZ5iD,GAAQojD,OACTxD,GAAKM,YAAYsjD,WAZzBljD,OAAOmr B,KAAOA,GAgBVztB,GAAQumD,UACJ,SAASroC,KAAK5b,OAAO6hD,SAAS1/B,OAC9BgJ,GAAKm7B,QA GJ5oD,GAAQojD,QACT3zB,GAAM,oCACN7tB,GAAOpB,SAASoB,MAAQpB,SAASqB,qBAAqB,QAAQ,IAC9 D2jD,GAAQhID,SAASU,cAAc,UAEzBqC,KAAO,WACTiD,GAAMnkD,WACNmKd,GAAMnkD,WAAWc,QA AUstB,GAE3B+1B,GAAMlkD,YAAYd,SAASe,eAAekuB,KAG9C7tB,GAACKN,YAAYkkD,KAERB/3B,GAAKu7 B,iCACLv7B,GAAKm8B,iBAAmBn8B,GAAK47B,QAAqB,gBAAb57B,GAAKg4B,KAAuB7D,KAAK+H,GAAi BA" }

Found

in path(s):

\* /opt/cola/permits/1550489314\_1675273249.1374285/0/less-4-1-3-2-tgz/package/dist/less.min.js.map

No license file was found, but licenses were detected in source scan.

/\*\*

\* Less - Leaner CSS v4.1.3

\* <http://lesscss.org>

\*

\* Copyright (c) 2009-2022, Alexis Sellier <[self@cloudhead.net](mailto:self@cloudhead.net)>

\* Licensed under the Apache-2.0 License.

\*

\* @license Apache-2.0

\*/

Found in path(s):

\* /opt/cola/permits/1550489314\_1675273249.1374285/0/less-4-1-3-2-tgz/package/dist/less.min.js

## 1.89 audit 3.0.9



## 1.89.1 Available under license :

The MIT License (MIT)

Copyright (c) 2015-2016 Rico Sta. Cruz and other contributors

Copyright (c) 2016-2022 Zoltan Kochan and other contributors

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY,

WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

## 1.90 psmisc 23.6-1

### 1.90.1 Available under license :

GNU GENERAL PUBLIC LICENSE

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.

59 Temple Place, Suite 330, Boston, MA 02111-1307 USA

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Library General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

## GNU GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below,

refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but

does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can

be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for

making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot

distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of

this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

#### END OF TERMS AND CONDITIONS

##### How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the program's name and a brief idea of what it does.>  
Copyright (C) 19yy <name of author>

This program is free software; you can redistribute it and/or modify  
it under the terms of the GNU General Public License as published by  
the Free Software Foundation; either version  
2 of the License, or  
(at your option) any later version.

This program is distributed in the hope that it will be useful,  
but WITHOUT ANY WARRANTY; without even the implied warranty of  
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the  
GNU General Public License for more details.

You should have received a copy of the GNU General Public License  
along with this program; if not, write to the Free Software  
Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this  
when it starts in an interactive mode:

Gnomovision version 69, Copyright (C) 19yy name of author  
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.  
This is free software, and you are welcome to redistribute it  
under certain conditions; type `show c' for details.

The hypothetical commands  
`show w' and `show c' should show the appropriate  
parts of the General Public License. Of course, the commands you use may  
be called something other than `show w' and `show c'; they could even be  
mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your  
school, if any, to sign a "copyright disclaimer" for the program, if  
necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the program  
`Gnomovision' (which makes passes at compilers) written by James Hacker.

<signature of Ty Coon>, 1 April 1989  
Ty Coon, President of Vice

This General Public License does not permit incorporating your program into  
proprietary programs. If your program is a subroutine library, you may  
consider it more useful to permit linking proprietary applications with the



library. If this is what you want to do, use the GNU Library General Public License instead of this License.

# 1.91 safestring 4.1.25

## 1.91.1 Available under license :

No license file was found, but licenses were detected in source scan.

/\*

SafeString to Number conversion

Examples of SafeString to Number conversions and comparing these to the results from String methods

by Matthew Ford

Copyright(c)2020 Forward Computing and Control Pty. Ltd.

This example code is in the public domain.

[www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html](http://www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html)

\*/

Found in path(s):

\* /opt/cola/permits/1550499841\_1675274436.6722012/0/powerbroker2-safestring-4-1-25-0-gfac1370-tar-gz/PowerBroker2-SafeString-fac1370/examples/SafeString\_Tests/SafeStringToNum/SafeStringToNum.ino

No license file was found, but licenses were detected in source scan.

/\*

SafeString Case changes

Examples of how to change the case of a SafeString

by Matthew Ford

Mods Copyright(c)2020 Forward Computing and Control Pty. Ltd.

Modified from String Examples by Tom Igoe

This example code is in the public domain.

[www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html](http://www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html)

\*/

Found in path(s):

\* /opt/cola/permits/1550499841\_1675274436.6722012/0/powerbroker2-safestring-4-1-25-0-gfac1370-tar-gz/PowerBroker2-SafeString-

fac1370/examples/SafeString\_Tests/SafeStringCaseChanges/SafeStringCaseChanges.ino

No license file was found, but licenses were detected in source scan.

/\*

SafeString constructors and assignments

Examples of how to create SafeStrings and how to assign SafeStrings from other data types

also see the SafeStringFromArray, SafeStringFromCharPtr and SafeStringFromCharPtrWithSize examples

by Matthew Ford  
Mods Copyright(c)2020 Forward Computing and Control Pty. Ltd.  
Modified from String Examples by Tom Igoe  
This example code is in the public domain.

[www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html](http://www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html)  
\*/

Found in path(s):

\* /opt/cola/permits/1550499841\_1675274436.6722012/0/powerbroker2-safestring-4-1-25-0-gfac1370-tar-gz/PowerBroker2-SafeString-fac1370/examples/SafeString\_Tests/SafeString\_ConstructorAndDebugging/SafeString\_ConstructorAndDebugging.ino

No license file was found, but licenses were detected in source scan.

```
/* SafeStringWithArraysOfCstrings.ino
   Example of using SafeString for working with char[][][xx]
```

by Matthew Ford  
Copyright(c)2020 Forward Computing and Control Pty. Ltd.  
This example code is in the public domain.

download and install the SafeString library from Arduino library manager  
or from [www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html](http://www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html)  
\*/

Found in path(s):

\* /opt/cola/permits/1550499841\_1675274436.6722012/0/powerbroker2-safestring-4-1-25-0-gfac1370-tar-gz/PowerBroker2-SafeString-fac1370/examples/SafeStringWithArraysOfCstrings/SafeStringWithArraysOfCstrings.ino

No license file was found, but licenses were detected in source scan.

```
/*
   SafeString startsWith(), startsWithIgnoreCase(), endsWithCharFrom() and endsWith()
```

by Matthew Ford  
Copyright(c)2020 Forward Computing and Control Pty. Ltd.  
This example code is in the public domain.

[www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html](http://www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html)  
\*/

Found in path(s):

\* /opt/cola/permits/1550499841\_1675274436.6722012/0/powerbroker2-safestring-4-1-25-0-gfac1370-tar-gz/PowerBroker2-SafeString-fac1370/examples/SafeString\_Tests/SafeStringStartsWithEndsWith/SafeStringStartsWithEndsWith.ino

No license file was found, but licenses were detected in source scan.

/\*

sfStream.ino

SafeStringStream Unit test

Example of using SafeStringStream

by Matthew Ford

Copyright(c)2020 Forward Computing and Control Pty. Ltd.

This example code is in the public domain.

[https://www.forward.com.au/pfod/ArduinoProgramming/Serial\\_IO/index.html](https://www.forward.com.au/pfod/ArduinoProgramming/Serial_IO/index.html)

\*/

Found in path(s):

\* /opt/cola/permits/1550499841\_1675274436.6722012/0/powerbroker2-safestring-4-1-25-0-gfac1370-tar-gz/PowerBroker2-SafeString-fac1370/examples/SafeStringStream\_Tests/sfStream/sfStream.ino

No license file was found, but licenses were detected in source scan.

/\*

Blink

Turns an led on for one second, then off for one second, repeatedly.

Most Arduinos have an on-board led you can control. On the UNO, MEGA and ZERO it is attached to digital pin 13, on MKR1000 on pin 6. led is set to the correct led pin independent of which board is used.

If you want to know what pin the on-board led is connected to on your Arduino model, check the Technical Specs of your board at:

<https://www.arduino.cc/en/Main/Products>

modified 8 May 2014

by Scott Fitzgerald

modified 2 Sep 2016

by Arturo Guadalupi

modified 8 Sep 2016

by Colby Newman

This example code is in the public domain.

<http://www.arduino.cc/en/Tutorial/Blink>

\*/

Found in path(s):

\* /opt/cola/permits/1550499841\_1675274436.6722012/0/powerbroker2-safestring-4-1-25-0-gfac1370-tar-gz/PowerBroker2-SafeString-fac1370/examples/loopTimer/LoopTimer\_BlinkDelay/LoopTimer\_BlinkDelay.ino

No license file was found, but licenses were detected in source scan.

/\*

SafeString replace()

Examples of SafeString replace for chars and strings

by Matthew Ford

Copyright(c)2020 Forward Computing and Control Pty. Ltd.

This example code is in the public domain.

[www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html](http://www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html)

\*/

Found in path(s):

\* /opt/cola/permits/1550499841\_1675274436.6722012/0/powerbroker2-safestring-4-1-25-0-gfac1370-tar-gz/PowerBroker2-SafeString-fac1370/examples/SafeString\_Tests/SafeStringReplace/SafeStringReplace.ino

No license file was found, but licenses were detected in source scan.

/\*

SafeStringReader\_Assign.ino

This example = to SafeStringReader

by Matthew Ford

Copyright(c)2021 Forward Computing and Control Pty. Ltd.

This example code is in the public domain.

download and install the SafeString library from Arduino library manager

or from [www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html](http://www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html)

\*/

Found in path(s):

\* /opt/cola/permits/1550499841\_1675274436.6722012/0/powerbroker2-safestring-4-1-25-0-gfac1370-tar-gz/PowerBroker2-SafeString-fac1370/examples/SafeStringReader\_Assign/SafeStringReader\_Assign.ino

No license file was found, but licenses were detected in source scan.

/\*

SafeString substring()

Examples of SafeString substring

by Matthew Ford

Copyright(c)2020 Forward Computing and Control Pty. Ltd.

This example code is in the public domain.

[www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html](http://www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html)

\*/

Found in path(s):

\* /opt/cola/permits/1550499841\_1675274436.6722012/0/powerbroker2-safestring-4-1-25-0-gfac1370-tar-gz/PowerBroker2-SafeString-fac1370/examples/SafeString\_Tests/SafeStringSubstring/SafeStringSubstring.ino  
No license file was found, but licenses were detected in source scan.

/\*

SafeSting length(), trim()

by Matthew Ford

Copyright(c)2020 Forward Computing and Control Pty. Ltd.

This example code is in the public domain.

[www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html](http://www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html)

\*/

Found in path(s):

\* /opt/cola/permits/1550499841\_1675274436.6722012/0/powerbroker2-safestring-4-1-25-0-gfac1370-tar-gz/PowerBroker2-SafeString-fac1370/examples/SafeString\_Tests/SafeStringLengthTrim/SafeStringLengthTrim.ino  
No license file was found, but licenses were detected in source scan.

/\*

SafeString.h static memory SafeString library modified by  
Matthew Ford

Mods Copyright(c)2020 Forward Computing and Control Pty. Ltd.

All rights reserved subject to the License below

modified from

WString.h - String library for Wiring & Arduino

...mostly rewritten by Paul Stoffregen...

Copyright (c) 2009-10 Hernando Barragan. All right reserved.

Copyright 2011, Paul Stoffregen, paul@pjrc.com

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 St, Fifth Floor, Boston, MA 02110-1301 USA

\*/

Found in path(s):

```
* /opt/cola/permits/1550499841_1675274436.6722012/0/powerbroker2-safestring-4-1-25-0-gfac1370-tar-gz/PowerBroker2-SafeString-fac1370/src/SafeString.h
```

No license file was found, but licenses were detected in source scan.

```
/*
```

SafeString from char\* with specified size constructor

Examples of how to create SafeStrings from an existing pointer to a char[]

also see the SafeString\_ConstructorAndDebugging, SafeStringFromArray and SafeStringFromCharPtr examples

by Matthew Ford

Mods Copyright(c)2020 Forward Computing and Control Pty. Ltd.

Modified from String Examples by Tom Igoe

This example code is in the public domain.

[www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html](http://www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html)

```
*/
```

Found in path(s):

```
* /opt/cola/permits/1550499841_1675274436.6722012/0/powerbroker2-safestring-4-1-25-0-gfac1370-tar-gz/PowerBroker2-SafeString-
```

```
fac1370/examples/SafeString_Tests/SafeStringFromCharPtrWithSize/SafeStringFromCharPtrWithSize.ino
```

No license file was found, but licenses were detected in source scan.

```
/*
```

SafeStringReader\_flushInput.ino

This example flushes any initial input and also starts flushing if "flush" is found in the text stream

by Matthew Ford

Copyright(c)2021 Forward Computing and Control Pty. Ltd.

This example code is in the public domain.

download and install the SafeString library from Arduino library manager

or from [www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html](http://www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html)

```
*/
```

Found in path(s):

```
* /opt/cola/permits/1550499841_1675274436.6722012/0/powerbroker2-safestring-4-1-25-0-gfac1370-tar-gz/PowerBroker2-SafeString-fac1370/examples/SafeStringReader_flushInput/SafeStringReader_flushInput.ino
```

No license file was found, but licenses were detected in source scan.

```
/*
```

Appending to SafeStrings using the += operator and concat()

Examples of how to append different data types to SafeStrings

Also has examples of using hasError() method

by Matthew Ford

Mods Copyright(c)2020 Forward Computing and Control Pty. Ltd.

Modified from String Examples by Tom Igoe

This example code is in the public domain.

[www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html](http://www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html)

\*/

Found in path(s):

\* /opt/cola/permits/1550499841\_1675274436.6722012/0/powerbroker2-safestring-4-1-25-0-gfac1370-targz/PowerBroker2-SafeString-fac1370/examples/SafeString\_Tests/SafeStringAssignmentAndConcatOperator/SafeStringAssignmentAndConcatOperator.ino

No license file was found, but licenses were detected in source scan.

/\*

SafeString charAt() and setCharAt()

Examples of how to get and set characters of a SafeString

by Matthew Ford

Mods Copyright(c)2020 Forward Computing and Control Pty. Ltd.

Modified from String Examples by Tom Igoe

This example code is in the public domain.

[www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html](http://www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html)

\*/

Found in path(s):

\* /opt/cola/permits/1550499841\_1675274436.6722012/0/powerbroker2-safestring-4-1-25-0-gfac1370-targz/PowerBroker2-SafeString-fac1370/examples/SafeString\_Tests/SafeStringCharacters/SafeStringCharacters.ino

No license file was found, but licenses were detected in source scan.

/\*

Comparing SafeStrings

Examples of how to compare SafeStrings using the comparison operators

by Matthew Ford

Mods Copyright(c)2020 Forward Computing and Control Pty. Ltd.

Modified from String Examples by Tom Igoe

This example code is in the public domain.

[www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html](http://www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html)

\*/

Found in path(s):

\* /opt/cola/permits/1550499841\_1675274436.6722012/0/powerbroker2-safestring-4-1-25-0-gfac1370-targz/PowerBroker2-SafeString-fac1370/examples/SafeString\_Tests/SafeStringComparisonOperators/SafeStringComparisonOperators.ino

No license file was found, but licenses were detected in source scan.

/\*

Tokenizing SafeStrings and converting to numbers  
Examples of how to use the nextToken() and toLong() and toDouble() to parse a CSV line

by Matthew Ford  
Copyright(c)2020 Forward Computing and Control Pty. Ltd.  
This example code is in the public domain.

[www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html](http://www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html)

\*/

Found in path(s):

\* /opt/cola/permits/1550499841\_1675274436.6722012/0/powerbroker2-safestring-4-1-25-0-gfac1370-tar-gz/PowerBroker2-SafeString-fac1370/examples/SafeString\_Tests/SafeString\_nextToken/SafeString\_nextToken.ino

No license file was found, but licenses were detected in source scan.

/\*

OBD\_Processor.ino for SafeString V4.0.0+

Example of using SafeString to process Car OnBoardData

by Matthew Ford  
Copyright(c)2020 Forward Computing and Control Pty. Ltd.  
This example code is in the public domain.

download and install the SafeString library V4.0.0+ from Arduino library manager  
or from [www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html](http://www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html)

\*/

Found in path(s):

\* /opt/cola/permits/1550499841\_1675274436.6722012/0/powerbroker2-safestring-4-1-25-0-gfac1370-tar-gz/PowerBroker2-SafeString-fac1370/examples/OBD\_Processor/OBD\_Processor.ino

No license file was found, but licenses were detected in source scan.

/\*

SSring indexOf() and lastIndexOf()

by Matthew Ford  
Copyright(c)2020 Forward Computing and Control Pty. Ltd.  
This example code is in the public domain.

[www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html](http://www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html)

\*/

Found in path(s):

\* /opt/cola/permits/1550499841\_1675274436.6722012/0/powerbroker2-safestring-4-1-25-0-gfac1370-tar-



gz/PowerBroker2-SafeString-fac1370/examples/SafeString\_Tests/SafeStringIndexOf/SafeStringIndexOf.ino

No license file was found, but licenses were detected in source scan.

/\*

SafeString removeFrom(), removeBefore(), remove(), removeLast(), keepLast()

Examples of SafeString remove

by Matthew Ford

Copyright(c)2020 Forward Computing and Control Pty. Ltd.

This example code is in the public domain.

[www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html](http://www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html)

\*/

Found in path(s):

\* /opt/cola/permits/1550499841\_1675274436.6722012/0/powerbroker2-safestring-4-1-25-0-gfac1370-tar-

gz/PowerBroker2-SafeString-fac1370/examples/SafeString\_Tests/SafeStringRemove/SafeStringRemove.ino

No license file was found, but licenses were detected in source scan.

/\*

SafeString readUntil, non-blocking until delimiter found

Example of how to use the non-blocking readUntil() method to parse a CSV line

by Matthew Ford

Copyright(c)2020 Forward Computing and Control Pty. Ltd.

This example code is in the public domain.

[www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html](http://www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html)

\*/

Found in path(s):

\* /opt/cola/permits/1550499841\_1675274436.6722012/0/powerbroker2-safestring-4-1-25-0-gfac1370-tar-

gz/PowerBroker2-SafeString-fac1370/examples/SafeString\_Tests/SafeString\_readUntil/SafeString\_readUntil.ino

No license file was found, but licenses were detected in source scan.

/\*

SafeString.cpp V2.0.0 static memory SafeString library modified by

Matthew Ford

Mods Copyright(c)2020 Forward Computing and Control Pty. Ltd.

All rights reserved subject to the License below

extensively modified from

WString.cpp - SafeString library for Wiring & Arduino

...mostly rewritten by Paul Stoffregen...

Copyright (c) 2009-10 Hernando Barragan. All rights reserved.

Copyright 2011, Paul Stoffregen, paul@pjrc.com

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 St, Fifth Floor, Boston, MA 02110-1301 USA

\*/

Found in path(s):

\* /opt/cola/permits/1550499841\_1675274436.6722012/0/powerbroker2-safestring-4-1-25-0-gfac1370-tar-gz/PowerBroker2-SafeString-fac1370/src/SafeString.cpp

No license file was found, but licenses were detected in source scan.

/\* SafeStringInClasses\_1.ino

Example of using SafeString for Class char[]s

by Matthew Ford

Copyright(c)2020 Forward Computing and Control Pty. Ltd.

This example code is in the public domain.

download and install the SafeString library from Arduino library manager or from [www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html](http://www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html)

\*/

Found in path(s):

\* /opt/cola/permits/1550499841\_1675274436.6722012/0/powerbroker2-safestring-4-1-25-0-gfac1370-tar-gz/PowerBroker2-SafeString-fac1370/examples/SafeStringsInClasses\_1/SafeStringsInClasses\_1.ino

No license file was found, but licenses were detected in source scan.

/\*

SafeString from char\* constructor

Examples of how to create SafeStrings from an existing pointer to a char[]

also see the SafeString\_ConstructorAndDebugging, SafeStringFromCharArray and SafeStringFromCharPtrWithSize examples

by Matthew Ford

Mods Copyright(c)2020 Forward Computing and Control Pty. Ltd.

Modified from String Examples by Tom Igoe

This example code is in the public domain.

[www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html](http://www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html)

\*/

Found in path(s):

\* /opt/cola/permits/1550499841\_1675274436.6722012/0/powerbroker2-safestring-4-1-25-0-gfac1370-tar-gz/PowerBroker2-SafeString-

fac1370/examples/SafeString\_Tests/SafeStringFromCharPtr/SafeStringFromCharPtr.ino

No license file was found, but licenses were detected in source scan.

/\*

Prefixing to SafeStrings using the -= operator and prefix()

Examples of how to prefix different data types to SafeStrings

by Matthew Ford

Mods Copyright(c)2020 Forward Computing and Control Pty. Ltd.

Modified from String Examples by Tom Igoe

This example code is in the public domain.

[www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html](http://www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html)

\*/

Found in path(s):

\* /opt/cola/permits/1550499841\_1675274436.6722012/0/powerbroker2-safestring-4-1-25-0-gfac1370-tar-gz/PowerBroker2-SafeString-

fac1370/examples/SafeString\_Tests/SafeStringPrefixOperator/SafeStringPrefixOperator.ino

No license file was found, but licenses were detected in source scan.

/\*

Tokenizing SafeStrings and converting to numbers

Examples of how to use the token and toLong() and toDouble() to parse a CSV line

by Matthew Ford

Copyright(c)2020 Forward Computing and Control Pty. Ltd.

This example code is in the public domain.

[www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html](http://www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html)

\*/

Found in path(s):

\* /opt/cola/permits/1550499841\_1675274436.6722012/0/powerbroker2-safestring-4-1-25-0-gfac1370-tar-gz/PowerBroker2-SafeString-fac1370/examples/SafeString\_Tests/SafeString\_token/SafeString\_token.ino

No license file was found, but licenses were detected in source scan.

/\*

Fixed 9 Formatting of double/float/long/ing

by Matthew Ford

Copyright(c)2021 Forward Computing and Control Pty. Ltd.

This example code is in the public domain.

[www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html](http://www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html)

\*/

Found in path(s):

\* /opt/cola/permits/1550499841\_1675274436.6722012/0/powerbroker2-safestring-4-1-25-0-gfac1370-tar-gz/PowerBroker2-SafeString-

fac1370/examples/SafeString\_Tests/SafeString\_fixedWidthFormat/SafeString\_fixedWidthFormat.ino

No license file was found, but licenses were detected in source scan.

/\*

Test Errors for Assignment to SafeStrings using the = operator

by Matthew Ford

Mods Copyright(c)2020 Forward Computing and Control Pty. Ltd.

Modified from String Examples by Tom Igoe

This example code is in the public domain.

[www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html](http://www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html)

\*/

Found in path(s):

\* /opt/cola/permits/1550499841\_1675274436.6722012/0/powerbroker2-safestring-4-1-25-0-gfac1370-tar-gz/PowerBroker2-SafeString-

fac1370/examples/SafeString\_Tests/SafeStringEquAssignErrTests/SafeStringEquAssignErrTests.ino

No license file was found, but licenses were detected in source scan.

/\*

SafeString from char[] constructor

Examples of how to create SafeStrings from an existing char[]

also see the SafeString\_ConstructorAndDebugging, SafeStringFromCharPtr and SafeStringFromCharPtrWithSize examples

by Matthew Ford

Mods Copyright(c)2020 Forward Computing and Control Pty. Ltd.

Modified from String Examples by Tom Igoe

This example code is in the public domain.

[www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html](http://www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html)

\*/

Found in path(s):

\* /opt/cola/permits/1550499841\_1675274436.6722012/0/powerbroker2-safestring-4-1-25-0-gfac1370-tar-gz/PowerBroker2-SafeString-

fac1370/examples/SafeString\_Tests/SafeStringFromCharArray/SafeStringFromCharArray.ino

No license file was found, but licenses were detected in source scan.

/\*

SafeStringReader\_GPS.ino

This example reads GPS data from a SafeStringStream continuously using a SafeStringReader

by Matthew Ford

Copyright(c)2020 Forward Computing and Control Pty. Ltd.

This example code is in the public domain.

download and install the SafeString library from Arduino library manager

or from [www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html](http://www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html)

\*/

Found in path(s):

\* /opt/cola/permits/1550499841\_1675274436.6722012/0/powerbroker2-safestring-4-1-25-0-gfac1370-tar-gz/PowerBroker2-SafeString-fac1370/examples/SafeStringReader\_GPS/SafeStringReader\_GPS.ino

No license file was found, but licenses were detected in source scan.

/\*

Appending to SafeStrings using print()/println()

Examples of how to use the standard print()/println() to append and format different data types to SafeStrings

by Matthew Ford

Copyright(c)2020 Forward Computing and Control Pty. Ltd.

This example code is in the public domain.

[www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html](http://www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html)

\*/

Found in path(s):

\* /opt/cola/permits/1550499841\_1675274436.6722012/0/powerbroker2-safestring-4-1-25-0-gfac1370-tar-gz/PowerBroker2-SafeString-fac1370/examples/SafeString\_Tests/SafeStringPrint/SafeStringPrint.ino

## 1.92 libsepol 3.4-2

### 1.92.1 Available under license :

GNU LESSER GENERAL PUBLIC LICENSE

Version 2.1, February 1999

Copyright (C) 1991, 1999 Free Software Foundation, Inc.

51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

[This is the first released version of the Lesser GPL. It also counts

as the successor of the GNU Library Public License, version 2, hence the version number 2.1.]

## Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public Licenses are intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users.

This license, the Lesser General Public License, applies to some specially designated software packages--typically libraries--of the Free Software Foundation and other authors who decide to use it. You can use it too, but we suggest you first think carefully about whether this license or the ordinary General Public License is the better strategy to use in any particular case, based on the explanations below.

When we speak of free software, we are referring to freedom of use, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish); that you receive source code or can get it if you want it; that you can change the software and use pieces of it in new free programs; and that you are informed that you can do these things.

To protect your rights, we need to make restrictions that forbid distributors to deny you these rights or to ask you to surrender these rights. These restrictions translate to certain responsibilities for you if you distribute copies of the library or if you modify it.

For example, if you distribute copies of the library, whether gratis or for a fee, you must give the recipients all the rights that we gave you. You must make sure that they, too, receive or can get the source code. If you link other code with the library, you must provide complete object files to the recipients, so that they can relink them with the library after making changes to the library and recompiling it. And you must show them these terms so they know their rights.

We protect your rights with a two-step method: (1) we copyright the library, and (2) we offer you this license, which gives you legal permission to copy, distribute and/or modify the library.

To protect each distributor, we want to make it very clear that there is no warranty for the free library. Also, if the library is modified by someone else and passed on, the recipients should know that what they have is not the original version, so that the original

author's reputation will not be affected by problems that might be introduced by others.

Finally, software patents pose a constant threat to the existence of any free program. We wish to make sure that a company cannot effectively restrict the users of a free program by obtaining a restrictive license from a patent holder. Therefore, we insist that any patent license obtained for a version of the library must be consistent with the full freedom of use specified in this license.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License. This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License. We use this license for certain libraries in order to permit linking those libraries into non-free programs.

When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.

We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU

operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

## GNU LESSER GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License Agreement applies to any software library or other program which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Lesser General Public License (also called "this License"). Each licensee is addressed as "you".

A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does



and what the program that uses the Library does.

1. You may copy and distribute verbatim copies of the Library's complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and distribute a copy of this License along with the Library.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) The modified work must itself be a software library.

b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.

c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.

d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves,

then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License.

Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot

use both them and the Library together in an executable that you distribute.

7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:

a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.

b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

8. You may not copy, modify, sublicense, link with, or distribute the Library except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the Library is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

9. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Library or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Library (or any work based on the Library), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Library or works based on it.

10. Each time you redistribute the Library (or any work based on the Library), the recipient automatically receives a license from the original licensor to copy, distribute, link with or modify the Library subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties with this License.

11. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues),

conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute

so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Library at all. For example, if a patent license would not permit royalty-free redistribution of the Library by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Library.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

12. If the distribution and/or use of the Library is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Library under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

13. The Free Software Foundation may publish revised and/or new versions of the Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and

conditions either of that version or of any later version published by the Free Software Foundation. If the Library does not specify a license version number, you may choose any version ever published by the Free Software Foundation.

14. If you wish to incorporate parts of the Library into other free programs whose distribution conditions are incompatible with these, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

15. BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE LIBRARY "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE LIBRARY AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE LIBRARY (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

#### END OF TERMS AND CONDITIONS

##### How to Apply These Terms to Your New Libraries

If you develop a new library, and you want it to be of the greatest possible use to the public, we recommend making it free software that everyone can redistribute and change. You can do so by permitting redistribution under these terms (or, alternatively, under the terms of the ordinary General Public License).

To apply these terms, attach the following notices to the library. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the library's name and a brief 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 St, Fifth Floor, Boston, MA 02110-1301 USA

Also add information on how to contact you by electronic and paper mail.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the library, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the library `Frob' (a library for tweaking knobs) written by James Random Hacker.

<signature of Ty Coon>, 1 April 1990  
Ty Coon, President of Vice

That's all there is to it!

## 1.93 gpt-fdisk 1.0.5

### 1.93.1 Available under license :

GNU GENERAL PUBLIC LICENSE  
Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA



Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

## Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Library General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free

program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

## GNU GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

- a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

- b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.
- c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

- a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- b) Accompany it with a written offer, valid for at least three

years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6.

Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among

countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

## END OF TERMS AND CONDITIONS

### How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the program's name and a brief idea of what it does.>

Copyright (C) <year> <name of author>

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or  
(at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

```
Gnomovision version 69, Copyright (C) year name of author
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute it
under certain conditions; type `show c' for details.
```

The hypothetical commands

`show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the program `Gnomovision' (which makes passes at compilers) written by James Hacker.

<signature of Ty Coon>, 1 April 1989  
Ty Coon, President of Vice

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Library General Public License instead of this License.

## 1.94 nettle 3.6

### 1.94.1 Available under license :

GNU GENERAL PUBLIC LICENSE  
Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.,  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA  
Everyone is permitted to copy and distribute verbatim copies  
of this license document, but changing it is not allowed.

#### Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Lesser General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price.

Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.



To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

## GNU GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of

running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you

distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under

any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

## NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

## END OF TERMS AND CONDITIONS

### How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the program's name and a brief idea of what it does.>  
Copyright (C) <year> <name of author>

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful,

but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA.

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

```
Gnomovision version 69, Copyright (C) year name of author
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute
it
under certain conditions; type `show c' for details.
```

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

```
Yoyodyne, Inc., hereby disclaims all copyright interest in the program
`Gnomovision' (which makes passes at compilers) written by James Hacker.
```

```
<signature of Ty Coon>, 1 April 1989
Ty Coon, President of Vice
```

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Lesser General Public License instead of this License.

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.

## 0. Additional Definitions.

As used herein, "this License" refers to version 3 of the GNU Lesser General Public License, and the "GNU GPL" refers to version 3 of the GNU General Public License.

"The Library" refers to a covered work governed by this License, other than an Application or a Combined Work as defined below.

An "Application" is any work that makes use of an interface provided by the Library, but which is not otherwise based on the Library. Defining a subclass of a class defined by the Library is deemed a mode of using an interface provided by the Library.

A "Combined Work" is a work produced by combining or linking an Application with the Library. The particular version of the Library with which the Combined Work was made is also called the "Linked Version".

The "Minimal Corresponding Source" for a Combined Work means the Corresponding Source for the Combined Work, excluding any source code for portions of the Combined Work that, considered in isolation, are based on the Application, and not on the Linked Version.

The "Corresponding Application Code" for a Combined Work means the object code and/or source code for the Application, including any data and utility programs needed for reproducing the Combined Work from the Application, but excluding the System Libraries of the Combined Work.

## 1. Exception to Section 3 of the GNU GPL.

You may convey a covered work under sections 3 and 4 of this License without being bound by section 3 of the GNU GPL.

## 2. Conveying Modified Versions.

If you modify a copy of the Library, and, in your modifications, a facility refers to a function or data to be supplied by an Application that uses the facility (other than as an argument passed when the facility is invoked), then you may convey a copy of the modified version:



a) under this License, provided that you make a good faith effort to ensure that, in the event an Application does not supply the function or data, the facility still operates, and performs whatever part of its purpose remains meaningful, or

b) under the GNU GPL, with none of the additional permissions of this License applicable to that copy.

### 3. Object Code Incorporating Material from Library Header Files.

The object code form of an Application may incorporate material from a header file that is part of the Library. You may convey such object code under terms of your choice, provided that, if the incorporated material is not limited to numerical parameters, data structure layouts and accessors, or small macros, inline functions and templates (ten or fewer lines in length), you do both of the following:

a) Give prominent notice with each copy of the object code that the Library is used in it and that the Library and its use are covered by this License.

b) Accompany the object code with a copy of the GNU GPL and this license document.

### 4. Combined Works.

You may convey a Combined Work under terms of your choice that, taken together, effectively do not restrict modification of the portions of the Library contained in the Combined Work and reverse engineering for debugging such modifications, if you also do each of the following:

a) Give prominent notice with each copy of the Combined Work that the Library is used in it and that the Library and its use are covered by this License.

b) Accompany the Combined Work with a copy of the GNU GPL and this license document.

c) For a Combined Work that displays copyright notices during execution, include the copyright notice for the Library among these notices, as well as a reference directing the user to the copies of the GNU GPL and this license document.

d) Do one of the following:

0) Convey the Minimal Corresponding Source under the terms of this License, and the Corresponding Application Code in a form suitable for, and under terms that permit, the user to recombine or relink the Application with a modified version of the Linked Version to produce a modified Combined Work, in the manner specified by section 6 of the GNU GPL for conveying Corresponding Source.

1) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (a) uses at run time a copy of the Library already present on the user's computer system, and (b) will operate properly with a modified version of the Library that is interface-compatible

with the Linked  
Version.

e) Provide Installation Information, but only if you would otherwise be required to provide such information under section 6 of the GNU GPL, and only to the extent that such information is necessary to install and execute a modified version of the Combined Work produced by recombining or relinking the Application with a modified version of the Linked Version. (If you use option 4d0, the Installation Information must accompany the Minimal Corresponding Source and Corresponding Application Code. If you use option 4d1, you must provide the Installation Information in the manner specified by section 6 of the GNU GPL for conveying Corresponding Source.)

## 5. Combined Libraries.

You may place library facilities that are a work based on the Library side by side in a single library together with other library facilities that are not Applications and are not covered by this License, and convey such a combined library under terms of your choice, if you do both of the following:

a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities, conveyed under the terms of this License.

b) Give prominent notice with the combined library that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

## 6. Revised Versions of the GNU Lesser General Public License.

The Free Software Foundation may publish revised and/or new versions

of the GNU Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library as you received it specifies that a certain numbered version of the GNU Lesser General Public License "or any later version" applies to it, you have the option of following the terms and conditions either of that published version or of any later version published by the Free Software Foundation. If the Library as you received it does not specify a version number of the GNU Lesser General Public License, you may choose any version of the GNU Lesser General Public License ever published by the Free Software Foundation.

If the Library as you received it specifies that a proxy can decide whether future versions of the GNU Lesser General Public License shall apply, that proxy's public statement of acceptance of any version is permanent authorization for you to choose that version for the Library.

GNU GENERAL PUBLIC LICENSE  
Version 3, 29 June 2007

Copyright (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.

Preamble

The GNU General Public License is a free, copyleft license for software and other kinds of works.

The licenses for most software and other practical works are designed to take away your freedom to share and change the works. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change all versions of a program--to make sure it remains free software for all its users. We, the Free Software Foundation, use the GNU General Public License for most of our software; it applies also to any other work released this way by its authors. You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for them if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs, and that you know you can do these things.

To protect your rights, we need to prevent others from denying you these rights or asking you to surrender the rights. Therefore, you have certain responsibilities if you distribute copies of the software, or if you modify it: responsibilities to respect the freedom of others.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must pass on to the recipients the same freedoms that you received. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

Developers that use the GNU GPL protect your rights with two steps:

(1) assert copyright on the software, and (2) offer you this License giving you legal permission to copy, distribute and/or modify it.

For the developers' and authors' protection, the GPL clearly explains that there is no warranty for this free software. For both users' and authors' sake, the GPL requires that modified versions be marked as changed, so that their problems will not be attributed erroneously to authors of previous versions.

Some devices are designed to deny users access to install or run modified versions of the software inside them, although the manufacturer can do so. This is fundamentally incompatible with the aim of protecting users' freedom to change the software. The systematic pattern of such abuse occurs in the area of products for individuals to use, which is precisely where it is most unacceptable. Therefore, we have designed this version of the GPL to prohibit the practice for those products. If such problems arise substantially in other domains, we stand

ready to extend this provision to those domains in future versions of the GPL, as needed to protect the freedom of users.

Finally, every program is threatened constantly by software patents. States should not allow patents to restrict development and use of software on general-purpose computers, but in those that do, we wish to avoid the special danger that patents applied to a free program could make it effectively proprietary. To prevent this, the GPL assures that patents cannot be used to render the program non-free.

The precise terms and conditions for copying, distribution and modification follow.

## TERMS AND CONDITIONS

### 0. Definitions.

"This License" refers to version 3 of the GNU General Public License.

"Copyright" also means copyright-like laws that apply to other kinds of works, such as semiconductor masks.

"The Program" refers to any copyrightable work licensed under this License. Each licensee is addressed as "you". "Licensees" and "recipients" may be individuals or organizations.

To "modify" a work means to copy from or adapt all or part of the work in a fashion requiring copyright permission, other than the making of an exact copy. The resulting work is called a "modified version" of the earlier work or a work "based on" the earlier work.

A "covered work" means either the unmodified Program or a work based on the Program.

To "propagate" a work means to do anything with it that, without permission, would make you directly or secondarily liable for infringement under applicable copyright law, except executing it on a computer or modifying a private copy. Propagation includes copying, distribution (with or without modification), making available to the public, and in some countries other activities as well.

To "convey" a work means any kind of propagation that enables other parties to make or receive copies. Mere interaction with a user through a computer network, with no transfer of a copy, is not conveying.

An interactive user interface displays "Appropriate Legal Notices" to the extent that it includes a convenient and prominently visible feature that (1) displays an appropriate copyright notice, and (2) tells the user that there is no warranty for the work (except to the extent that warranties are provided), that licensees may convey the work under this License, and how to view a copy of this License. If the interface presents a list of user commands or options, such as a menu, a prominent item in the list meets this criterion.

#### 1. Source Code.

The "source code" for a work means the preferred form of the work for making modifications to it. "Object code" means any non-source form of a work.

A "Standard Interface" means an interface that either is an official standard defined by a recognized standards body, or, in the case of

interfaces specified for a particular programming language, one that is widely used among developers working in that language.

The

"System Libraries" of an executable work include anything, other than the work as a whole, that (a) is included in the normal form of packaging a Major Component, but which is not part of that Major Component, and (b) serves only to enable use of the work with that Major Component, or to implement a Standard Interface for which an implementation is available to the public in source code form. A "Major Component", in this context, means a major essential component (kernel, window system, and so on) of the specific operating system (if any) on which the executable work runs, or a compiler used to produce the work, or an object code interpreter used to run it.

The "Corresponding Source" for a work in object code form means all the source code needed to generate, install, and (for an executable work) run the object code and to modify the work, including scripts to control those activities. However, it does not include the work's System Libraries, or general-purpose tools or generally available free programs which are used unmodified in performing those activities but which are not part of the work. For example, Corresponding Source includes interface definition files associated with source files for the work, and the source code for shared libraries and dynamically linked subprograms that the work is specifically designed to require, such as by intimate data communication or control flow between those subprograms and other parts of the work.

The Corresponding Source need not include anything that users can regenerate automatically from other parts of the Corresponding Source.

The Corresponding Source for a work in source code form is that same work.

## 2. Basic Permissions.

All rights granted under this License are granted for the term of copyright on the Program, and are irrevocable provided the stated conditions are met. This License explicitly affirms your unlimited permission to run the unmodified Program. The output from running a covered work is covered by this License only if the output, given its content, constitutes a covered work. This License acknowledges your rights of fair use or other equivalent, as provided by copyright law.

You may make, run and propagate covered works that you do not

convey, without conditions so long as your license otherwise remains in force. You may convey covered works to others for the sole purpose of having them make modifications exclusively for you, or provide you with facilities for running those works, provided that you comply with the terms of this License in conveying all material for which you do not control copyright. Those thus making or running the covered works for you must do so exclusively on your behalf, under your direction and control, on terms that prohibit them from making any copies of your copyrighted material outside their relationship with you.

Conveying under any other circumstances is permitted solely under the conditions stated below. Sublicensing is not allowed; section 10 makes it unnecessary.

### 3. Protecting Users' Legal Rights From Anti-Circumvention Law.

No covered work shall be deemed part of an effective technological measure under any applicable law fulfilling obligations under article 11 of the WIPO copyright treaty adopted on 20 December 1996, or similar laws prohibiting or restricting circumvention of such measures.

When you convey a covered work, you waive any legal power to forbid circumvention of technological measures to the extent such circumvention is effected by exercising rights under this License with respect to the covered work, and you disclaim any intention to limit operation or modification of the work as a means of enforcing, against the work's users, your or third parties' legal rights to forbid circumvention of technological measures.

### 4. Conveying Verbatim Copies.

You may convey verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice; keep intact all notices stating that this License and any non-permissive terms added in accord with section 7 apply to the code; keep intact all notices of the absence of any warranty; and give all recipients a copy of this License along with the Program.

You may charge any price or no price for each copy that you convey, and you may offer support or warranty protection for a fee.

### 5. Conveying Modified Source Versions.

You may convey a work based on the Program, or the modifications to

produce it from the Program, in the form of source code under the terms of section 4, provided that you also meet all of these conditions:

- a) The work must carry prominent notices stating that you modified it, and giving a relevant date.
- b) The work must carry prominent notices stating that it is released under this License and any conditions added under section 7. This requirement modifies the requirement in section 4 to "keep intact all notices".
- c) You must license the entire work, as a whole, under this License to anyone who comes into possession of a copy. This License will therefore apply, along with any applicable section 7 additional terms, to the whole of the work, and all its parts, regardless of how they are packaged. This License gives no permission to license the work in any other way, but it does not invalidate such permission if you have separately received it.
- d) If the work has interactive user interfaces, each must display Appropriate Legal Notices; however, if the Program has interactive interfaces that do not display Appropriate Legal Notices, your work need not make them do so.

A compilation of a covered work with other separate and independent works, which are not by their nature extensions of the covered work, and which are not combined with it such as to form a larger program, in or on a volume of a storage or distribution medium, is called an "aggregate" if the compilation and its resulting copyright are not used to limit the access or legal rights of the compilation's users beyond what the individual works permit. Inclusion of a covered work in an aggregate does not cause this License to apply to the other parts of the aggregate.

#### 6. Conveying Non-Source Forms.

You may convey a covered work in object code form under the terms of sections 4 and 5, provided that you also convey the machine-readable Corresponding Source under the terms of this License, in one of these ways:

- a) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by the Corresponding Source fixed on a durable physical medium customarily used for software interchange.



b) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by a written offer, valid for at least three years

and valid for as

long as you offer spare parts or customer support for that product model, to give anyone who possesses the object code either (1) a copy of the Corresponding Source for all the software in the product that is covered by this License, on a durable physical medium customarily used for software interchange, for a price no more than your reasonable cost of physically performing this conveying of source, or (2) access to copy the Corresponding Source from a network server at no charge.

c) Convey individual copies of the object code with a copy of the written offer to provide the Corresponding Source. This alternative is allowed only occasionally and noncommercially, and only if you received the object code with such an offer, in accord with subsection 6b.

d) Convey the object code by offering access from a designated place (gratis or for a charge), and offer equivalent access to the Corresponding Source in the same way through the same place at no further charge. You need not require recipients to copy the Corresponding Source along with the object code. If the place to copy the object code is a network server, the Corresponding Source may be on a different server (operated by you or a third party) that supports equivalent copying facilities, provided you maintain clear directions next to the object code saying where to find the Corresponding Source. Regardless of what server hosts the Corresponding Source, you remain obligated to ensure that it is available for as long as needed to satisfy these requirements.

e) Convey the object code using peer-to-peer transmission, provided you inform other peers where the object code and Corresponding Source of the work are being offered to the general public at no charge under subsection 6d.

A separable portion of the object code, whose source code is excluded from the Corresponding Source as a System Library, need not be included in conveying the object code work.

A "User Product" is either (1) a "consumer product", which means any tangible personal property which is normally used for personal, family, or household purposes, or (2) anything designed or sold for incorporation into a dwelling. In determining whether a product is a consumer product, doubtful cases shall be resolved in favor of coverage. For a particular

product received by a particular user, "normally used" refers to a typical or common use of that class of product, regardless of the status of the particular user or of the way in which the particular user actually uses, or expects or is expected to use, the product. A product is a consumer product regardless of whether the product has substantial commercial, industrial or non-consumer uses, unless such uses represent the only significant mode of use of the product.

"Installation Information" for a User Product means any methods, procedures, authorization keys, or other information required to install and execute modified versions of a covered work in that User Product from a modified version of its Corresponding Source. The information must suffice to ensure that the continued functioning of the modified object code is in no case prevented or interfered with solely because modification has been made.

If you convey an object code work under this section in, or with, or specifically for use in, a User Product, and the conveying occurs as part of a transaction in which the right of possession and use of the User Product is transferred to the recipient in perpetuity or for a fixed term (regardless of how the transaction is characterized), the Corresponding Source conveyed under this section must be accompanied by the Installation Information. But this requirement does not apply if neither you nor any third party retains the ability to install modified object code on the User Product (for example, the work has been installed in ROM).

The requirement to provide Installation Information does not include a requirement to continue to provide support service, warranty, or updates for a work that has been modified or installed by the recipient, or for the User Product in which it has been modified or installed. Access to a network may be denied when the modification itself materially and adversely affects the operation of the network or violates the rules and protocols for communication across the network.

Corresponding Source conveyed, and Installation Information provided, in accord with this section must be in a format that is publicly documented (and with an implementation available to the public in source code form), and must require no special password or key for unpacking, reading or copying.

## 7. Additional Terms.

"Additional permissions" are terms that supplement the terms of this License by making exceptions from one or more of its conditions. Additional permissions that are applicable to the

entire Program shall be treated as though they were included in this License, to the extent that they are valid under applicable law. If additional permissions apply only to part of the Program, that part may be used separately under those permissions, but the entire Program remains governed by this License without regard to the additional permissions.

When you convey a copy of a covered work, you may at your option remove any additional permissions from that copy, or from any part of it. (Additional permissions may be written to require their own removal in certain cases when you modify the work.) You may place additional permissions on material, added by you to a covered work, for which you have or can give appropriate copyright permission.

Notwithstanding any other provision of this License, for material you add to a covered work, you may (if authorized by the copyright holders of that material) supplement the terms of this License with terms:

- a) Disclaiming warranty or limiting liability differently from the terms of sections 15 and 16 of this License; or
- b) Requiring preservation of specified reasonable legal notices or author attributions in that material or in the Appropriate Legal Notices displayed by works containing it; or
- c) Prohibiting misrepresentation of the origin of that material, or requiring that modified versions of such material be marked in reasonable ways as different from the original version; or
- d) Limiting the use for publicity purposes of names of licensors or authors of the material; or
- e) Declining to grant rights under trademark law for use of some trade names, trademarks, or service marks; or
- f) Requiring indemnification of licensors and authors of that material by anyone who conveys the material (or modified versions of it) with contractual assumptions of liability to the recipient, for any liability that these contractual assumptions directly impose on those licensors and authors.

All other non-permissive additional terms are considered "further restrictions" within the meaning of section 10. If the Program as you received it, or any part of it, contains a notice stating that it is governed by this License along with a term that is a further restriction, you may remove that term. If a license document contains

a further restriction but permits relicensing or conveying under this License, you may add to a covered work material governed by the terms of that license document, provided that the further restriction does not survive such relicensing or conveying.

If you add terms to a covered work in accord with this section, you must place, in the relevant source files, a statement of the additional terms that apply to those files, or a notice indicating where to find the applicable terms.

Additional terms, permissive or non-permissive, may be stated in the form of a separately written license, or stated as exceptions; the above requirements apply either way.

#### 8. Termination.

You may not propagate or modify a covered work except as expressly provided under this License. Any attempt otherwise to propagate or modify it is void, and will automatically terminate your rights under this License (including any patent licenses granted under the third paragraph of section 11).

However, if you cease all violation of this License, then your license from a particular copyright holder is reinstated (a) provisionally, unless and until the copyright holder explicitly and finally terminates your license, and (b) permanently, if the copyright holder fails to notify you of the violation by some reasonable means prior to 60 days after the cessation.

Moreover, your license from a particular copyright holder is reinstated permanently if the copyright holder notifies you of the violation by some reasonable means, this is the first time you have received notice of violation of this License (for any work) from that copyright holder, and you cure the violation prior to 30 days after your receipt of the notice.

Termination of your rights under this section does not terminate the licenses of parties who have received copies or rights from you under this License. If your rights have been terminated and not permanently reinstated, you do not qualify to receive new licenses for the same material under section 10.

#### 9. Acceptance Not Required for Having Copies.

You are not required to accept this License in order to receive or run a copy of the Program. Ancillary propagation of a covered work

occurring solely as a consequence of using peer-to-peer transmission to receive a copy likewise does not require acceptance. However, nothing other than this License grants you permission to propagate or modify any covered work. These actions infringe copyright if you do not accept this License. Therefore, by modifying or propagating a covered work, you indicate your acceptance of this License to do so.

#### 10. Automatic Licensing of Downstream Recipients.

Each time you convey a covered work, the recipient automatically receives a license from the original licensors, to run, modify and propagate that work, subject to this License. You are not responsible for enforcing compliance by third parties with this License.

An "entity transaction" is a transaction transferring control of an organization, or substantially all assets of one, or subdividing an organization, or merging organizations. If propagation of a covered work results from an entity transaction, each party to that transaction who receives a copy of the work also receives whatever licenses to the work the party's predecessor in interest had or could give under the previous paragraph, plus a right to possession of the Corresponding Source of the work from the predecessor in interest, if the predecessor has it or can get it with reasonable efforts.

You may not impose any further restrictions on the exercise of the rights granted or affirmed under this License. For example, you may not impose a license fee, royalty, or other charge for exercise of rights granted under this License, and you may not initiate litigation (including a cross-claim or counterclaim in a lawsuit) alleging that any patent claim is infringed by making, using, selling, offering for sale, or importing the Program or any portion of it.

#### 11. Patents.

A "contributor" is a copyright holder who authorizes use under this License of the Program or a work on which the Program is based. The work thus licensed is called the contributor's "contributor version".

A contributor's "essential patent claims" are all patent claims owned or controlled by the contributor, whether already acquired or hereafter acquired, that would be infringed by some manner, permitted by this License, of making, using, or selling its contributor version, but do not include claims that would be infringed only as a consequence of further modification of the contributor version. For purposes of this definition, "control" includes the right to grant

patent sublicenses in a manner consistent with the requirements of this License.

Each contributor grants you a non-exclusive, worldwide, royalty-free patent license under the contributor's essential patent claims, to make, use, sell, offer for sale, import and otherwise run, modify and propagate the contents of its contributor version.

In the following three paragraphs, a "patent license" is any express agreement or commitment, however denominated, not to enforce a patent (such as an express permission to practice a patent or covenant not to sue for patent infringement). To "grant" such a patent license to a party means to make such an agreement or commitment not to enforce a patent against the party.

If you convey a covered work, knowingly relying on a patent license, and the Corresponding Source of the work is not available for anyone to copy, free of charge and under the terms of this

License, through a publicly available network server or other readily accessible means, then you must either (1) cause the Corresponding Source to be so available, or (2) arrange to deprive yourself of the benefit of the patent license for this particular work, or (3) arrange, in a manner consistent with the requirements of this License, to extend the patent license to downstream recipients. "Knowingly relying" means you have actual knowledge that, but for the patent license, your conveying the covered work in a country, or your recipient's use of the covered work in a country, would infringe one or more identifiable patents in that country that you have reason to believe are valid.

If, pursuant to or in connection with a single transaction or arrangement, you convey, or propagate by procuring conveyance of, a covered work, and grant a patent license to some of the parties receiving the covered work authorizing them to use, propagate, modify or convey a specific copy of the covered work, then the patent license you grant is automatically extended to all recipients of the covered work and works based on it.

A patent license is "discriminatory" if it does not include within the scope of its coverage, prohibits the exercise of, or is conditioned on the non-exercise of one or more of the rights that are specifically granted under this License. You may not convey a covered work if you are a party to an arrangement with a third party that is in the business of distributing software, under which you make payment to the third party based on the extent of your activity of conveying the work, and under which the third party grants, to any of the parties who would receive the covered work from you, a discriminatory

patent license (a) in connection with copies of the covered work conveyed by you (or copies made from those copies), or (b) primarily for and in connection with specific products or compilations that contain the covered work, unless you entered into that arrangement, or that patent license was granted, prior to 28 March 2007.

Nothing in this License shall be construed as excluding or limiting any implied license or other defenses to infringement that may otherwise be available to you under applicable patent law.

#### 12. No Surrender of Others' Freedom.

If conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot convey a covered work so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not convey it at all. For example, if you agree to terms that obligate you to collect a royalty for further conveying from those to whom you convey the Program, the only way you could satisfy both those terms and this License would be to refrain entirely from conveying the Program.

#### 13. Use with the GNU Affero General Public License.

Notwithstanding any other provision of this License, you have permission to link or combine any covered work with a work licensed under version 3 of the GNU Affero General Public License into a single combined work, and to convey the resulting work. The terms of this License will continue to apply to the part which is the covered work, but the special requirements of the GNU Affero General Public License, section 13, concerning interaction through a network will apply to the combination as such.

#### 14. Revised Versions of this License.

The Free Software Foundation may publish revised and/or new versions of the GNU General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies that a certain numbered version of the GNU General Public License "or any later version" applies to it, you have the option of following the terms and conditions either of that numbered version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of the

GNU General Public License, you may choose any version ever published by the Free Software Foundation.

If the Program specifies that a proxy can decide which future versions of the GNU General Public License can be used, that proxy's public statement of acceptance of a version permanently authorizes you to choose that version for the Program.

Later license versions may give you additional or different permissions. However, no additional obligations are imposed on any author or copyright holder as a result of your choosing to follow a later version.

#### 15. Disclaimer of Warranty.

THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

#### 16. Limitation of Liability.

IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MODIFIES AND/OR CONVEYS THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

#### 17.

Interpretation of Sections 15 and 16.

If the disclaimer of warranty and limitation of liability provided above cannot be given local legal effect according to their terms, reviewing courts shall apply local law that most closely approximates an absolute waiver of all civil liability in connection with the Program, unless a warranty or assumption of liability accompanies a copy of the Program in return for a fee.

END OF TERMS AND CONDITIONS



## How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively state the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

```
<one line to give the program's name and a brief idea of what it does.>  
Copyright (C) <year> <name of author>
```

This program is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program. If not, see <https://www.gnu.org/licenses/>.

Also add information on how to contact you by electronic and paper mail.

If the program does terminal interaction, make it output a short notice like this when it starts in an interactive mode:

```
<program> Copyright (C) <year> <name of author>  
This program comes with ABSOLUTELY NO WARRANTY; for details type `show w'.  
This is free software, and you are welcome to redistribute it  
under certain conditions; type `show c' for details.
```

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, your program's commands might be different; for a GUI interface, you would use an "about box".

You should also get your employer (if you work as a programmer) or school, if any, to sign a "copyright disclaimer" for the program, if necessary. For more information on this, and how to apply and follow the GNU GPL, see <https://www.gnu.org/licenses/>.

The GNU General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Lesser General Public License instead of this License. But first, please read <<https://www.gnu.org/philosophy/why-not-lgpl.html>>.

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: [www.cisco.com/go/trademarks](http://www.cisco.com/go/trademarks). Third-party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1110R)

©2024 Cisco Systems, Inc. All rights reserved.