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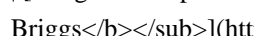
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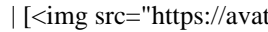
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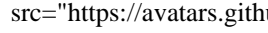
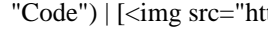
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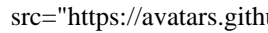
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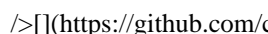

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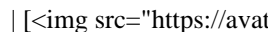
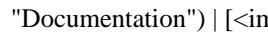
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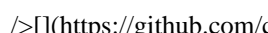
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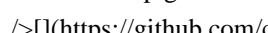
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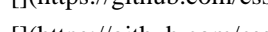
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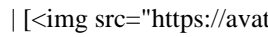
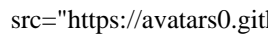
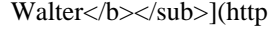

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<!-- ALL-CONTRIBUTORS-LIST:END -->

This project follows the [\[all-contributors\]](https://github.com/kentcdodds/all-contributors) specification.
Contributions of any kind welcome!

1.5 Django 2.0.10

1.5.1 Available under license :

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django.dispatch was originally forked from PyDispatcher.

PyDispatcher License:

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=====
Advice for new contributors
=====

New contributor and not sure what to do? Want to help but just don't know how to get started? This is the section for you.

.. admonition:: Basic tools and workflow

If you are new to contributing to Django, the `:doc:`intro/contributing`` tutorial will give you an introduction to the tools and the workflow.

First steps
=====

Start with these easy tasks to discover Django's development process.

* **Sign the Contributor License Agreement**

The code that you write belongs to you or your employer. If your contribution is more than one or two lines of code, you need to sign the ``CLA`_`. See the ``Contributor License Agreement FAQ`_` for a more thorough explanation.

* **Triage tickets**

If an ``unreviewed ticket`_` reports a bug, try and reproduce it. If you can reproduce it and it seems valid, make a note that you confirmed the bug and accept the ticket. Make sure the ticket is filed under the correct component area. Consider writing a patch that adds a test for the bug's behavior, even if you don't fix the bug itself. See more at `:ref:`how-can-i-help-with-triaging``

* **Look for tickets that are accepted and review patches to build familiarity with the codebase and the process**

Mark the appropriate flags if a patch needs docs or tests. Look through the changes a patch makes, and keep an eye out for syntax that is incompatible with older but still supported versions of Python. `:doc:`Run the tests </internals/contributing/writing-code/unit-tests>`` and make sure they pass. Where possible and relevant, try them out on a database other than SQLite. Leave comments and feedback!

* **Keep old patches up to date**

Oftentimes the codebase will change between a patch being submitted and the

time it gets reviewed. Make sure it still applies cleanly and functions as expected. Simply updating a patch is both useful and important! See more on `:doc:`writing-code/submitting-patches``.

****Write some documentation****

Django's documentation is great but it can always be improved. Did you find a typo? Do you think that something should be clarified? Go ahead and suggest a documentation patch! See also the guide on `:doc:`writing-documentation``.

.. note::

The ``reports page`_` contains links to many useful Trac queries, including several that are useful for triaging tickets and reviewing patches as suggested above.

.. `_reports page`: <https://code.djangoproject.com/wiki/Reports>

.. `_CLA`: <https://www.djangoproject.com/foundation/cla/>

.. `_Contributor License Agreement FAQ`: <https://www.djangoproject.com/foundation/cla/faq/>

.. `_unreviewed ticket`: <https://code.djangoproject.com/query?status=!closed&stage=Unreviewed>

Guidelines

=====

As a newcomer on a large project, it's easy to experience frustration. Here's some advice to make your work on Django more useful and rewarding.

****Pick a subject area that you care about, that you are familiar with, or that you want to learn about****

You don't already have to be an expert on the area you want to work on; you become an expert through your ongoing contributions to the code.

****Analyze tickets' context and history****

Trac isn't an absolute; the context is just as important as the words.

When reading Trac, you need to take into account who says things, and when they were said. Support for an idea two years ago doesn't necessarily mean that the idea will still have support. You also need to pay attention to who *hasn't* spoken -- for example, if an experienced contributor hasn't been recently involved in a discussion, then a ticket may not have the support required to get into Django.

****Start small****

It's easier to get feedback on a little issue than on a big one. See the ``easy pickings`_`.

****If you're going to engage in a big task, make sure that your idea has support first****

This means getting someone else to confirm that a bug is real before you fix the issue, and ensuring that there's consensus on a proposed feature before you go implementing it.

****Be bold! Leave feedback!****

Sometimes it can be scary to put your opinion out to the world and say "this ticket is correct" or "this patch needs work", but it's the only way the project moves forward. The contributions of the broad Django community ultimately have a much greater impact than that of any one person. We can't do it without ****you****!

****Err on the side of caution when marking things Ready For Check-in****

If you're really not certain if a ticket is ready, don't mark it as such. Leave a comment instead, letting others know your thoughts. If you're mostly certain, but not completely certain, you might also try asking on IRC to see if someone else can confirm your suspicions.

****Wait for feedback, and respond to feedback that you receive****

Focus on one or two tickets, see them through from start to finish, and repeat. The shotgun approach of taking on lots of tickets and letting some fall by the wayside ends up doing more harm than good.

****Be rigorous****

When we say "pep:8", and must have docs and tests", we mean it. If a patch doesn't have docs and tests, there had better be a good reason. Arguments like "I couldn't find any existing tests of this feature" don't carry much weight--while it may be true, that means you have the extra-important job of writing the very first tests for that feature, not that you get a pass from writing tests altogether.

.. `_easy pickings`: <https://code.djangoproject.com/query?status=!closed&easy=1>

.. `_new-contributors-faq`:

FAQ

===

1. ****This ticket I care about has been ignored for days/weeks/months! What can**

I do to get it committed?*

First off, it's not personal. Django is entirely developed by volunteers (except the Django fellow), and sometimes folks just don't have time. The best thing to do is to send a gentle reminder to the `|django-developers|` mailing list asking for review on the ticket, or to bring it up in the ``#django-dev`` IRC channel.

2. **I'm sure my ticket is absolutely 100% perfect, can I mark it as RFC myself?***

Short answer: No. It's always better to get another set of eyes on a ticket. If you're having trouble getting that second set of eyes, see question 1, above.

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Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see <http://www.cwi.nl>) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see <http://www.cnri.reston.va.us>) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations (now Zope Corporation, see <http://www.zope.com>). In 2001, the Python Software Foundation (PSF, see <http://www.python.org/psf/>) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation is a sponsoring member of the PSF.

All Python releases are Open Source (see <http://www.opensource.org> for the Open Source Definition). Historically, most, but not all, Python releases have also been GPL-compatible; the table below summarizes the various releases.

Release	Derived from	Year	Owner	GPL-compatible? (1)
0.9.0 thru 1.2		1991-1995	CWI	yes
1.3 thru 1.5.2	1.2	1995-1999	CNRI	yes
1.6	1.5.2	2000	CNRI	no
2.0	1.6	2000	BeOpen.com	no
1.6.1	1.6	2001	CNRI	yes (2)
2.1	2.0+1.6.1	2001	PSF	no
2.0.1	2.0+1.6.1	2001	PSF	yes
2.1.1	2.1+2.0.1	2001	PSF	yes
2.1.2	2.1.1	2002	PSF	yes
2.1.3	2.1.2	2002	PSF	yes
2.2 and above	2.1.1	2001-now	PSF	yes

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(2) According to Richard Stallman, 1.6.1 is not GPL-compatible, because its license has a choice of law clause. According to CNRI, however, Stallman's lawyer has told CNRI's lawyer that 1.6.1 is "not incompatible" with the GPL.

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utils.FormatterString

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1.9 epel-release 7-11

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1.11 gcc 4.8.5 :28.e17_5.1

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This is an attempt to acknowledge early contributions to the garbage collector. Later contributions should instead be mentioned in README.changes.

HISTORY -

Early versions of this collector were developed as a part of research projects supported in part by the National Science Foundation and the Defense Advance Research Projects Agency.

The garbage collector originated as part of the run-time system for the Russell programming language implementation. The first version of the garbage collector was written primarily by Al Demers. It was then refined and mostly rewritten, primarily by Hans-J. Boehm, at Cornell U., the University of Washington, Rice University (where it was first used for C and assembly code), Xerox PARC, SGI, and HP Labs. However, significant contributions have also been made by many others.

Some other contributors:

More recent contributors are mentioned in the modification history in README.changes. My apologies for any omissions.

The SPARC specific code was originally contributed by Mark Weiser.

The Encore Multimax modifications were supplied by Kevin Kenny (kenny@m.cs.uiuc.edu). The adaptation to the IBM PC/RT is largely due to Vernon Lee, on machines made available to Rice by IBM.

Much of the HP specific code and a number of good suggestions for improving the generic code are due to Walter Underwood.

Robert Brazile (brazile@diamond.bbn.com) originally supplied the ULTRIX code.

Al Dossier (dossier@src.dec.com) and Regis Cridlig (Regis.Cridlig@cl.cam.ac.uk) subsequently provided updates and information on variation between ULTRIX systems. Parag Patel (parag@netcom.com) supplied the A/UX code.

Jesper Peterson(jep@mtiame.mtia.oz.au), Michel Schinz, and

Martin Tauchmann (martintauchmann@bigfoot.com) supplied the Amiga port.

Thomas Funke (thf@zelator.in-berlin.de(?)) and

Brian D.Carlstrom (bdc@clark.lcs.mit.edu) supplied the NeXT ports.

Douglas Steel (doug@wg.icl.co.uk) provided ICL DRS6000 code.

Bill Janssen (janssen@parc.xerox.com) supplied the SunOS dynamic loader

specific code. Manuel Serrano (serrano@cornas.inria.fr) supplied linux and

Sony News specific code. Al Dosser provided Alpha/OSF/1 code. He and Dave Detlefs(detlefs@src.dec.com) also provided several generic bug fixes. Alistair G. Crooks(agc@uts.amdahl.com) supplied the NetBSD and 386BSD ports. Jeffrey Hsu(hsu@soda.berkeley.edu) provided the FreeBSD port. Brent Benson(brent@jade.ssd.csd.harris.com) ported the collector to a Motorola 88K processor running CX/UX (Harris NightHawk). Ari Huttunen(Ari.Huttunen@hut.fi) generalized the OS/2 port to nonIBM development environments (a nontrivial task). Patrick Beard(beard@cs.ucdavis.edu) provided the initial MacOS port. David Chase, then at Olivetti Research, suggested several improvements. Scott Schwartz(schwartz@groucho.cse.psu.edu) supplied some of the code to save and print call stacks for leak detection on a SPARC. Jesse Hull and John Ellis supplied the C++ interface code. Zhong Shao performed much of the experimentation that led to the current typed allocation facility. (His dynamic type inference code hasn't made it into the released version of the collector, yet.)

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Version 3, 29 June 2007

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<<http://www.gnu.org/licenses/>>. */

```
/* Use the Sequent Symmetry assembler syntax. */
```

```
/* Define the syntax of pseudo-ops, labels and comments. */
```

```
/* Prefix for internally generated assembler labels. If we aren't using
   underscores, we are using prefix `.'s to identify labels that should
   be ignored, as in `i386/gas.h' --karl@cs.umb.edu */
```

```

#define LPREFIX "L"

/* Assembler pseudos to introduce constants of various size. */

#define ASM_BYTE "\t.byte\t"
#define ASM_SHORT "\t.word\t"
#define ASM_LONG "\t.long\t"
#define ASM_QUAD "\t.quad\t" /* Should not be used for 32bit compilation. */

/* This was suggested, but it shouldn't be right for DBX output. -- RMS
#define ASM_OUTPUT_SOURCE_FILENAME(FILE, NAME) */

/* Define the syntax of labels and symbol definitions/declarations. */

/* This is how to output an assembler line
that says to advance the location counter by SIZE bytes. */

#define ASM_OUTPUT_SKIP(FILE,SIZE) \
fprintf (FILE, "\t.space \"HOST_WIDE_INT_PRINT_UNSIGNED\"\n", (SIZE))

/* Define the syntax of labels and symbol definitions/declarations. */

/* This says how to output an assembler line
to define a global common symbol. */

#define ASM_OUTPUT_COMMON(FILE, NAME, SIZE, ROUNDED) \
( fputs (".comm ", (FILE)), \
assemble_name ((FILE), (NAME)), \
fprintf ((FILE), "%u\n", (int)(ROUNDED)))

/* This says how to output an assembler line
to define a local common symbol. */

#define ASM_OUTPUT_LOCAL(FILE, NAME, SIZE, ROUNDED) \
( fputs (".lcomm ", (FILE)), \
assemble_name ((FILE), (NAME)), \
fprintf ((FILE), "%u\n", (int)(ROUNDED)))

#ifdef HAVE_GAS_LCOMM_WITH_ALIGNMENT
#define ASM_OUTPUT_ALIGNED_LOCAL(FILE, NAME, SIZE, ALIGNMENT) \
( fputs (".lcomm ", (FILE)), \
assemble_name ((FILE), (NAME)), \
fprintf ((FILE), "%u,%u\n", (int)(SIZE), (int)(ALIGNMENT) / BITS_PER_UNIT))
#endif

/* This is how to output an assembler line
that says to advance the location counter

```

to a multiple of 2**LOG bytes. */

```
#define ASM_OUTPUT_ALIGN(FILE,LOG) \  
if ((LOG)!=0) fprintf ((FILE), "\t.align %d\n", (LOG))
```

```
/* This is how to store into the string BUF  
the symbol_ref name of an internal numbered label where  
PREFIX is the class of label and NUM is the number within the class.  
This is suitable for output with `assemble_name'. */
```

```
#define ASM_GENERATE_INTERNAL_LABEL(BUF,PREFIX,NUMBER) \  
sprintf ((BUF), "%s%ld", (PREFIX), (long)(NUMBER))
```

```
/* The prefix to add to user-visible assembler symbols. */
```

```
#define USER_LABEL_PREFIX "_"
```

```
/* Sequent has some changes in the format of DBX symbols. */
```

```
#define DBX_NO_XREFS 1
```

```
/* Don't split DBX symbols into continuations. */
```

```
#define DBX_CONTIN_LENGTH 0
```

```
@ignore
```

```
@c Set file name and title for man page.
```

```
@setfilename gpl
```

```
@settitle GNU General Public License
```

```
@c man begin SEEALSO
```

```
gfdl(7), fsf-funding(7).
```

```
@c man end
```

```
@c man begin COPYRIGHT
```

```
Copyright { } 2007 Free Software Foundation, Inc.
```

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```
@c man end
```

```
@end ignore
```

```
@node Copying
```

```
@c man begin DESCRIPTION
```

```
@unnumbered GNU General Public License
```

```
@center Version 3, 29 June 2007
```

```
@c This file is intended to be included in another file.
```

```
@display
```

```
Copyright { } 2007 Free Software Foundation, Inc. @url{http://fsf.org/}
```

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```
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under certain conditions; type @samp{show c} for details.
@end smallexample
```

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```
@c man end
@ignore
@c Set file name and title for man page.
@setfilename gfdl
@settitle GNU Free Documentation License
@c man begin SEEALSO
gpl(7), fsf-funding(7).
@c man end
@c man begin COPYRIGHT
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@uref{http://fsf.org/}
```

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```

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@c hence no sectioning command or @node.
@c man end
@end ignore
@c Special handling for inclusion in the install manual.
@ifset gfdlhtml
@ifnohtml
@comment node-name, next, previous, up
@node GNU Free Documentation License, Concept Index, Old, Top
@end ifnohtml
@html
<h1 align="center">Installing GCC: GNU Free Documentation License</h1>
@end html
@ifnohtml
@unnumbered GNU Free Documentation License
@end ifnohtml
@end ifset
@c man begin DESCRIPTION
@ifclear gfdlhtml
@node GNU Free Documentation License
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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.

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

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

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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!

```
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charset=UTF-8" /><title>License</title><meta name="generator" content="DocBook XSL-NS Stylesheets
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href="status.html" title="Chapter1.Status" /><link rel="prev" href="status.html" title="Chapter1.Status" /><link
rel="next" href="bugs.html" title="Bugs" /></head><body><div class="navheader"><table width="100%"
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href="bugs.html">Next</a></td></tr></table><hr /></div><div class="section"><div
class="titlepage"><div><div><h2 class="title" style="clear: both"><a
id="manual.intro.status.license"></a>License</h2></div></div></div><p>
```

There are two licenses affecting GNU libstdc++: one for the code,
and one for the documentation.

```
</p><p>
```

There is a license section in the FAQ regarding common [questions](../faq.html#faq.license). If you have more
questions, ask the FSF or the [gcc mailing list](http://gcc.gnu.org/lists.html).

```
</p><div class="section"><div class="titlepage"><div><div><h3 class="title"><a
id="manual.intro.status.license.gpl"></a>The Code: GPL</h3></div></div></div><p>
```

The source code is distributed under the [AppendixD. GNU
General Public License version 3](appendix_gpl.html) GNU General Public License version 3.

with the addition under section 7 of an exception described in the `GCC Runtime Library Exception, version 3.1` as follows (or see the file `COPYING.RUNTIME`):

```

</p><div class="literallayout"><p><br />
GCCRUNTIMELIBRARYEXCEPTION<br />
<br />
Version3.1,31March2009<br />
<br />
Copyright(C)2009<a class="link" href="http://www.fsf.org" target="_top">FreeSoftwareFoundation,Inc.</a><br />
<br />
Everyoneispermittedtocopyanddistributeverbatimcopiesofthis<br />
licensedocument,butchangingitisnotallowed.<br />
<br />
ThisGCCRuntimeLibraryException("Exception")isanadditional<br />
permissionundersection7oftheGNUGeneralPublicLicense,version<br />
3("GPLv3").Itappliestoagivenfile(the"RuntimeLibrary")that<br />
bearsanoticeplacedbythecopyrightholderofthefilestatingthat<br />
thefileisgovernedbyGPLv3alongwiththisException.<br />
<br />
WhenyouuseGCCtocompileaprogram,GCCmaycombineportionsof<br />
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<br />
0.Definitions.<br />
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Afileisan"IndependentModule"ifiteitherrequirestheRuntime<br />
LibraryforexecutionafteraCompilationProcess,ormakesuseofan<br />
interfaceprovidedbytheRuntimeLibrary,butisnototherwisebased<br />
ontheRuntimeLibrary.<br />
<br />
"GCC"meansaversionoftheGNUCompilerCollection,withorwithout<br />
modifications,governedbyversion3(oraspecifiedlaterversion)of<br />
theGNUGeneralPublicLicense(GPL)withtheoptionofusingany<br />
subsequentversionspublishedbytheFSF.<br />
<br />
"GPL-compatibleSoftware"isssoftwarewhoseconditionsofpropagation,<br />
modificationandusewouldpermitcombinationwithGCCinaccordwith<br />
thelicenseofGCC.<br />
<br />
"TargetCode"referstooutputfromanycompilerforarealorvirtual<br />
targetprocessorarchitecture,inexecutableformorsuitablefor<br />
inputtoan assembler, loader, linkerand/or execution<br />
phase.Notwithstandingthat,TargetCodedoesnotincludedatainany<br />
formatthat is used as a compiler intermediate representation, or used<br />
for producing a compiler intermediate representation.<br />
<br />

```

The "CompilationProcess" transforms code entirely represented in non-intermediate languages designed for human-written code, and/or in Java Virtual Machine bytecode, into TargetCode. Thus, for example, use of source code generators and preprocessors need not be considered part of the CompilationProcess, since the CompilationProcess can be understood as starting with the output of the generators or preprocessors.

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1. Grant of Additional Permission.

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2. No Weakening of GCC Copyleft.

The availability of this Exception does not imply any general presumption that third-party software is unaffected by the copyleft requirements of the license of GCC.

Hopefully that text is self-explanatory. If it isn't, you need to speak to your lawyer, or the Free Software Foundation.

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We can probably offer suggestions.

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<acronym>GNU</acronym> General Public License version 3
</title></info>
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<para>

Version 3, 29 June 2007

</para>

<para>

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<link xmlns:xlink="http://www.w3.org/1999/xlink" xlink:href="http://www.fsf.org/">http://www.fsf.org/</link>

</para>

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<bridgehead xml:id="gpl-3-preamble" renderas="sect1">

Preamble

</bridgehead>

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know you can do these things.

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<para>

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<para>

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<para>

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</para>

<para>

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<para>

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</para>

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

</para>

<bridgehead>

TERMS AND CONDITIONS

</bridgehead>

<bridgehead xml:id="gpl-3-definitions" renderas="sect1">

0. Definitions.

</bridgehead>

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</para>

<para>

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</para>

<para>

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</para>

<para>

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</para>

<para>

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</para>

<para>

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</para>

<para>

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</para>

<bridgehead xml:id="SourceCode" renderas="sect1">

1. Source Code.

</bridgehead>

<para>

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.

</para>

<para>

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.

</para>

<para>

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.

</para>

<para>

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 works 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.

</para>

<para>

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

</para>

<para>

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</para>

<bridgehead xml:id="BasicPermissions" renderas="sect1">

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</bridgehead>

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</para>

<para>

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</para>

<bridgehead xml:id="Protecting" renderas="sect1">

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

</bridgehead>

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</para>

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</para>

<bridgehead xml:id="ConveyingVerbatim" renderas="sect1">

4. Conveying Verbatim Copies.

</bridgehead>

<para>

You may convey verbatim copies of the Programs 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.

</para>

<para>

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</para>

<bridgehead xml:id="ConveyingModified" renderas="sect1">

5. Conveying Modified Source Versions.

</bridgehead>

<para>

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:

</para>

<orderedlist numeration="loweralpha" inheritnum="ignore" continuation="restarts">

<listitem>

<para>

The work must carry prominent notices stating that you modified it, and giving a relevant date.

</para>

</listitem>

<listitem>

<para>

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.

</para>

</listitem>

<listitem>

<para>
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.

</para>
</listitem>
<listitem>

<para>
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.

</para>
</listitem>
</orderedlist>

<para>
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 compilations 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.

</para>
<bridgehead xml:id="ConveyingNonSource" renderas="sect1">

6. Conveying Non-Source Forms.

</bridgehead>

<para>
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:

</para>
<orderedlist numeration="loweralpha" inheritnum="ignore" continuation="restarts">

<listitem>

<para>
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.

</para>
</listitem>
<listitem>

<para>

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.

</para>

</listitem>

<listitem>

<para>

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.

</para>

</listitem>

<listitem>

<para>

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.

</para>

</listitem>

<listitem>

<para>

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.

</para>

</listitem>

</orderedlist>

<para>

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.

</para>

<para>

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.

</para>

<para>

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.

</para>

<para>

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 <acronym>ROM</acronym>).

</para>

<para>

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.

</para>

<para>

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.

</para>

<bridgehead xml:id="AdditionalTerms" renderas="sect1">

7. Additional Terms.

</bridgehead>

<para>

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.

</para>

<para>

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</para>

<para>

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</para>

<orderedlist numeration="loweralpha" inheritnum="ignore" continuation="restarts">

<listitem>

<para>

Disclaiming warranty or limiting liability differently from the terms of sections 15 and 16 of this License; or

</para>

</listitem>

<listitem>

<para>

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

</para>

</listitem>

<listitem>

<para>

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

</para>

</listitem>

<listitem>

<para>

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</para>

</listitem>

<listitem>

<para>

Declining to grant rights under trademark law for use of some trade names, trademarks, or service marks; or

</para>

</listitem>

<listitem>

<para>

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</para>

</listitem>

</orderedlist>

<para>

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</para>

<para>

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.

</para>

<para>

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.

</para>

<bridgehead xml:id="gpl-3-termination" renderas="sect1">

8. Termination.

</bridgehead>

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</para>

<para>

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</para>

<para>

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</para>

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</para>

<bridgehead xml:id="AcceptanceNotRequired" renderas="sect1">

9. Acceptance Not Required for Having Copies.

</bridgehead>

<para>

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</para>

<bridgehead xml:id="AutomaticDownstream" renderas="sect1">

10. Automatic Licensing of Downstream Recipients.

</bridgehead>

<para>

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.

</para>

<para>

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.

</para>

<para>

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</para>

<bridgehead xml:id="Patents" renderas="sect1">

11. Patents.

</bridgehead>

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</para>

<para>

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</para>

<para>

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contents of its contributor version.

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<para>

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</para>

<para>

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</para>

<para>

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<para>

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<para>

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</para>

<bridgehead xml:id="NoSurrender" renderas="sect1">

12. No Surrender of Others Freedom.

</bridgehead>

<para>

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</para>

<bridgehead xml:id="UsedWithAGPL" renderas="sect1">

13. Use with the <acronym>GNU</acronym> Affero General Public License.

</bridgehead>

<para>

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</para>

<bridgehead xml:id="RevisedVersions" renderas="sect1">

14. Revised Versions of this License.

</bridgehead>

<para>

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</para>

<para>

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<acronym>GNU</acronym> General Public License, you may choose any version ever published by the Free Software Foundation.

</para>

<para>

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</para>

<para>

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</para>

<bridgehead xml:id="WarrantyDisclaimer" renderas="sect1">

15. Disclaimer of Warranty.

</bridgehead>

<para>

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</para>

<bridgehead xml:id="LiabilityLimitation" renderas="sect1">

16. Limitation of Liability.

</bridgehead>

<para>

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</para>

<bridgehead xml:id="InterpretationSecs1516" renderas="sect1">

17. Interpretation of Sections 15 and 16.

</bridgehead>

<para>

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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.

</para>

<bridgehead>

END OF TERMS AND CONDITIONS

</bridgehead>

<bridgehead xml:id="HowToApply" renderas="sect1">

How to Apply These Terms to Your New Programs

</bridgehead>

<para>

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</para>

<para>

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.

</para>

<screen>

<replaceable>one line to give the programs name and a brief idea of what it does.</replaceable>

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

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</screen>

<para>

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

</para>

<para>

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

</para>

<screen>

<replaceable>program</replaceable> Copyright (C) <replaceable>year</replaceable> <replaceable>name of author</replaceable>

This program comes with ABSOLUTELY NO WARRANTY; for details type <literal>show w</literal>.

This is free software, and you are welcome to redistribute it under certain conditions; type <literal>show c</literal> for details.

</screen>

<para>

The hypothetical commands <literal>show w</literal> and <literal>show c</literal> should show the appropriate parts of the General Public License. Of course, your programs commands might be different; for a GUI interface, you would use an about box.

</para>

<para>

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<para>

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</para>

</appendix>

<appendix xmlns="http://docbook.org/ns/docbook" version="5.0" xml:id="appendix.gfdl-1.3">

<info><title>GNU Free Documentation License</title></info>
<?dbhtml filename="appendix_gfdl.html"?>

<simpara>Version 1.3, 3 November 2008</simpara>

<simpara>

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</simpara>

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</simpara>

<bridgehead xml:id="fdl-1-section0" renderas="sect2">

0. PREAMBLE

</bridgehead>

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</simpara>

<bridgehead xml:id="fdl-1-section1" renderas="sect2">

1. APPLICABILITY AND DEFINITIONS

</bridgehead>

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<simpara>

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</simpara>

<simpara>

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<simpara>

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<simpara>

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</simpara>

<bridgehead xml:id="fdl-1-section2" renderas="sect2">

2. VERBATIM COPYING

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</appendix>

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Version 3.1, 31 March 2009

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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

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@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

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@end enumerate

@iftex

@heading END OF TERMS AND CONDITIONS

@end iftex

@ifinfo

@center END OF TERMS AND CONDITIONS

@end ifinfo

@page

@appendixsubsec 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.

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@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!

```
#!/usr/bin/python
```

```
#
```

```
# Copyright (C) 2013 Free Software Foundation, Inc.
```

```
#
```

```
# This script 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, or (at your option)  
# any later version.
```

```
# This script adjusts the copyright notices at the top of source files
```

```
# so that they have the form:
```

```
#
```

```
# Copyright XXXX-YYYY Free Software Foundation, Inc.
```

```
#
```

```
# It doesn't change code that is known to be maintained elsewhere or  
# that carries a non-FSF copyright.
```

```
#
```

```
# The script also doesn't change testsuite files, except those in  
# libstdc++-v3. This is because libstdc++-v3 has a conformance testsuite,  
# while most tests in other directories are just things that failed at some  
# point in the past.
```

```
#
```

```

# Pass --this-year to the script if you want it to add the current year
# to all applicable notices. Pass --quilt if you are using quilt and
# want files to be added to the quilt before being changed.
#
# By default the script will update all directories for which the
# output has been vetted. You can instead pass the names of individual
# directories, including those that haven't been approved. So:
#
# update-copyright.pl --this-year
#
# is the command that would be used at the beginning of a year to update
# all copyright notices (and possibly at other times to check whether
# new files have been added with old years). On the other hand:
#
# update-copyright.pl --this-year libjava
#
# would run the script on just libjava/.
#
# Note that things like --version output strings must be updated before
# this script is run. There's already a separate procedure for that.

```

```

import os
import re
import sys
import time
import subprocess

```

```

class Errors:

```

```

    def __init__(self):
        self.num_errors = 0

```

```

    def report(self, filename, string):
        if filename:
            string = filename + ': ' + string
            sys.stderr.write(string + '\n')
            self.num_errors += 1

```

```

    def ok(self):
        return self.num_errors == 0

```

```

class GenericFilter:

```

```

    def __init__(self):
        self.skip_files = set()
        self.skip_dirs = set()
        self.skip_extensions = set()
        self.fossilised_files = set()
        self.own_files = set()

```

```

self.skip_files |= set ([
    # Skip licence files.
    'COPYING',
    'COPYING.LIB',
    'COPYING3',
    'COPYING3.LIB',
    'LICENSE',
    'fdl.texi',
    'gpl_v3.texi',
    'fdl-1.3.xml',
    'gpl-3.0.xml',

    # Skip auto- and libtool-related files
    'aclocal.m4',
    'compile',
    'config.guess',
    'config.sub',
    'depcomp',
    'install-sh',
    'libtool.m4',
    'ltmain.sh',
    'ltoptions.m4',
    'ltsugar.m4',
    'ltversion.m4',
    'lt~obsolete.m4',
    'missing',
    'mkdep',
    'mknstalldirs',
    'move-if-change',
    'shlibpath.m4',
    'symlink-tree',
    'ylwrap',

    # Skip FSF mission statement, etc.
    'gnu.texi',
    'funding.texi',
    'appendix_free.xml',

    # Skip imported texinfo files.
    'texinfo.tex',
])

def get_line_filter (self, dir, filename):
    if filename.startswith ('ChangeLog'):
        # Ignore references to copyright in changelog entries.
        return re.compile ('\t')

```

```

return None

def skip_file (self, dir, filename):
    if filename in self.skip_files:
        return True

    (base, extension) = os.path.splitext (os.path.join (dir, filename))
    if extension in self.skip_extensions:
        return True

    if extension == '.in':
        # Skip .in files produced by automake.
        if os.path.exists (base + '.am'):
            return True

        # Skip files produced by autogen
        if (os.path.exists (base + '.def')
            and os.path.exists (base + '.tpl')):
            return True

    # Skip configure files produced by autoconf
    if filename == 'configure':
        if os.path.exists (base + '.ac'):
            return True
        if os.path.exists (base + '.in'):
            return True

    return False

def skip_dir (self, dir, subdir):
    return subdir in self.skip_dirs

def is_fossilised_file (self, dir, filename):
    if filename in self.fossilised_files:
        return True
    # Only touch current current ChangeLogs.
    if filename != 'ChangeLog' and filename.find ('ChangeLog') >= 0:
        return True
    return False

def by_package_author (self, dir, filename):
    return filename in self.own_files

class Copyright:
    def __init__ (self, errors):
        self.errors = errors

    # Characters in a range of years. Include '.' for typos.

```



```

ranges = '[0-9](?:[-0-9.,\s])\s+and\s+[0-9]'

# Non-whitespace characters in a copyright holder's name.
name = '[\w.,-]'

# Matches one year.
self.year_re = re.compile('[0-9]+')

# Matches part of a year or copyright holder.
self.continuation_re = re.compile(ranges + '|' + name)

# Matches a full copyright notice:
self.copyright_re = re.compile (
    # 1: 'Copyright (C)', etc.
    '([Cc]opyright'
    '[Cc]opyright\s+\([Cc]\)'
    '[Cc]opyright\s+%s'
    '[Cc]opyright\s+&copy;'
    '[Cc]opyright\s+@copyright{ }'
    '@set\s+copyright[\w-]+)'

    # 2: the years. Include the whitespace in the year, so that
    # we can remove any excess.
    '\s*(?:' + ranges + ',?'
    '@value\{[^\{]*\})\s*'

    # 3: 'by ', if used
    '(by\s+)?'

    # 4: the copyright holder. Don't allow multiple consecutive
    # spaces, so that right-margin gloss doesn't get caught
    # (e.g. gnat_ugn.texi).
    '(' + name + '(?:\s?' + name + ')*?)')

# A regexp for notices that might have slipped by. Just matching
# 'copyright' is too noisy, and 'copyright.*[0-9]' falls foul of
# HTML header markers, so check for 'copyright' and two digits.
self.other_copyright_re = re.compile ('copyright.*[0-9][0-9]',
                                       re.IGNORECASE)
self.comment_re = re.compile('#+|[*]+;+|%+//+|@c |dnl ')
self.holders = { '@copying': '@copying' }
self.holder_prefixes = set()

# True to 'quilt add' files before changing them.
self.use_quilt = False

# If set, force all notices to include this year.
self.max_year = None

```

```

# Goes after the year(s). Could be ', '.
self.separator = ''

def add_package_author (self, holder, canon_form = None):
    if not canon_form:
        canon_form = holder
    self.holders[holder] = canon_form
    index = holder.find (' ')
    while index >= 0:
        self.holder_prefixes.add (holder[:index])
        index = holder.find (' ', index + 1)

def add_external_author (self, holder):
    self.holders[holder] = None

class BadYear():
    def __init__ (self, year):
        self.year = year

    def __str__ (self):
        return 'unrecognised year: ' + self.year

def parse_year (self, string):
    year = int (string)
    if len (string) == 2:
        if year > 70:
            return year + 1900
    elif len (string) == 4:
        return year
    raise self.BadYear (string)

def year_range (self, years):
    year_list = [self.parse_year (year)
                 for year in self.year_re.findall (years)]
    assert len (year_list) > 0
    return (min (year_list), max (year_list))

def set_use_quilt (self, use_quilt):
    self.use_quilt = use_quilt

def include_year (self, year):
    assert not self.max_year
    self.max_year = year

def canonicalise_years (self, dir, filename, filter, years):
    # Leave texinfo variables alone.
    if years.startswith ('@value'):

```

```

    return years

(min_year, max_year) = self.year_range (years)

# Update the upper bound, if enabled.
if self.max_year and not filter.is_fossilised_file (dir, filename):
    max_year = max (max_year, self.max_year)

# Use a range.
if min_year == max_year:
    return '%d' % min_year
else:
    return '%d-%d' % (min_year, max_year)

def strip_continuation (self, line):
    line = line.lstrip()
    match = self.comment_re.match (line)
    if match:
        line = line[match.end():].lstrip()
    return line

def is_complete (self, match):
    holder = match.group (4)
    return (holder
            and (holder not in self.holder_prefixes
                or holder in self.holders))

def update_copyright (self, dir, filename, filter, file, line, match):
    orig_line = line
    next_line = None
    pathname = os.path.join (dir, filename)

    intro = match.group (1)
    if intro.startswith ('@set'):
        # Texinfo year variables should always be on one line
        after_years = line[match.end (2):].strip()
        if after_years != "":
            self.errors.report (pathname,
                                'trailing characters in @set: '
                                + after_years)
            return (False, orig_line, next_line)
    else:
        # If it looks like the copyright is incomplete, add the next line.
        while not self.is_complete (match):
            try:
                next_line = file.next()
            except StopIteration:
                break

```

```

# If the next line doesn't look like a proper continuation,
# assume that what we've got is complete.
continuation = self.strip_continuation (next_line)
if not self.continuation_re.match (continuation):
    break

# Merge the lines for matching purposes.
orig_line += next_line
line = line.rstrip() + ' ' + continuation
next_line = None

# Rematch with the longer line, at the original position.
match = self.copyright_re.match (line, match.start())
assert match

holder = match.group (4)

# Use the filter to test cases where markup is getting in the way.
if filter.by_package_author (dir, filename):
    assert holder not in self.holders

elif not holder:
    self.errors.report (pathname, 'missing copyright holder')
    return (False, orig_line, next_line)

elif holder not in self.holders:
    self.errors.report (pathname,
                        'unrecognised copyright holder: ' + holder)
    return (False, orig_line, next_line)

else:
    # See whether the copyright is associated with the package
    # author.
    canon_form = self.holders[holder]
    if not canon_form:
        return (False, orig_line, next_line)

    # Make sure the author is given in a consistent way.
    line = (line[:match.start (4)]
           + canon_form
           + line[match.end (4):])

    # Remove any 'by'
    line = line[:match.start (3)] + line[match.end (3):]

# Update the copyright years.
years = match.group (2).strip()

```

```

try:
    canon_form = self.canonicalise_years (dir, filename, filter, years)
except self.BadYear as e:
    self.errors.report (pathname, str (e))
    return (False, orig_line, next_line)

line = (line[:match.start (2)]
        + ' ' + canon_form + self.separator
        + line[match.end (2):])

# Use the standard (C) form.
if intro.endswith ('right'):
    intro += '(C)'
elif intro.endswith ('(c)'):
    intro = intro[:-3] + '(C)'
line = line[:match.start (1)] + intro + line[match.end (1):]

# Strip trailing whitespace
line = line.rstrip() + '\n'

return (line != orig_line, line, next_line)

def process_file (self, dir, filename, filter):
    pathname = os.path.join (dir, filename)
    if filename.endswith ('.tmp'):
        # Looks like something we tried to create before.
        try:
            os.remove (pathname)
        except OSError:
            pass
        return

    lines = []
    changed = False
    line_filter = filter.get_line_filter (dir, filename)
    with open (pathname, 'r') as file:
        prev = None
        for line in file:
            while line:
                next_line = None
                # Leave filtered-out lines alone.
                if not (line_filter and line_filter.match (line)):
                    match = self.copyright_re.search (line)
                    if match:
                        res = self.update_copyright (dir, filename, filter,
                                                    file, line, match)
                        (this_changed, line, next_line) = res
                        changed = changed or this_changed

```

```

        # Check for copyright lines that might have slipped by.
        elif self.other_copyright_re.search (line):
            self.errors.report (pathname,
                                'unrecognised copyright: %s'
                                % line.strip())
        lines.append (line)
        line = next_line

# If something changed, write the new file out.
if changed and self.errors.ok():
    tmp_pathname = pathname + '.tmp'
    with open (tmp_pathname, 'w') as file:
        for line in lines:
            file.write (line)
    if self.use_quilt:
        subprocess.call (['quilt', 'add', pathname])
    os.rename (tmp_pathname, pathname)

def process_tree (self, tree, filter):
    for (dir, subdirs, filenames) in os.walk (tree):
        # Don't recurse through directories that should be skipped.
        for i in xrange (len (subdirs) - 1, -1, -1):
            if filter.skip_dir (dir, subdirs[i]):
                del subdirs[i]

        # Handle the files in this directory.
        for filename in filenames:
            if filter.skip_file (dir, filename):
                sys.stdout.write ('Skipping %s\n'
                                    % os.path.join (dir, filename))
            else:
                self.process_file (dir, filename, filter)

class CmdLine:
    def __init__ (self, copyright = Copyright):
        self.errors = Errors()
        self.copyright = copyright (self.errors)
        self.dirs = []
        self.default_dirs = []
        self.chosen_dirs = []
        self.option_handlers = dict()
        self.option_help = []

        self.add_option ('--help', 'Print this help', self.o_help)
        self.add_option ('--quilt', '"quilt add" files before changing them',
                        self.o_quilt)
        self.add_option ('--this-year', 'Add the current year to every notice',

```

```

        self.o_this_year)

def add_option (self, name, help, handler):
    self.option_help.append ((name, help))
    self.option_handlers[name] = handler

def add_dir (self, dir, filter = GenericFilter()):
    self.dirs.append ((dir, filter))

def o_help (self, option = None):
    sys.stdout.write ('Usage: %s [options] dir1 dir2...\n\n'
        'Options:\n' % sys.argv[0])
    format = '%-15s %s\n'
    for (what, help) in self.option_help:
        sys.stdout.write (format % (what, help))
    sys.stdout.write ('\nDirectories:\n')

    format = '%-25s'
    i = 0
    for (dir, filter) in self.dirs:
        i += 1
        if i % 3 == 0 or i == len (self.dirs):
            sys.stdout.write (dir + '\n')
        else:
            sys.stdout.write (format % dir)
    sys.exit (0)

def o_quilt (self, option):
    self.copyright.set_use_quilt (True)

def o_this_year (self, option):
    self.copyright.include_year (time.localtime().tm_year)

def main (self):
    for arg in sys.argv[1:]:
        if arg[1] != '-':
            self.chosen_dirs.append (arg)
        elif arg in self.option_handlers:
            self.option_handlers[arg] (arg)
        else:
            self.errors.report (None, 'unrecognised option: ' + arg)
    if self.errors.ok():
        if len (self.chosen_dirs) == 0:
            self.chosen_dirs = self.default_dirs
        if len (self.chosen_dirs) == 0:
            self.o_help()
        else:
            for chosen_dir in self.chosen_dirs:

```

```

        canon_dir = os.path.join (chosen_dir, ")
        count = 0
        for (dir, filter) in self.dirs:
            if (dir + os.sep).startswith (canon_dir):
                count += 1
                self.copyright.process_tree (dir, filter)
        if count == 0:
            self.errors.report (None, 'unrecognised directory: '
                                + chosen_dir)
        sys.exit (0 if self.errors.ok() else 1)

#-----

class TopLevelFilter (GenericFilter):
    def skip_dir (self, dir, subdir):
        return True

class ConfigFilter (GenericFilter):
    def __init__ (self):
        GenericFilter.__init__ (self)

    def skip_file (self, dir, filename):
        if filename.endswith ('.m4'):
            pathname = os.path.join (dir, filename)
            with open (pathname) as file:
                # Skip files imported from gettext.
                if file.readline().find ('gettext-') >= 0:
                    return True
        return GenericFilter.skip_file (self, dir, filename)

class GCCFilter (GenericFilter):
    def __init__ (self):
        GenericFilter.__init__ (self)

        self.skip_files |= set ([
            # Not part of GCC
            'math-68881.h',
        ])

        self.skip_dirs |= set ([
            # Better not create a merge nightmare for the GNAT folks.
            'ada',

            # Handled separately.
            'testsuite',
        ])

        self.skip_extensions |= set ([

```



```

        # Maintained by the translation project.
        '.po',

        # Automatically-generated.
        '.pot',
    ])

    self.fossilised_files |= set ([
        # Old news won't be updated.
        'ONEWS',
    ])

class TestsuiteFilter (GenericFilter):
    def __init__ (self):
        GenericFilter.__init__ (self)

    self.skip_extensions |= set ([
        # Don't change the tests, which could be woened by anyone.
        '.c',
        '.C',
        '.cc',
        '.h',
        '.hs',
        '.f',
        '.f90',
        '.go',
        '.inc',
        '.java',
    ])

    def skip_file (self, dir, filename):
        # g++.niklas/README contains historical copyright information
        # and isn't updated.
        if filename == 'README' and os.path.basename (dir) == 'g++.niklas':
            return True
        return GenericFilter.skip_file (self, dir, filename)

class LibCppFilter (GenericFilter):
    def __init__ (self):
        GenericFilter.__init__ (self)

    self.skip_extensions |= set ([
        # Maintained by the translation project.
        '.po',

        # Automatically-generated.
        '.pot',
    ])

```

```

class LibGCCFilter (GenericFilter):
    def __init__ (self):
        GenericFilter.__init__ (self)

        self.skip_dirs |= set ([
            # Imported from GLIBC.
            'soft-fp',
        ])

class LibJavaFilter (GenericFilter):
    def __init__ (self):
        GenericFilter.__init__ (self)

        self.skip_dirs |= set ([
            # Handled separately.
            'testsuite',

            # Not really part of the library
            'contrib',

            # Imported from upstream
            'classpath',
            'libltdl',
        ])

    def get_line_filter (self, dir, filename):
        if filename == 'NameDecoder.h':
            return re.compile ('.*NAME_COPYRIGHT')
        if filename == 'ICC_Profile.h':
            return re.compile ('.*icSigCopyrightTag')
        return GenericFilter.get_line_filter (self, dir, filename)

class LibMudflapFilter (GenericFilter):
    def __init__ (self):
        GenericFilter.__init__ (self)

        self.skip_dirs |= set ([
            # Handled separately.
            'testsuite',
        ])

class LibStdCxxFilter (GenericFilter):
    def __init__ (self):
        GenericFilter.__init__ (self)

        self.skip_files |= set ([
            # Contains no copyright of its own, but quotes the GPL.

```

```

        'intro.xml',
    ])

    self.skip_dirs |= set ([
        # Contains automatically-generated sources.
        'html',

        # The testsuite data files shouldn't be changed.
        'data',

        # Contains imported images
        'images',
    ])

    self.own_files |= set ([
        # Contains markup around the copyright owner.
        'spine.xml',
    ])

    def get_line_filter (self, dir, filename):
        if filename == 'boost_concept_check.h':
            return re.compile ('// \\\(C\\\) Copyright Jeremy Siek')
        return GenericFilter.get_line_filter (self, dir, filename)

class GCCCopyright (Copyright):
    def __init__ (self, errors):
        Copyright.__init__ (self, errors)

        canon_fsf = 'Free Software Foundation, Inc.'
        self.add_package_author ('Free Software Foundation', canon_fsf)
        self.add_package_author ('Free Software Foundation.', canon_fsf)
        self.add_package_author ('Free Software Foundation Inc.', canon_fsf)
        self.add_package_author ('Free Software Foundation, Inc', canon_fsf)
        self.add_package_author ('Free Software Foundation, Inc.', canon_fsf)
        self.add_package_author ('The Free Software Foundation', canon_fsf)
        self.add_package_author ('The Free Software Foundation, Inc.', canon_fsf)
        self.add_package_author ('Software Foundation, Inc.', canon_fsf)

        self.add_external_author ('ARM')
        self.add_external_author ('AdaCore')
        self.add_external_author ('Ami Tavory and Vladimir Dreizin, IBM-HRL.')
        self.add_external_author ('Cavium Networks.')
        self.add_external_author ('Faraday Technology Corp.')
        self.add_external_author ('Florida State University')
        self.add_external_author ('Greg Colvin and Beman Dawes.')
        self.add_external_author ('Hewlett-Packard Company')
        self.add_external_author ('Information Technology Industry Council.')
        self.add_external_author ('James Theiler, Brian Gough')

```

```

self.add_external_author ('Makoto Matsumoto and Takuji Nishimura,')
self.add_external_author ('National Research Council of Canada.')
self.add_external_author ('Peter Dimov and Multi Media Ltd.')
self.add_external_author ('Peter Dimov')
self.add_external_author ('Pipeline Associates, Inc.')
```

```

self.add_external_author ('Regents of the University of California.')
```

```

self.add_external_author ('Silicon Graphics Computer Systems, Inc.')
```

```

self.add_external_author ('Silicon Graphics')
```

```

self.add_external_author ('Stephen L. Moshier')
```

```

self.add_external_author ('Sun Microsystems, Inc. All rights reserved.')
```

```

self.add_external_author ('The Go Authors. All rights reserved.')
```

```

self.add_external_author ('The Go Authors. All rights reserved.')
```

```

self.add_external_author ('The Go Authors.')
```

```

self.add_external_author ('The Regents of the University of California.')
```

```

self.add_external_author ('Unicode, Inc.')
```

```

self.add_external_author ('University of Toronto.')
```

```

class GCCCmdLine (CmdLine):
```

```

    def __init__ (self):
```

```

        CmdLine.__init__ (self, GCCCopyright)
```

```

        self.add_dir ('.', TopLevelFilter())
```

```

        # Boehm-gc is imported from upstream.
```

```

        self.add_dir ('config', ConfigFilter())
```

```

        # contrib isn't really part of GCC.
```

```

        self.add_dir ('fixincludes')
```

```

        self.add_dir ('gcc', GCCFilter())
```

```

        self.add_dir (os.path.join ('gcc', 'testsuite'), TestsuiteFilter())
```

```

        self.add_dir ('gnattools')
```

```

        self.add_dir ('include')
```

```

        self.add_dir ('libada')
```

```

        self.add_dir ('libatomic')
```

```

        self.add_dir ('libbacktrace')
```

```

        self.add_dir ('libcpp', LibCppFilter())
```

```

        self.add_dir ('libdecnumber')
```

```

        # libffi is imported from upstream.
```

```

        self.add_dir ('libgcc', LibGCCFilter())
```

```

        self.add_dir ('libgfortran')
```

```

        self.add_dir ('libgomp')
```

```

        self.add_dir ('libiberty')
```

```

        self.add_dir ('libitm')
```

```

        self.add_dir ('libjava', LibJavaFilter())
```

```

        self.add_dir (os.path.join ('libjava', 'testsuite'), TestsuiteFilter())
```

```

        self.add_dir ('libmudflap', LibMudflapFilter())
```

```

        self.add_dir (os.path.join ('libmudflap', 'testsuite'),
```

```

            TestsuiteFilter())
```

```

        self.add_dir ('libobjc')
```

```

        self.add_dir ('libquadmath')
```

```

# libsanitiser is imported from upstream.
self.add_dir ('libssp')
self.add_dir ('libstdc++-v3', LibStdCxxFilter())
self.add_dir ('lto-plugin')
# zlib is imported from upstream.

self.default_dirs = [
    'gcc',
    'libada',
    'libatomic',
    'libbacktrace',
    'libcpp',
    'libdecnumber',
    'libgcc',
    'libgfortran',
    'libgomp',
    'libitm',
    'libmudflap',
    'libobjc',
    'libstdc++-v3',
]

```

GCCCmdLine().main()

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```
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```

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```
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```

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

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/* gnu.classpath.tools.taglets.CopyrightTaglet

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```
package gnu.classpath.tools.taglets;

import java.util.Map;

import com.sun.tools.doclets.Taglet;

import com.sun.javadoc.Tag;

/**
 * A simple Taglet which handles Copyright information.
 */
public class CopyrightTaglet implements Taglet {

    private static final String NAME = "copyright";
    private static final String HEADER = "Copyright:";

    public String getName() {
        return NAME;
    }

    public boolean inField() {
        return true;
    }

    public boolean inConstructor() {
        return true;
    }

    public boolean inMethod() {
```

```

    return true;
}

public boolean inOverview() {
    return true;
}

public boolean inPackage() {
    return true;
}

public boolean inType() {
    return true;
}

public boolean isInlineTag() {
    return false;
}

public static void register(Map tagletMap) {
    CopyrightTaglet copyrightTaglet = new CopyrightTaglet();
    tagletMap.put(copyrightTaglet.getName(), copyrightTaglet);
}

public String toString(Tag tag) {
    return toString(new Tag[] { tag });
}

public String toString(Tag[] tags) {
    if (tags.length == 0) {
        return null;
    }
    else {
        boolean haveValidTag = false;
        for (int i = 0; i < tags.length && !haveValidTag; ++i) {
            if (tags[i].text().length() > 0) {
                haveValidTag = true;
            }
        }
    }

    if (haveValidTag) {
        StringBuffer result = new StringBuffer();
        result.append("<dl>");
        for (int i = 0; i < tags.length; i++) {
            if (tags[i].text().length() > 0) {
                result.append("<dt><i>Copyright &#169; " + tags[i].text() + "</i></dt>");
            }
        }
    }
}

```



```

import gnu.java.lang.CPStringBuilder;

import java.io.Serializable;

/**
 * This class is the abstract superclass of all classes that implement
 * the concept of a permission. A permission consists of a permission name
 * and optionally a list of actions that relate to the permission. The
 * actual meaning of the name of the permission is defined only in the
 * context of a subclass. It may name a resource to which access permissions
 * are granted (for example, the name of a file) or it might represent
 * something else entirely. Similarly, the action list only has meaning
 * within the context of a subclass. Some permission names may have no
 * actions associated with them. That is, you either have the permission
 * or you don't.
 *
 * <p>The most important method in this class is <code>implies</code>. This
 * checks whether if one has this permission, then the specified
 * permission is also implied. As a conceptual example, consider the
 * permissions "Read All Files" and "Read File foo". The permission
 * "Read All Files" implies that the caller has permission to read the
 * file foo.
 *
 * <p><code>Permission</code>'s must be immutable - do not change their
 * state after creation.
 *
 * @author Aaron M. Renn (arenn@urbanophile.com)
 * @see Permissions
 * @see PermissionCollection
 * @since 1.1
 * @status updated to 1.4
 */
public abstract class Permission implements Guard, Serializable
{
    /**
     * Compatible with JDK 1.1+.
     */
    private static final long serialVersionUID = -563657022231596674L;

    /**
     * This is the name assigned to this permission object.
     *
     * @serial the name of the permission
     */
    private String name;

    /**
     * Create an instance with the specified name.

```

```

*
* @param name the permission name
*/
public Permission(String name)
{
    this.name = name;
}

/**
 * This method implements the Guard interface for this class.
 * It calls the checkPermission method in
 * SecurityManager with this Permission as its
 * argument. This method returns silently if the security check succeeds
 * or throws an exception if it fails.
 *
 * @param obj the Object being guarded - ignored by this class
 * @throws SecurityException if the security check fails
 * @see GuardedObject
 * @see SecurityManager#checkPermission(Permission)
 */
public void checkGuard(Object obj)
{
    SecurityManager sm = System.getSecurityManager();
    if (sm != null)
        sm.checkPermission(this);
}

/**
 * This method tests whether this Permission implies that the
 * specified Permission is also granted.
 *
 * @param perm the Permission to test against
 * @return true if perm is implied by this
 */
public abstract boolean implies(Permission perm);

/**
 * Check to see if this object equals obj. Use implies, rather
 * than equals, when making access control decisions.
 *
 * @param obj the object to compare to
 */
public abstract boolean equals(Object obj);

/**
 * This method returns a hash code for this Permission. It
 * must satisfy the contract of Object.hashCode: it must be
 * the same for all objects that equals considers to be the same.

```

```

*
* @return a hash value
*/
public abstract int hashCode();

/**
 * Get the name of this Permission.
 *
 * @return the name
 */
public final String getName()
{
    return name;
}

/**
 * This method returns the list of actions for this Permission
 * as a String. The string should be in canonical order, for
 * example, both new FilePermission(f, "write,read") and
 * new FilePermission(f, "read,write") have the action list
 * "read,write".
 *
 * @return the action list for this Permission
 */
public abstract String getActions();

/**
 * This method returns an empty PermissionCollection object
 * that can store permissions of this type, or null if no
 * such collection is defined. Subclasses must override this to provide
 * an appropriate collection when one is needed to accurately calculate
 * implies.
 *
 * @return a new PermissionCollection
 */
public PermissionCollection newPermissionCollection()
{
    return null;
}

/**
 * This method returns a String representation of this
 * Permission object. This is in the format:
 * '(' + getClass().getName() + ' ' + getName() + ' ' + getActions
 * + ')'.
 *
 * @return this object as a String
 */

```

```

public String toString()
{
    CPStringBuilder string = new CPStringBuilder();

    string = string.append('(');
    string = string.append(getClass().getName());
    string = string.append(' ');
    string = string.append(getName());

    if (!(getActions().equals("")))
    {
        string = string.append(' ');
        string = string.append(getActions());
    }

    string = string.append(')');
    return string.toString();
}
} // class Permission
/* Permission.java -- Information about an ACL permission
   Copyright (C) 1998 Free Software Foundation, Inc.

```

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```
package java.security.acl;
```

```
/**
```

```
* This interface provides information about a permission that can be  
* granted. Note that this is not the same as the class  
* java.security.Permission.
```

```
*
```

```
* @version 0.0
```

```
*
```

```
* @author Aaron M. Renn (arenn@urbanophile.com)
```

```
*/
```

```
public interface Permission
```

```
{
```

```
/**
```

```
* This method tests whether or not a specified Permission  
* (passed as an Object) is the same as this permission.
```

```
*
```

```
* @param perm The permission to check for equality
```

```
*
```

```
* @return true if the specified permission is the same as this one, false otherwise
```

```
*/
```

```
boolean equals (Object perm);
```

```
/**
```

```
* This method returns this Permission as a String.
```

```
*
```

```
* @return A String representing this permission.
```

```
*/
```

```
String toString();
```

```
}
```

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* m4/ax_func_which_gethostbyname_r.m4

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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.

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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.

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(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

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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.

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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.

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1.21 gunicorn 19.9.0

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doc/sitemap_gen.py

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util/unlink.py

backport from python3 Lib/test/support.py

unicorn/selectors.py

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1.22 ius-release 1.0-15

1.23 libsass 0.15.1

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1.24 Isof 4.87 :5.e17

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1.26 nginx 1.15.8

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1.27 openssh 7.4p1 :16.el7

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```
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--- openssh-7.4p1/sftp-server.8.sftp-force-mode 2016-12-19 05:59:41.000000000 +0100
+++ openssh-7.4p1/sftp-server.8 2017-02-09 10:35:41.926475399 +0100
@@ -38,6 +38,7 @@
.Op Fl P Ar blacklisted_requests
.Op Fl p Ar whitelisted_requests
.Op Fl u Ar umask
+.Op Fl m Ar force_file_perms
.Ek
.Nm
.Fl Q Ar protocol_feature
@@ -138,6 +139,10 @@ Sets an explicit
.Xr umask 2
to be applied to newly-created files and directories, instead of the
user's default mask.
+.It Fl m Ar force_file_perms
+Sets explicit file permissions to be applied to newly-created files instead
+of the default or client requested mode. Numeric values include:
+777, 755, 750, 666, 644, 640, etc. Option -u is ineffective if -m is set.
.El
.Pp
On some systems,
diff -up openssh-7.4p1/sftp-server.c.sftp-force-mode openssh-7.4p1/sftp-server.c
--- openssh-7.4p1/sftp-server.c.sftp-force-mode 2017-02-09 10:22:36.498019921 +0100
+++ openssh-7.4p1/sftp-server.c 2017-02-09 10:35:07.190520959 +0100
@@ -65,6 +65,10 @@ struct sshbuf *oqueue;
/* Version of client */
static u_int version;

+/* Force file permissions */
+int permforce = 0;
+long permforcemode;
+
```

```

/* SSH2_FXP_INIT received */
static int init_done;

@@ -679,6 +683,7 @@ process_open(u_int32_t id)
Attrib a;
char *name;
int r, handle, fd, flags, mode, status = SSH2_FX_FAILURE;
+ mode_t old_umask = 0;

if ((r = sshbuf_get_cstring(iqueue, &name, NULL)) != 0 ||
    (r = sshbuf_get_u32(iqueue, &pflags)) != 0 || /* portable flags */
@@ -688,6 +693,10 @@ process_open(u_int32_t id)
debug3("request %u: open flags %d", id, pflags);
flags = flags_from_portable(pflags);
mode = (a.flags & SSH2_FILEXFER_ATTR_PERMISSIONS) ? a.perm : 0666;
+ if (permforce == 1) { /* Force perm if -m is set */
+ mode = permforcemode;
+ old_umask = umask(0); /* so umask does not interfere */
+ }
logit("open \"%s\" flags %s mode 0%o",
    name, string_from_portable(pflags), mode);
if (readonly &&
@@ -709,6 +718,8 @@ process_open(u_int32_t id)
}
}
}
+ if (permforce == 1)
+ (void) umask(old_umask); /* restore umask to something sane */
if (status != SSH2_FX_OK)
    send_status(id, status);
free(name);
@@ -1490,7 +1501,7 @@ sftp_server_usage(void)
fprintf(stderr,
    "usage: %s [-ehR] [-d start_directory] [-f log_facility] "
    "[-l log_level]\n\t[-P blacklisted_requests] "
-   "[-p whitelisted_requests] [-u umask]\n"
+   "[-p whitelisted_requests] [-u umask] [-m force_file_perms]\n"
    "    %s -Q protocol_feature\n",
    __progname, __progname);
exit(1);
@@ -1516,7 +1527,7 @@ sftp_server_main(int argc, char **argv,
pw = pwcopyp(user_pw);

while (!skipargs && (ch = getopt(argc, argv,
-   "d:f:l:P:p:Q:u:cehR")) != -1) {
+   "d:f:l:P:p:Q:u:m:cehR")) != -1) {
    switch (ch) {
        case 'Q':

```

```

    if (strcasecmp(optarg, "requests") != 0) {
@@ -1576,6+1587,15 @@ sftp_server_main(int argc, char **argv,
    fatal("Invalid umask \"%s\"", optarg);
    (void)umask((mode_t)mask);
    break;
+ case 'm':
+ /* Force permissions on file received via sftp */
+ permforce = 1;
+ permforcemode = strtol(optarg, &cp, 8);
+ if (permforcemode < 0 || permforcemode > 0777 ||
+     *cp != '\0' || (permforcemode == 0 &&
+     errno != 0))
+ fatal("Invalid file mode \"%s\"", optarg);
+ break;
    case 'h':
    default:
        sftp_server_usage();
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#ifdef HAVE_SETRESGID
int setresgid(gid_t, gid_t, gid_t);
#endif
#ifdef HAVE_SETRESUID
int setresuid(uid_t, uid_t, uid_t);
#endif
/* $OpenBSD: poll.h,v 1.11 2003/12/10 23:10:08 millert Exp $ */

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*/

```

```

/* OPENBSD ORIGINAL: sys/sys/poll.h */

```

```

#if !defined(HAVE_POLL) && !defined(HAVE_POLL_H)
#ifndef _COMPAT_POLL_H_
#define _COMPAT_POLL_H_

```

```

typedef struct pollfd {
    int fd;
    short events;
    short revents;
} pollfd_t;

```

```

typedef unsigned int nfds_t;

```

```

#define POLLIN 0x0001
#define POLLOUT 0x0004
#define POLLERR 0x0008
#define POLLHUP 0x0010
#define POLLNVAL 0x0020
#if 0
/* the following are currently not implemented */
#define POLLPRI 0x0002
#define POLLRDNORM 0x0040
#define POLLNORM POLLRDNORM
#define POLLWRNORM POLLOUT
#define POLLRDBAND 0x0080
#define POLLWRBAND 0x0100
#endif

```

```

#define INFTIM (-1) /* not standard */

```



```

int poll(struct pollfd *, nfd_t, int);
#endif /* !_COMPAT_POLL_H_ */
#endif /* !HAVE_POLL_H */
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 */

#ifndef _BSD_WAITPID_H
#define _BSD_WAITPID_H

#ifndef HAVE_WAITPID
/* Clean out any potential issues */
#undef WIFEXITED
#undef WIFSTOPPED
#undef WIFSIGNALED

/* Define required functions to mimic a POSIX look and feel */
#define _W_INT(w) (*(int*)&(w)) /* convert union wait to int */
#define WIFEXITED(w) (!((_W_INT(w)) & 0377))
#define WIFSTOPPED(w) ((_W_INT(w)) & 0100)
#define WIFSIGNALED(w) (!WIFEXITED(w) && !WIFSTOPPED(w))
#define WEXITSTATUS(w) (int)(WIFEXITED(w) ? ((_W_INT(w)) >> 8) & 0377) : -1)
#define WTERMSIG(w) (int)(WIFSIGNALED(w) ? (_W_INT(w) & 0177) : -1)
#define WCOREFLAG 0x80
#define WCOREDUMP(w) ((_W_INT(w)) & WCOREFLAG)

```

```
/* Prototype */
pid_t waitpid(int, int *, int);

#endif /* !HAVE_WAITPID */
#endif /* _BSD_WAITPID_H */
```

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*
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* @author Antoon Bosselaers <antoon.bosselaers@esat.kuleuven.ac.be>
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```
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*/
```

```
/* OPENBSD ORIGINAL: sys/sys/poll.h */
```

```
#if !defined(HAVE_POLL) && !defined(HAVE_POLL_H)
```

```
#ifndef _COMPAT_POLL_H_
```

```
#define _COMPAT_POLL_H_
```

```
typedef struct pollfd {
```

```
int fd;
```

```
short events;
```

```
short revents;
```

```
} pollfd_t;
```

```
typedef unsigned int nfd_t;
```

```
#define POLLIN 0x0001
```

```
#define POLLOUT 0x0004
```

```
#define POLLERR 0x0008
```

```
#if 0
```

```
/* the following are currently not implemented */
```

```
#define POLLPRI 0x0002
```

```
#define POLLHUP 0x0010
```

```

#define POLLNVAL 0x0020
#define POLLRDNORM 0x0040
#define POLLNORM POLLRDNORM
#define POLLWRNORM  POLLOUT
#define POLLRDBAND 0x0080
#define POLLWRBAND 0x0100
#endif

#define INFTIM (-1) /* not standard */

int  poll(struct pollfd *, nfds_t, int);
#endif /* !_COMPAT_POLL_H_ */
#endif /* !HAVE_POLL_H */
/* $Id: BSD-waitpid.h,v 1.5 2003/08/29 16:59:52 mouring Exp $ */

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 */

#ifndef _BSD_WAITPID_H
#define _BSD_WAITPID_H

#ifndef HAVE_WAITPID
/* Clean out any potential issues */
#undef WIFEXITED
#undef WIFSTOPPED
#undef WIFSIGNALED

```

```

/* Define required functions to mimic a POSIX look and feel */
#define _W_INT(w) (*(int*)&(w)) /* convert union wait to int */
#define WIFEXITED(w) (!((_W_INT(w)) & 0377))
#define WIFSTOPPED(w) ((_W_INT(w)) & 0100)
#define WIFSIGNALED(w) (!WIFEXITED(w) && !WIFSTOPPED(w))
#define WEXITSTATUS(w) (int)(WIFEXITED(w) ? ((_W_INT(w)) >> 8) & 0377) : -1)
#define WTERMSIG(w) (int)(WIFSIGNALED(w) ? (_W_INT(w) & 0177) : -1)
#define WCOREFLAG 0x80
#define WCOREDUMP(w) ((_W_INT(w)) & WCOREFLAG)

/* Prototype */
pid_t waitpid(int, int *, int);

#endif /* !HAVE_WAITPID */
#endif /* _BSD_WAITPID_H */
This file is part of the OpenSSH software.

```

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* Jan-Pieter Cornet ( johnpc ) - 2012-03-23 03:25:52 PDT
* chrysn@fsfe.org
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1.28 openssh 7.4p1 :11.e17

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*
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/* OPENBSD ORIGINAL: sys/sys/poll.h */

#if !defined(HAVE_POLL) && !defined(HAVE_POLL_H)
#ifdef _COMPAT_POLL_H_
#define _COMPAT_POLL_H_

typedef struct pollfd {
    int fd;
    short events;
    short revents;
} pollfd_t;

typedef unsigned int nfds_t;

#define POLLIN 0x0001
#define POLLOUT 0x0004
#define POLLERR 0x0008

```

```

#if 0
/* the following are currently not implemented */
#define POLLPRI 0x0002
#define POLLHUP 0x0010
#define POLLNVAL 0x0020
#define POLLRDNORM 0x0040
#define POLLNORM POLLRDNORM
#define POLLWRNORM POLLOUT
#define POLLRDBAND 0x0080
#define POLLWRBAND 0x0100
#endif

#define INFTIM (-1) /* not standard */

int poll(struct pollfd *, nfd_t, int);
#endif /* !_COMPAT_POLL_H */
#endif /* !HAVE_POLL_H */
/* $Id: BSD-waitpid.h,v 1.5 2003/08/29 16:59:52 mousing Exp $ */

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 */

#ifndef _BSD_WAITPID_H
#define _BSD_WAITPID_H

#ifndef HAVE_WAITPID

```



```

/* Clean out any potential issues */
#undef WIFEXITED
#undef WIFSTOPPED
#undef WIFSIGNALED

/* Define required functions to mimic a POSIX look and feel */
#define _W_INT(w) (*(int*)&(w)) /* convert union wait to int */
#define WIFEXITED(w) (!((_W_INT(w)) & 0377))
#define WIFSTOPPED(w) ((_W_INT(w)) & 0100)
#define WIFSIGNALED(w) (!WIFEXITED(w) && !WIFSTOPPED(w))
#define WEXITSTATUS(w) (int)(WIFEXITED(w) ? ((_W_INT(w) >> 8) & 0377) : -1)
#define WTERMSIG(w) (int)(WIFSIGNALED(w) ? (_W_INT(w) & 0177) : -1)
#define WCOREFLAG 0x80
#define WCOREDUMP(w) ((_W_INT(w)) & WCOREFLAG)

/* Prototype */
pid_t waitpid(int, int *, int);

#endif /* !HAVE_WAITPID */
#endif /* _BSD_WAITPID_H */
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* @version 3.0 (December 2000)

*

* Optimised ANSI C code for the Rijndael cipher (now AES)

*

* @author Vincent Rijmen <vincent.rijmen@esat.kuleuven.ac.be>

* @author Antoon Bosselaers <antoon.bosselaers@esat.kuleuven.ac.be>

* @author Paulo Barreto <paulo.barreto@terra.com.br>

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 */
```

```
#ifndef HAVE_SETRESGID
int setresgid(gid_t, gid_t, gid_t);
#endif
```

```
#ifndef HAVE_SETRESUID
int setresuid(uid_t, uid_t, uid_t);
#endif
```

```
/* $OpenBSD: poll.h,v 1.11 2003/12/10 23:10:08 millert Exp $ */
```

```
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 */
```

```

/* OPENBSD ORIGINAL: sys/sys/poll.h */

#if !defined(HAVE_POLL) && !defined(HAVE_POLL_H)
#ifdef _COMPAT_POLL_H_
#define _COMPAT_POLL_H_

typedef struct pollfd {
    int fd;
    short events;
    short revents;
} pollfd_t;

typedef unsigned int nfds_t;

#define POLLIN 0x0001
#define POLLOUT 0x0004
#define POLLERR 0x0008
#define POLLHUP 0x0010
#define POLLNVAL 0x0020
#if 0
/* the following are currently not implemented */
#define POLLPRI 0x0002
#define POLLRDNORM 0x0040
#define POLLNORM POLLRDNORM
#define POLLWRNORM POLLOUT
#define POLLRDBAND 0x0080
#define POLLWRBAND 0x0100
#endif

#define INFTIM (-1) /* not standard */

int poll(struct pollfd *, nfd_t, int);
#endif /* !_COMPAT_POLL_H_ */
#endif /* !HAVE_POLL_H */
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*
*/

```

```

#ifndef _BSD_WAITPID_H
#define _BSD_WAITPID_H

```

```

#ifndef HAVE_WAITPID
/* Clean out any potential issues */
#undef WIFEXITED
#undef WIFSTOPPED
#undef WIFSIGNALED

```

```

/* Define required functions to mimic a POSIX look and feel */
#define _W_INT(w) (*(int*)&(w)) /* convert union wait to int */
#define WIFEXITED(w) (!((_W_INT(w)) & 0377))
#define WIFSTOPPED(w) ((_W_INT(w)) & 0100)
#define WIFSIGNALED(w) (!WIFEXITED(w) && !WIFSTOPPED(w))
#define WEXITSTATUS(w) (int)(WIFEXITED(w) ? ((_W_INT(w) >> 8) & 0377) : -1)
#define WTERMSIG(w) (int)(WIFSIGNALED(w) ? (_W_INT(w) & 0177) : -1)
#define WCOREFLAG 0x80
#define WCOREDUMP(w) ((_W_INT(w)) & WCOREFLAG)

```

```

/* Prototype */
pid_t waitpid(int, int *, int);

```

```

#endif /* !HAVE_WAITPID */
#endif /* _BSD_WAITPID_H */

```

```

diff -up openssh-7.4p1/sftp-server.8.sftp-force-mode openssh-7.4p1/sftp-server.8
--- openssh-7.4p1/sftp-server.8.sftp-force-mode 2016-12-19 05:59:41.000000000 +0100
+++ openssh-7.4p1/sftp-server.8 2017-02-09 10:35:41.926475399 +0100
@@ -38,6 +38,7 @@
.Op Fl P Ar blacklisted_requests
.Op Fl p Ar whitelisted_requests
.Op Fl u Ar umask
+.Op Fl m Ar force_file_perms
.Ek
.Nm
.Fl Q Ar protocol_feature
@@ -138,6 +139,10 @@ Sets an explicit

```

.Xr umask 2

to be applied to newly-created files and directories, instead of the user's default mask.

+.It Fl m Ar force_file_perms

+Sets explicit file permissions to be applied to newly-created files instead

+of the default or client requested mode. Numeric values include:

+777, 755, 750, 666, 644, 640, etc. Option -u is ineffective if -m is set.

.El

.Pp

On some systems,

```
diff -up openssl-7.4p1/sftp-server.c.sftp-force-mode openssl-7.4p1/sftp-server.c
```

```
--- openssl-7.4p1/sftp-server.c.sftp-force-mode 2017-02-09 10:22:36.498019921 +0100
```

```
+++ openssl-7.4p1/sftp-server.c 2017-02-09 10:35:07.190520959 +0100
```

```
@@ -65,6 +65,10 @@ struct sshbuf *oqueue;
```

```
/* Version of client */
```

```
static u_int version;
```

```
+/* Force file permissions */
```

```
+int permforce = 0;
```

```
+long permforcemode;
```

```
+
```

```
/* SSH2_FXP_INIT received */
```

```
static int init_done;
```

```
@@ -679,6 +683,7 @@ process_open(u_int32_t id)
```

```
Attrib a;
```

```
char *name;
```

```
int r, handle, fd, flags, mode, status = SSH2_FX_FAILURE;
```

```
+ mode_t old_umask = 0;
```

```
if ((r = sshbuf_get_cstring(iqueue, &name, NULL)) != 0 ||
```

```
    (r = sshbuf_get_u32(iqueue, &pflags)) != 0 || /* portable flags */
```

```
@@ -688,6 +693,10 @@ process_open(u_int32_t id)
```

```
debug3("request %u: open flags %d", id, pflags);
```

```
flags = flags_from_portable(pflags);
```

```
mode = (a.flags & SSH2_FILEXFER_ATTR_PERMISSIONS) ? a.perm : 0666;
```

```
+ if (permforce == 1) { /* Force perm if -m is set */
```

```
+ mode = permforcemode;
```

```
+ old_umask = umask(0); /* so umask does not interfere */
```

```
+ }
```

```
logit("open \"%s\" flags %s mode 0%o",
```

```
    name, string_from_portable(pflags), mode);
```

```
if (readonly &&
```

```
@@ -709,6 +718,8 @@ process_open(u_int32_t id)
```

```
 }
```

```
 }
```

```
 }
```

```
+ if (permforce == 1)
```

```

+ (void) umask(old_umask); /* restore umask to something sane */
if (status != SSH2_FX_OK)
    send_status(id, status);
free(name);
@@ -1490,7 +1501,7 @@ sftp_server_usage(void)
fprintf(stderr,
    "usage: %s [-ehR] [-d start_directory] [-f log_facility] "
    "[-l log_level]\n\t[-P blacklisted_requests] "
-   "[-p whitelisted_requests] [-u umask]\n"
+   "[-p whitelisted_requests] [-u umask] [-m force_file_perms]\n"
    "    %s -Q protocol_feature\n",
    __progname, __progname);
exit(1);
@@ -1516,7 +1527,7 @@ sftp_server_main(int argc, char **argv,
pw = pwcopyp(user_pw);

while (!skipargs && (ch = getopt(argc, argv,
-   "d:f:l:P:p:Q:u:cehR")) != -1) {
+   "d:f:l:P:p:Q:u:m:cehR")) != -1) {
    switch (ch) {
    case 'Q':
        if (strcasecmp(optarg, "requests") != 0) {
@@ -1576,6 +1587,15 @@ sftp_server_main(int argc, char **argv,
            fatal("Invalid umask \"%s\"", optarg);
            (void)umask((mode_t)mask);
            break;
+   case 'm':
+   /* Force permissions on file received via sftp */
+   permforce = 1;
+   permforcemode = strtoul(optarg, &cp, 8);
+   if (permforcemode < 0 || permforcemode > 0777 ||
+       *cp != '\0' || (permforcemode == 0 &&
+           errno != 0))
+       fatal("Invalid file mode \"%s\"", optarg);
+   break;
    case 'h':
    default:
        sftp_server_usage();

```

1.29 psycopg2-binary 2.7.6.1

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1.30 python36u 3.6.5-1

1.31 supervisor 3.0

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1.32 supervisor_ZPLv2.1 3.0

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1.33 wagtail 2.2.2

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