

## Open Source Used In Ixplat-CentOS 7.5-20180830

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1.284 qemu-guest-agent 2.8.0 :2.el7_5.1
1.284.1 Available under license
1.285 qemu-kvm 1.5.3:156.el7_5.5
1.285.1 Available under license
1.286 qrencode 3.4.1 :3.el7
1.286.1 Available under license
1.287 readline 6.2 :10.el7
1.287.1 Available under license
1.288 rootfiles 8.1 :11.el7
1.288.1 Available under license
1.289 rpm 4.11.3:32.el7
1.289.1 Available under license
1.290 rsync 3.1.2 :4.el7
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### 1.291 rsyslog 8.24 .0 :16.el7_5.4

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1.292 screen 4.1.0 :0.25.20120314git3c2946.el7
1.292.1 Available under license
1.293 sed 4.2.2 :5.el7
1.293.1 Available under license
1.294 selinux-policy 3.13 .1 :192.el7_5.6
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1.296 setup 2.8.71 :9.el7
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1.297 sg3_utils 1.37 :12.el7
1.297.1 Available under license
1.298 shadow-utils 4.1.5.1 :24.el7
1.298.1 Available under license
1.299 shared-mime-info 1.8 :4.el7
1.299.1 Available under license
1.300 shim-signed 12 :1.el7.centos
1.300.1 Available under license
1.301 slang 2.2.4:11.el7
1.301.1 Available under license
1.302 snappy 1.1 .0 :3.el7
1.302.1 Available under license
1.303 sqlite 3.7.17 :8.el7
1.303.1 Available under license
1.304 sshpass 1.06 :2.el7
1.304.1 Available under license
1.305 strace 4.12 :6.el7
1.305.1 Available under license
1.306 sudo 1.8.19p2 :14.el7_5
1.306.1 Available under license
1.307 sysfsutils 2.1.0:16.el7
1.307.1 Available under license
1.308 sysstat 10.1.5 :13.el7
1.308.1 Available under license
1.309 systemd 219 :57.el7_5.1
1.309.1 Available under license
1.310 sysvinit 2.88 :14.dsf.el7

> 1.310.1 Available under license

### 1.311 tar 1.26 :34.el7

1.311.1 Available under license
1.312 tcp_wrappers 7.6 :77.el7
1.312.1 Available under license 1.313 tcpdump 4.9.2 :3.el7
1.313.1 Available under license
1.314 texinfo 5.1 :5.el7
1.314.1 Available under license
1.315 traceroute 2.0.22 :2.el7
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1.316 tuned 2.9.0 :1.el7_5.2
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1.320 util-linux 2.23.2 :52.el7_5.1
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1.321 vim 7.4.160 :4.el7
1.321.1 Available under license
1.322 virt-what 1.18 :4.el7
1.322.1 Available under license
1.323 wget 1.14 :15.el7_4.1
1.323.1 Available under license

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1.325.1 Available under license
1.326 xfsprogs 4.5 .0 :15.el7
1.326.1 Available under license
1.327 xmlsec1 1.2.20 :7.el7_4
1.327.1 Available under license
1.328 xz 5.2.2 :1.el7
1.328.1 Available under license
1.329 yum 3.4.3:158.el7.centos
1.329.1 Available under license

### 1.330 yum-metadata-parser 1.1 .4 :10.el7

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### 1.331 yum-utils 1.1.31 :46.el7_5

1.331.1 Available under license
1.332 zip 3.0 :11.el7
1.332.1 Available under license
1.333 zlib 1.2.7 :17.el7
1.333.1 Available under license

## 1.1 acl 2.2.51 :14.el7

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@c Local Variables:
@c ispell-local-pdict: "ispell-dict"
@c End:
From friedman@cli.com Thu May 25 12:19:06 1995
Flags: 10
Return-Path: friedman@cli.com
Received: from po.cwru.edu (root@po.CWRU.Edu [129.22.4.2]) by odin.INS.CWRU.Edu with ESMTP (8.6.10+cwru/CWRU-2.1-ins)
id MAA08685; Thu, 25 May 1995 12:19:05-0400 (from friedman@cli.com for [chet@odin.INS.CWRU.Edu](mailto:chet@odin.INS.CWRU.Edu))
Received: from cli.com (cli.com [192.31.85.1]) by po.cwru.edu with SMTP (8.6.10+cwru/CWRU-2.3) id MAA11299; Thu, 25 May 1995 12:19:00-0400 (from friedman@cli.com for <chet@ po.cwru.edu>)
Received: from tepui.cli.com by cli.com (4.1/SMI-4.1)
id AA27213; Thu, 25 May 95 11:18:25 CDT
Received: by tepui.cli.com (4.1) id AA16031; Thu, 25 May 95 11:18:23 CDT
Message-Id: [9505251618.AA16031@tepui.cli.com](mailto:9505251618.AA16031@tepui.cli.com)
From: friedman@gnu.ai.mit.edu (Noah Friedman)
To: chet@po.cwru.edu
Subject: Bash scripts
Reply-To: friedman@gnu.ai.mit.edu
In-Reply-To: [chet@odin.ins.cwru.edu](mailto:chet@odin.ins.cwru.edu) Thu, 25 May 1995 11:19:59 -0400
References: [9505251519.AA06424.SM@odin.INS.CWRU.Edu](mailto:9505251519.AA06424.SM@odin.INS.CWRU.Edu)
Date: Thu, 25 May 95 11:18:21 CST
>Hi. I snagged some of your bash functions from your home directory on >the FSF machines (naughty, I know), and I was wondering if you'd let >me distribute them with bash-2.0. Thanks.

Sure. I think there's a later copy in
$\sim \mathrm{ftp} /$ friedman/shell-inits/init-4.89.tar.gz. There are also some elisp and es frobs in that file.

It should serve as a pretty good example of how to get carried away. :-)

From spcecdt@armory.com Wed May 10 10:21:11 1995
Flags: 10
Return-Path: spcecdt@armory.com
Received: from po.cwru.edu (root@po.CWRU.Edu [129.22.4.2]) by odin.INS.CWRU.Edu with ESMTP (8.6.10+cwru/CWRU-2.1-ins)
id KAA22876; Wed, 10 May 1995 10:21:10-0400 (from spcecdt@armory.com for <chet @odin.INS.CWRU.Edu>)
Received: from deepthought.armory.com (mmdf@deepthought.armory.com [192.122.209.42]) by po.cwru.edu with SMTP (8.6.10+cwru/CWRU-2.3)
id BAA16354; Wed, 10 May 1995 01:33:22-0400 (from spcecdt @ armory.com for <chet @ po.cwru.edu>)
From: John DuBois [spcecdt@armory.com](mailto:spcecdt@armory.com)
Date: Tue, 9 May 1995 22:33:12-0700
In-Reply-To: Chet Ramey [chet@odin.ins.cwru.edu](mailto:chet@odin.ins.cwru.edu)
"ksh scripts" (May 9, 1:36pm)
X-Www: http://www.armory.com/~spcecdt/
X-Mailer: Mail User's Shell (7.2.5 10/14/92)
To: chet@po.cwru.edu
Subject: Re: ksh scripts
Message-ID: [9505092233.aa13001@deepthought.armory.com](mailto:9505092233.aa13001@deepthought.armory.com)

Sure. The canonical versions are available on ftp.armory.com; you might want to pick up the latest versions before modifying them.

## John

On May 9, 1:36pm, Chet Ramey wrote:
\} Subject: ksh scripts
\} From odin.ins.cwru.edu!chet Tue May 9 10:39:51 1995
\} Received: from odin.INS.CWRU.Edu by deepthought.armory.com id aa22336;
\} $\quad 9$ May 95 10:39 PDT
\} Received: (chet@localhost) by odin.INS.CWRU.Edu (8.6.10+cwru/CWRU-2.1-ins)
\} id NAA20487; Tue, 9 May 1995 13:39:24-0400 (from chet)
\} Date: Tue, 9 May 1995 13:36:54-0400
\} From: Chet Ramey [chet@odin.ins.cwru.edu](mailto:chet@odin.ins.cwru.edu)
\} To: john@armory.com
\} Subject: ksh scripts
\} Cc: chet@odin.ins.cwru.edu
\} Reply-To: chet@po.cwru.edu
\} Message-ID: [9505091736.AA20411.SM@odin.INS.CWRU.Edu](mailto:9505091736.AA20411.SM@odin.INS.CWRU.Edu)
\} Read-Receipt-To: chet@po.CWRU.Edu
\} MIME-Version: 1.0
\} Content-Type: text/plain; charset=us-ascii
\} Status: OR
\}
\} Hi. I'm the maintainer of bash (the GNU 'Bourne Again shell') for \} the FSF.
\}
\} I picked up a tar file of ksh scripts you wrote from an anon FTP site \} a while back. I'd like your permission to include modified versions
\} of some of them in the next major bash distribution (with proper credit
\} given, of course). Is it OK if I do that?
\}
\} Chet Ramey
\}
\} --
\} "'The lyf so short, the craft so long to lerne." - Chaucer
\}
\} Chet Ramey, Case Western Reserve UniversityInternet: chet@ po.CWRU.Edu
\}-- End of excerpt from Chet Ramey
From mikel@ora.com Tue Aug 12:13:20 1995
Flags: 10
Return-Path: mikel@ora.com
Received: from ruby.ora.com (ruby.ora.com [198.112.208.25]) by odin.INS.CWRU.Edu with ESMTP (8.6.12+cwru/CWRU-2.1-ins)
id MAA01565; Tue, 1 Aug 1995 12:13:18-0400 (from mikel@ora.com for <chet @odin.INS.CWRU.Edu>)
Received: (from fax @localhost) by ruby.ora.com (8.6.12/8.6.11) with UUCP id MAA23251; Tue, 1 Aug 1995
12:07:51-0400
Received: by los.ora.com (4.1/Spike-2.1)
id AA00672; Tue, 1 Aug 95 08:57:32 EDT
Date: Tue, 1 Aug 95 08:57:32 EDT
From: mikel@ora.com (Michael Loukides)
Message-Id: [9508011257.AA00672@los.ora.com](mailto:9508011257.AA00672@los.ora.com)
Subject: Re: Ksh debugger from Rosenblatt's book [for bash]
To: Chet Ramey [chet@odin.INS.CWRU.Edu](mailto:chet@odin.INS.CWRU.Edu)
Cc: cmarie@ora.com, cam@iinet.com.au, brosenblatt@tm.com
In-Reply-To: Chet Ramey [chet@odin.INS.CWRU.Edu](mailto:chet@odin.INS.CWRU.Edu), Mon, 31 Jul 1995 16:22:48-0400

I've modified a (modified) version of Bill Rosenblatt's ksh debugger to work with bash-2.0. Does ORA have any problem with me distributing it with bash-2.0?

That's great!

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* configure.ac, Makefile.am: The original versions were derived from the ones in the XML Catalog Manager project, version 2.2.

Author: Julio Merino [jmmv@users.sourceforge.net](mailto:jmmv@users.sourceforge.net)

* atf-c/ui.c: The format_paragraph and format_text functions were derived form the ones in the Monotone project, revision 3a0982da308228d796df35f98d787c5cff2bb5b6.

Author: Julio Merino [jmmv@NetBSD.org](mailto:jmmv@NetBSD.org)

* atf-c++/detail/io.hpp, atf-c++/detail/io.cpp, atf-c++/detail/io_test.cpp: These files were derived from the file_handle, systembuf, pipe and pistream classes and tests found in the Boost.Process library.

Author: Julio Merino <jmmv84@ gmail.com>

* admin/check-style.sh, admin/check-style-common.awk, admin/check-style-cpp.awk, admin/check-style-shell.awk: These files, except the first one, were first implemented in the Buildtool project. They were later adapted to be part of Boost.Process and, during that process, the shell script was created.

Author: Julio Merino <jmmv84@ gmail.com>

```
vim: filetype=text:textwidth=75:expandtab:shiftwidth=2:softtabstop=2
<!--
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-->

```
<!-- $Id: copyright.xsl,v 1.8 2009/07/10 23:47:58 tbox Exp $ -->
<!-- Generate ISC copyright comments from Docbook copyright metadata. -->
<xsl:stylesheet xmlns:xsl="http://www.w3.org/1999/XSL/Transform" version="1.0">
<xsl:template name="isc.copyright.format">
    <xsl:param name="text"/>
    <xsl:value-of select="$isc.copyright.leader"/>
    <xsl:value-of select="normalize-space(substring-before($text, '&#10;'))"/>
    <xsl:text>&#10;</xsl:text>
    <xsl:variable name="rest" select="substring-after($text, '&#10;')"/>
    <xsl:if test="translate($rest, '&#9;&#32;', ")">
    <xsl:call-template name="isc.copyright.format">
        <xsl:with-param name="text" select="$rest"/>
        </xsl:call-template>
    </xsl:if>
</xsl:template>
<xsl:variable name="isc.copyright.text">
    <xsl:text>
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    LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE
    OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR
    PERFORMANCE OF THIS SOFTWARE.
    </xsl:text>
</xsl:variable>
<xsl:variable name="isc.copyright">
    <xsl:call-template name="isc.copyright.format">
    <xsl:with-param name="text">
<xsl:for-each select="/refentry/docinfo/copyright |/book/bookinfo/copyright">
    <xsl:text>Copyright (C) </xsl:text>
    <xsl:call-template name="copyright.years">
    <xsl:with-param name="years" select="year"/>
</xsl:call-template>
<xsl:text> </xsl:text>
<xsl:value-of select="holder"/>
<xsl:text>&#10;</xsl:text>
```

```
</xsl:for-each>
<xsl:value-of select="$isc.copyright.text"/>
    </xsl:with-param>
    </xsl:call-template>
</xsl:variable>
</xsl:stylesheet>
<!--
- Local variables:
- mode: sgml
- End:
-->
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### 1.14 binutils 2.27 :28.base.el7_5.1

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If you've contributed to gas and your name isn't listed here, it is not meant as a slight. I just don't know about it. Email me, nickc@redhat.com and I'll correct the situation.

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+++++++++++++++++

Dean Elsner wrote the original gas for vax. [more details?]

Jay Fenlason maintained gas for a while, adding support for gdb-specific debug information and the 68k series machines, most of the preprocessing pass, and extensive changes in messages.c, input-file.c, write.c.
K. Richard Pixley maintained gas for a while, adding various enhancements and many bug fixes, including merging support for several processors, breaking gas up to handle multiple object file format backends (including heavy rewrite, testing, an integration of the coff and b.out backends), adding configuration including heavy testing and verification of cross assemblers and file splits and renaming, converted gas to strictly ansi C including full prototypes, added support for m680[34]0 \& cpu32, considerable work on 1960 including a coff port (including considerable amounts of reverse engineering), a sparc opcode file rewrite, decstation, rs6000, and hp300hpux host ports, updated "know" assertions and made them work, much other reorganization, cleanup, and lint.

Ken Raeburn wrote the high-level BFD interface code to replace most of the code in format-specific I/O modules.

The original Vax-VMS support was contributed by David L. Kashtan. Eric Youngdale and Pat Rankin have done much work with it since.

The Intel 80386 machine description was written by Eliot Dresselhaus.

Minh Tran-Le at IntelliCorp contributed some AIX 386 support.

The Motorola 88k machine description was contributed by Devon Bowen of Buffalo University and Torbjorn Granlund of the Swedish Institute of Computer Science.

Keith Knowles at the Open Software Foundation wrote the original MIPS back end (tc-mips.c, tc-mips.h), and contributed Rose format support that hasn't been merged in yet. Ralph Campbell worked with the MIPS code to support a.out format.

Support for the Zilog Z8k and Hitachi H8/300, H8/500 and SH processors (tc-z8k, tc-h8300, tc-h8500, tc-sh), and IEEE 695 object file format (obj-ieee), was written by Steve Chamberlain of Cygnus Solutions. Steve also modified the COFF back end (obj-coffbfd) to use BFD for
some low-level operations, for use with the Hitachi, 29 k and Zilog targets.

John Gilmore built the AMD 29000 support, added .include support, and simplified the configuration of which versions accept which pseudo-ops. He updated the 68k machine description so that Motorola's opcodes always produced fixed-size instructions (e.g. jsr), while synthetic instructions remained shrinkable (jbsr). John fixed many bugs, including true tested cross-compilation support, and one bug in relaxation that took a week and required the proverbial one-bit fix.

Ian Lance Taylor of Cygnus Solutions merged the Motorola and MIT syntaxes for the 68 k , completed support for some COFF targets ( 68 k , i386 SVR3, and SCO Unix), wrote the ECOFF support based on Michael Meissner's mips-tfile program, wrote the PowerPC and RS/6000 support, and made a few other minor patches. He handled the binutils releases for versions 2.7 through 2.9.

David Edelsohn contributed fixes for the PowerPC and AIX support.

Steve Chamberlain made gas able to generate listings.

Support for the HP9000/300 was contributed by Glenn Engel of HP.

Support for ELF format files has been worked on by Mark Eichin of Cygnus Solutions (original, incomplete implementation), Pete Hoogenboom at the University of Utah (HPPA mainly), Michael Meissner of the Open Software Foundation (i386 mainly), and Ken Raeburn of Cygnus Solutions (sparc, initial 64-bit support).

Several engineers at Cygnus Solutions have also provided many small bug fixes and configuration enhancements.

The initial Alpha support was contributed by Carnegie-Mellon University. Additional work was done by Ken Raeburn of Cygnus Solutions. Richard Henderson then rewrote much of the Alpha support.

Ian Dall updated the support code for the National Semiconductor 32000 series, and added support for Mach 3 and NetBSD running on the PC532.

Klaus Kaempf ported the assembler and the binutils to openVMS/Alpha.

Steve Haworth contributed the support for the Texas Instruction c30 (tms320c30).
H.J. Lu has contributed many patches and much testing.

Alan Modra reworked much of the i386 backend, improving the error
checking, updating the code, and improving the 16 bit support, using patches from the work of Martynas Kunigelis and H.J. Lu.

Many others have contributed large or small bugfixes and enhancements. If you've contributed significant work and are not mentioned on this list, and want to be, let us know. Some of the history has been lost; we aren't intentionally leaving anyone out.

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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.)

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

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

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

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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.)

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To apply these terms, attach the following notices to the library. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.
<one line to give the library's name and a brief idea of what it does.>
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Yoyodyne, Inc., hereby disclaims all copyright interest in the library `Frob' (a library for tweaking knobs) written by James Random Hacker.
<signature of Ty Coon>, 1 April 1990
Ty Coon, President of Vice

That's all there is to it!

### 1.15 boost 1.53.0 :27.el7

### 1.15.1 Available under license :

The following people hereby grant permission to replace all existing licenses on their contributions to Boost with the Boost Software
License, Version 1.0. (boostinspect:nolicense boostinspect:nocopyright)

Aleksey Gurtovoy (agurtovoy @ meta-comm.com)
Andrei Alexandrescu (andrewalex - at - hotmail.com) (See Boost list message of August 12, 2004 11:06:58 AM EST)
Andrew Lumsdaine ()
Anthony Williams (anthony -at- justsoftwaresolutions.co.uk)
Beman Dawes (bdawes@acm.org)
Brad King (brad.king -at- kitware.com) (See Boost list message of Wed, 21 Jul 2004 11:15:46-0400)
Brian Osman (osman -at- vvisions.com) (See CVS log)
Bruce Barr (schmoost -at- yahoo.com) (See Boost list of Mon, 16 Aug 2004 15:06:43-0500)
Bruno da Silva de Oliveira (bruno - at - esss.com.br)
Christain Engstrom (christian.engstrom -at- glindra.org) (See Boost list message of Mon, 30 Aug 2004 14:31:49 +0200)
Cromwell D Enage (sponage -at- yahoo.com) (See Boost list message of August 12, 2004 11:49:13 AM EST)
Dan Gohman (djg -at- cray.com) (See Boost list messsage of Sat, 21 Aug 2004 10:54:59 +0100)
Dan Nuffer (dan -at- nuffer.name)
Daniel Frey (d.frey -at- gmx.de, daniel.frey -at- aixigo.de)
Daniel Nuffer (dan -at- nuffer.name)
Darin Adler (darin -at- bentspoon.com) (Email to Andreas Huber, see change log)
Daryle Walker (darylew - at - hotmail.com)
Dave Abrahams (dave@boost-consulting.com)
Dave Moore (dmoore -at- viefinancial.com) (See Boost list message of 18 Dec 2003 15:35:50-0500)
David Abrahams (dave@boost-consulting.com)
Dietmar Kuehl (dietmar_kuehl -at- yahoo.com) (Email to Andreas Huber, see change log)
Douglas Gregor (gregod -at- cs.rpi.edu, dgregor -at- cs.indiana.edu, doug.gregor -at- gmail.com)
Dr John Maddock (john - at - johnmaddock.co.uk)
Edward D. Brey (brey -at- ductape.net) (Email to Andreas Huber, see change log)
Eric Ford (un5o6n902 -at- sneakemail.com) (See Boost list message of Sun, 15 Aug 2004 10:29:13 +0100)
Eric Friedman (ebf@users.sourceforge.net)
Eric Niebler (eric@boost-consulting.com)
Fernando Cacciola (fernando_cacciola@ciudad.com.ar)
Fernando Luis Cacciola Carballal (fernando_cacciola@ciudad.com.ar)
Francois Faure (Francois.Faure -at- imag.fr) (See CVS log)
Gary Powell (powellg - at - amazon.com) (See Boost list message of 10 Feb 2004 14:22:46-0800)
Gennadiy Rozental (rogeeff -at- mail.com) (Email to Andreas Huber, see change log)
Gottfried Ganssauge (Gottfried.Ganssauge -at- HAUFE.DE) (See Boost List message of Mon, 16 Aug 2004 10:09:19 +0200)
Gottfried Ganauge (Gottfried.Ganssauge -at- HAUFE.DE) (Alternative spelling of Gottfried Ganssauge)
Greg Colvin (gregory.colvin -at- oracle.com) (See Boost list message of Sat, 14 Aug 2004 10:57:00 +0100)
Gregory Colvin (gregory.colvin -at- oracle.com) (See Boost list message of Sat, 14 Aug 2004 10:57:00 +0100)

Gunter Winkler (gunter.winkler -at- unibw-muenchen.de) (See Boost List message of Mon, 16 Aug 2004 10:24:17 +0200)
Hartmut Kaiser (hartmut.kaiser -at- gmail.com)
Herve Bronnimann (hbr -at- poly.edu)
Herv Brnnimann (hbr -at- poly.edu)
Housemarque Oy (Ilari Kuittinen ilari.kuittinen -at- housemarque.fi)
Howard Hinnant (hinnant -at- twcny.rr.com) (See Boost list message of July 25, 2004 3:44:49 PM EST)
Hubert Holin (hubert_holin -at- users.sourceforge.net)
Indiana University ()
Itay Maman (imaman -at- users.sourceforge.net)
Jaakko Jrvi (jajarvi -at- osl.iu.edu)
Jaap Suter (j.suter -at- student.utwente.nl) (See Boost list message of Thu, 16 Sep 2004 09:32:43-0700)
Jeff Garland (jeff - at - crystalclearsoftware.com) (see Boost list post of July 25, 2004 19:31:09-0700)
Jens Maurer (Jens.Maurer@gmx.net)
Jeremy G Siek (jsiek@osl.iu.edu)
Jeremy Siek (jsiek@osl.iu.edu)
Joel de Guzman (joel -at- boost-consulting.com) (See Boost list message of July 25, 2004 8:32:00 PM EST)
John Bandela (jbandela-at-ufl.edu)
John Maddock (john - at - johnmaddock.co.uk)
John R Bandela (jbandela-at-ufl.edu)
Jonathan Turkanis (turkanis -at- coderage dot com)
Juergen Hunold (hunold -at- ive.uni-hannover.de) (See Boost List Message of Fri, 13 Aug 2004 19:39:55 +0200)
Kevlin Henney (kevlin -at- curbralan.com) (See Boost list message of Wed, 15 Sep 2004 18:15:17 +0200)
Kresimir Fresl (fresl-at- master.grad.hr) (See Boost List message of August 16, 2004 8:23:35 AM EST)
Lars Gullik Bjnnes (larsbj -at- lyx.org) (See Boost list message of Tue, 17 Aug 2004 15:49:02 +0100)
Lie-Quan Lee (liequan - at - slac.stanford.edu, llee - at - cs.indiana.edu)
Maarten Keijzer (mkeijzer -at- cs.vu.nl) (See Boost list message of Wed, 18 Aug 2004 21:43:18 +0100)
Mac Murrett (mmurrett -at- mac.com)
Marc Wintermantel (wintermantel -at- imes.mavt.ethz.ch, wintermantel -at- even-ag.ch) (See CVS log)
Michael Glassford (glassfordm - at - hotmail.com)
Michael Stevens (Michael.Stevens - at - epost.de)
Multi Media Ltd. (pdimov@mmltd.net)
Nicolai M Josuttis (solutions -at- josuttis.com) (See Boost list message of Mon, 30 Aug 2004 10:52:00 +0100)
Nikolay Mladenov (nickm -at- sitius.com) (See Boost list message of Tue, 17 Aug 2004 15:45:33 +0100)
Paul Mensonides (pmenso57 -at- comcast.net) (See Boost list message of July 21, 2004 1:12:21 AM EST)
Pavol Droba (droba -at- topmail.sk)
Peter Dimov (pdimov@mmltd.net)
R W Grosse-Kunstleve (RWGrosse-Kunstleve@lbl.gov)
Ralf W. Grosse-Kunstleve (RWGrosse-Kunstleve@lbl.gov)
Rational Discovery LLC (Greg Landrum Landrum -at- RationalDiscovery.com) (See Boost list post of Tue, 17 Aug 2004 10:35:36 +0100)
Rene Rivera (grafik/redshift-software.com, rrivera/acm.org)
Robert Ramey (ramey@www.rrsd.com)
Roland Richter (roland -at- flll.jku.at) (See Boost list post of Mon, 16 Aug 2004 22:16:55 +0200)
Roland Schwarz (roland.schwarz -at- chello.at)
Ronald Garcia (garcia -at- cs.indiana.edu) (Email to Andreas Huber, see change log)
Samuel Krempp (krempp -at- crans.ens-cachan.fr) (See Boost list message of Mon, 27 Sep 2004 13:18:36 +0200)
Stefan Seefeld (seefeld -at- sympatico.ca)

Stephen Cleary (scleary -at- jerviswebb.com) (See Boost list message of Tue, 28 Sep 2004 13:11:46 +0100) Steve Cleary (Variant of Stephen Cleary)
Sylvain Pion (Sylvain.Pion - at - sophia.inria.fr)
The Trustees of Indiana University ()
Thomas Witt (witt - at - ive.uni-hannover.de, witt - at - acm.org, witt - at - styleadvisor.com)
Thorsten Jrgen Ottosen (nesotto - at - cs.auc.dk)
Thorsten Ottosen (nesotto - at - cs.auc.dk)
Toon Knapen (toon dot knapen - at - fft.be)
Trustees of Indiana University ()
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Vladimir Prus (ghost@cs.msu.su)
William E. Kempf () (email to Beman Dawes, 9/14/2006 4:18 PM)
Joerg Walter (jhr.walter - at - t-online.de : email to ublas mailing list Mon, 17 Sep 2007 10:17:08 +0200)
Mathias Koch (mkoch - at - idesis.de 7 : email to boost-owner@lists.boost.org Sep 2007 13:20:09 +0200)
--- end ---
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// (See accompanying file LICENSE_1_0.txt or copy at
// http://www.boost.org/LICENSE_1_0.txt)
//
// See http://www.boost.org/libs/intrusive for documentation.
\#ifndef BOOST_INTRUSIVE_DETAIL_MPL_HPP
\#define BOOST_INTRUSIVE_DETAIL_MPL_HPP
\#include <boost/intrusive/detail/config_begin.hpp>
\#include <cstddef>
namespace boost $\{$
namespace intrusive \{
namespace detail \{
typedef char one;
struct two \{one _[2];\};
template< bool C_ >
struct bool_
\{
static const bool value $=\mathrm{C}_{-}$;
\};
typedef bool_<true> true_;
typedef bool_<false> false_;
typedef true_ true_type;
typedef false_false_type;
typedef char yes_type;
struct no_type
\{
char padding[8];
\};
template <bool B, class T = void>
struct enable_if_c \{
typedef T type;
\};
template <class T>
struct enable_if_c<false, $T>\{ \}$;
template <class Cond, class $\mathrm{T}=$ void〉
struct enable_if : public enable_if_c<Cond::value, $\mathrm{T}>\{ \}$;
template<class F, class Param>
struct apply
\{
typedef typename F::template apply<Param>::type type;
\};

```
template <class T, class U>
class is_convertible
{
    typedef char true_t;
    class false_t { char dummy[2]; };
    static true_t dispatch(U);
    static false_t dispatch(...);
    static const T & trigger();
    public:
    static const bool value = sizeof(dispatch(trigger())) == sizeof(true_t);
};
template<
        bool C
    , typename T1
    , typename T2
    >
struct if_c
{
    typedef T1 type;
};
template<
        typename T1
    , typename T2
    >
struct if_c<false,T1,T2>
{
    typedef T2 type;
};
template<
    typename C
    , typename T1
    , typename T2
    >
struct if_
{
    typedef typename if_c<0 != C::value, T1, T2>::type type;
};
template<
        bool C
    , typename F1
    , typename F2
```

```
>
struct eval_if_c
    : if_c<C,F1,F2>::type
{};
template<
    typename C
    , typename T1
    , typename T2
    >
struct eval_if
    : if_<C,T1,T2>::type
{};
// identity is an extension: it is not part of the standard.
template <class T>
struct identity
{
    typedef T type;
};
#if defined(BOOST_MSVC) | defined(__BORLANDC_)
#define BOOST_INTRUSIVE_TT_DECL __cdecl
#else
#define BOOST_INTRUSIVE_TT_DECL
#endif
#if defined(_MSC_EXTENSIONS) && !defined(__BORLAND__) && !defined(_WIN64) &&
!defined(UNDER_CE)
#define BOOST_INTRUSIVE_TT_TEST_MSC_FUNC_SIGS
#endif
template <typename T>
struct is_unary_or_binary_function_impl
{ static const bool value = false; };
// see boost ticket #4094
// avoid duplicate definitions of is_unary_or_binary_function_impl
#ifndef BOOST_INTRUSIVE_TT_TEST_MSC_FUNC_SIGS
template <typename R>
struct is_unary_or_binary_function_impl<R (*)()>
{ static const bool value = true; };
template <typename R>
struct is_unary_or_binary_function_impl<R (*)(...)>
{ static const bool value = true; };
```

template <typename R>
struct is_unary_or_binary_function_impl<R (__stdcall*)()>
\{ static const bool value = true; \};
\#ifndef _MANAGED
template <typename R>
struct is_unary_or_binary_function_impl<R (__fastcall*)()>
\{ static const bool value $=$ true; \};
\#endif
template <typename R>
struct is_unary_or_binary_function_impl<R ( $\qquad$ cdecl*)()>
\{ static const bool value = true; \};
template <typename R>
struct is_unary_or_binary_function_impl<R (__cdecl*)(...)>
\{ static const bool value = true; \};
\#endif
// see boost ticket \#4094
// avoid duplicate definitions of is_unary_or_binary_function_impl
\#ifndef BOOST_INTRUSIVE_TT_TEST_MSC_FUNC_SIGS
template <typename R, class T0>
struct is_unary_or_binary_function_impl<R (*)(T0)>
\{ static const bool value = true; \};
template <typename R, class T0>
struct is_unary_or_binary_function_impl<R (*)(T0...)>
\{ static const bool value = true; \};
\#else // BOOST_INTRUSIVE_TT_TEST_MSC_FUNC_SIGS
template <typename R, class T0>
struct is_unary_or_binary_function_impl $<\mathrm{R}$ ( $\qquad$ stdcall*)(T0)>
\{ static const bool value $=$ true; \};
\#ifndef _MANAGED
template <typename R, class T0>
struct is_unary_or_binary_function_impl<R (__fastcall*)(T0)>
\{ static const bool value = true; \};
\#endif
template <typename R, class T0>
struct is_unary_or_binary_function_impl<R (__cdecl*)(T0)>
\{ static const bool value = true; \};
template <typename R, class T0>
struct is_unary_or_binary_function_impl<R (__cdecl*)(T0...)>
\{ static const bool value = true; \};
\#endif
// see boost ticket \#4094
// avoid duplicate definitions of is_unary_or_binary_function_impl
\#ifndef BOOST_INTRUSIVE_TT_TEST_MSC_FUNC_SIGS
template <typename R, class T0, class T1>
struct is_unary_or_binary_function_impl<R $\left(^{*}\right)(\mathrm{T} 0, \mathrm{~T} 1)>$
\{ static const bool value = true; \};
template <typename R, class T0, class T1>
struct is_unary_or_binary_function_impl<R $(*)(\mathrm{T} 0, \mathrm{~T} 1 \ldots)\rangle$
\{ static const bool value = true; \};
\#else // BOOST_INTRUSIVE_TT_TEST_MSC_FUNC_SIGS
template <typename R, class T0, class T1>
struct is_unary_or_binary_function_impl<R (__stdcall*)(T0, T1)>
\{ static const bool value = true; \};
\#ifndef _MANAGED
template <typename R, class T0, class T1>
struct is_unary_or_binary_function_impl<R (_fastcall*)(T0, T1)>
\{ static const bool value = true; \};
\#endif
template <typename R, class T0, class T1>
struct is_unary_or_binary_function_impl<R (__cdecl*)(T0, T1)>
\{ static const bool value $=$ true; \};
template <typename R, class T0, class T1>
struct is_unary_or_binary_function_impl<R (__cdecl*)(T0, T1...)>
\{ static const bool value = true; \};
\#endif
template <typename T>

```
struct is_unary_or_binary_function_impl<T&>
{ static const bool value = false; };
template<typename T>
struct is_unary_or_binary_function
{ static const bool value = is_unary_or_binary_function_impl<T>::value; };
//boost::alignment_of yields to 10K lines of preprocessed code, so we
//need an alternative
template <typename T> struct alignment_of;
template <typename T>
struct alignment_of_hack
{
    char c;
    T t;
    alignment_of_hack();
};
template <unsigned A, unsigned S>
struct alignment_logic
{
    static const std::size_t value = A < S ? A : S;
};
template< typename T >
struct alignment_of
{
    static const std::size_t value = alignment_logic
    < sizeof(alignment_of_hack<T>) - sizeof(T)
    , sizeof(T)
    >::value;
};
template <typename T, typename U>
struct is_same
{
typedef char yes_type;
struct no_type
{
    char padding[8];
};
template <typename V>
static yes_type is_same_tester(V*, V*);
static no_type is_same_tester(...);
static T *t;
```

```
static U *u;
    static const bool value = sizeof(yes_type) == sizeof(is_same_tester(t,u));
};
template<typename T>
struct add_const
{ typedef const T type; };
template<typename T>
struct remove_const
{ typedef T type; };
template<typename T>
struct remove_const<const T>
{ typedef T type; };
template<typename T>
struct remove_cv
{ typedef T type; };
template<typename T>
struct remove_cv<const T>
{ typedef T type; };
template<typename T>
struct remove_cv<const volatile T>
{ typedef T type; };
template<typename T>
struct remove_cv<volatile T>
{ typedef T type; };
template<class T>
struct remove_reference
{
    typedef T type;
};
template<class T>
struct remove_reference<T&>
{
    typedef T type;
};
template<class Class>
class is_empty_class
{
```

```
template <typename T>
struct empty_helper_t1 : public T
{
    empty_helper_t1();
    int i[256];
};
struct empty_helper_t2
{ int i[256]; };
public:
static const bool value = sizeof(empty_helper_t1<Class>) == sizeof(empty_helper_t2);
};
template<std::size_t S>
struct ls_zeros
{
    static const std::size_t value = (S & std::size_t(1)) ? 0 : (1 + 1s_zeros<(S>>1u)>::value);
};
template<>
struct ls_zeros<0>
{
    static const std::size_t value = 0;
};
template<>
struct ls_zeros<1>
{
    static const std::size_t value = 0;
};
} //namespace detail
} //namespace intrusive
} //namespace boost
#include <boost/intrusive/detail/config_end.hpp>
#endif //BOOST_INTRUSIVE_DETAIL_MPL_HPP
```



```
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// http://www.boost.org/LICENSE_1_0.txt)
//
// See http://www.boost.org/libs/interprocess for documentation.
```

\#ifndef BOOST_INTERPROCESS_DETAIL_MPL_HPP
\#define BOOST_INTERPROCESS_DETAIL_MPL_HPP
\#if (defined _MSC_VER) \& \& (_MSC_VER >= 1200)
\# pragma once
\#endif
\#include <cstddef>
namespace boost \{
namespace interprocess \{
namespace ipcdetail \{
template <class T, T val>
struct integral_constant
\{
static const T value $=$ val;
typedef integral_constant<T, val> type;
\};
template< bool C_>
struct bool_ : integral_constant<bool, C_>
\{
static const bool value $=\mathrm{C}_{-}$;
\};
typedef bool_<true> true_;
typedef bool_<false> false_;
typedef true_ true_type;
typedef false_false_type;
typedef char yes_type;
struct no_type
\{
char padding[8];
\};
template <bool B, class T = void>
struct enable_if_c \{
typedef T type;
\};
template <class T>
struct enable_if_c<false, T> \{\};

```
template <class Cond, class T = void>
struct enable_if : public enable_if_c<Cond::value, T> {};
template <class Cond, class T = void>
struct disable_if : public enable_if_c<!Cond::value, T> {};
template <class T, class U>
class is_convertible
{
    typedef char true_t;
    class false_t { char dummy[2]; };
    static true_t dispatch(U);
    static false_t dispatch(...);
    static T trigger();
    public:
    static const bool value = sizeof(dispatch(trigger())) == sizeof(true_t);
};
template<
        bool C
    , typename T1
    , typename T2
    >
struct if_c
{
    typedef T1 type;
};
template<
        typename T1
    , typename T2
    >
struct if_c<false,T1,T2>
{
    typedef T2 type;
};
template<
    typename T1
    , typename T2
    , typename T3
    >
struct if_
{
    typedef typename if_c<0 != T1::value, T2, T3>::type type;
};
```

```
template <class Pair>
struct select1st
// : public std::unary_function<Pair, typename Pair::first_type>
{
    template<class OtherPair>
    const typename Pair::first_type& operator()(const OtherPair& x) const
    { return x.first; }
    const typename Pair::first_type& operator()(const typename Pair::first_type& x) const
    { return x; }
};
// identity is an extension: it is not part of the standard.
template <class T>
struct identity
// : public std::unary_function<T,T>
{
    typedef T type;
    const T& operator()(const T& x) const
    { return x; }
};
template<std::size_t S>
struct ls_zeros
{
    static const std::size_t value = (S & std::size_t(1)) ? 0 : (1u + ls_zeros<(S >> 1u)>::value);
};
template<>
struct ls_zeros<0>
{
    static const std::size_t value = 0;
};
template<>
struct ls_zeros<1>
{
    static const std::size_t value = 0;
};
} //namespace ipcdetail {
} //namespace interprocess {
} //namespace boost {
#endif //#ifndef BOOST_INTERPROCESS_DETAIL_MPL_HPP
```



```
//
```

```
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//
// See http://www.boost.org/libs/container for documentation.
//
|/|/|/|/|/|/|/|/|/|/|/|/|/|/|/|/|/|/|/|/|/|/|/|/|/|/|/|/|/|/|/|/|/|
#ifndef BOOST_CONTAINER_CONTAINER_DETAIL_MPL_HPP
#define BOOST_CONTAINER_CONTAINER_DETAIL_MPL_HPP
#if (defined _MSC_VER) && (_MSC_VER >= 1200)
# pragma once
#endif
#include <cstddef>
namespace boost {
namespace container {
namespace container_detail {
template <class T, T val>
struct integral_constant
{
    static const T value = val;
    typedef integral_constant<T,val> type;
};
template< bool C_ >
struct bool_ : integral_constant<bool, C_>
{
    static const bool value = C_;
    operator bool() const { return bool_::value; }
};
typedef bool_<true> true_;
typedef bool_<false> false_;
typedef true_ true_type;
typedef false_false_type;
typedef char yes_type;
struct no_type
{
    char padding[8];
};
```

```
template <bool B, class T = void>
struct enable_if_c {
typedef T type;
};
template <class T>
struct enable_if_c<false, T> {};
template <class Cond, class T = void>
struct enable_if : public enable_if_c<Cond::value, T> { };
template <class Cond, class T = void>
struct disable_if : public enable_if_c<!Cond::value, T> {};
template <bool B, class T = void>
struct disable_if_c : public enable_if_c<!B, T> {};
template <class T, class U>
class is_convertible
{
    typedef char true_t;
    class false_t { char dummy[2]; };
    static true_t dispatch(U);
    static false_t dispatch(...);
    static T trigger();
    public:
    enum { value = sizeof(dispatch(trigger())) == sizeof(true_t) };
};
template<
        bool C
    , typename T1
    , typename T2
    >
struct if_c
{
    typedef T1 type;
};
template<
        typename T1
    , typename T2
    >
struct if_c<false,T1,T2>
{
    typedef T2 type;
};
```

```
template<
    typename T1
    , typename T2
    , typename T3
    >
struct if_
{
    typedef typename if_c<0 != T1::value, T2, T3>::type type;
};
template <class Pair>
struct select1st
// : public std::unary_function<Pair, typename Pair::first_type>
{
    template<class OtherPair>
    const typename Pair::first_type& operator()(const OtherPair& x) const
    { return x.first; }
    const typename Pair::first_type& operator()(const typename Pair::first_type& x) const
    { return x; }
};
// identity is an extension: it is not part of the standard.
template <class T>
struct identity
// : public std::unary_function<T,T>
{
    typedef T type;
    const T& operator()(const T& x) const
    { return x; }
};
template<std::size_t S>
struct ls_zeros
{
    static const std::size_t value = (S & std::size_t(1)) ? 0 : (1u + ls_zeros<(S >> 1u)>::value);
};
template<>
struct ls_zeros<0>
{
    static const std::size_t value = 0;
};
template<>
struct ls_zeros<1>
```

static const std::size_t value $=0$;
\};
template <typename T> struct unvoid $\{$ typedef T type; \};
template く> struct unvoid<void> \{ struct type \{ \}; \};
template <> struct unvoid<const void> $\{$ struct type $\} ;\}$;
\} //namespace container_detail \{
\} //namespace container \{
\} //namespace boost \{
\#endif //\#ifndef BOOST_CONTAINER_CONTAINER_DETAIL_MPL_HPP
[/===========================================================================
Boost.Geometry (aka GGL, Generic Geometry Library)

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]

<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=US-ASCII"> <title>MPL Interoperability</title>
<link rel="stylesheet" href="../../../../../doc/src/boostbook.css" type="text/css">
<meta name="generator" content="DocBook XSL Stylesheets V1.77.1">
<link rel="home" href="../index.html" title="Chapter\&\#160;1.\&\#160;Boost.TypeTraits">
<link rel="up" href="../index.html" title="Chapter\&\#160;1.\&\#160;Boost.TypeTraits">
<link rel="prev" href="intrinsics.html" title="Support for Compiler Intrinsics">
<link rel="next" href="examples.html" title="Examples">
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<td align="center"><a href="../../../../../index.html">Home</a></td>
<td align="center"><a href="../../../../../libs/libraries.htm">Libraries</a></td>
<td align="center"><a href="http://www.boost.org/users/people.html">People</a></td>
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href="examples.html"><img src="../../../../../doc/src/images/next.png" alt="Next"></a>
</div>
<div class="section boost_typetraits_mpl">
<div class="titlepage"><div><div><h2 class="title" style="clear: both">
<a name="boost_typetraits.mpl"></a><a class="link" href="mpl.html" title="MPL Interoperability">MPL
Interoperability</a>
</h2></div></div></div>
<p>
All the value based traits in this library conform to MPL's requirements for an <a href="../../../.././libs/mpl/doc/refmanual/integral-constant.html" target="_top"> Integral Constant type</a>: that includes a number of rather intrusive workarounds for broken compilers.
</p>
<p>
Purely as an implementation detail, this means that <code class="computeroutput"><a class="link"
href="reference/integral_constant.html" title="integral_constant">true_type</a></code> inherits from <a href="../../../../../libs/mpl/doc/refmanual/bool.html" target="_top"><code
class="computeroutput"><span class="identifier">boost</span><span class="special">::</span><span
class="identifier">mpl</span><span class="special">::</span><span class="identifier">true_</span></code></a>,
<code class="computeroutput"><a class="link" href="reference/integral_constant.html"
title="integral_constant">false_type</a></code>
inherits from <a href="../../../../../libs/mpl/doc/refmanual/bool.html" target="_top"><code
class="computeroutput"><span class="identifier">boost</span><span class="special">::</span><span
class="identifier">mpl</span><span class="special">::</span><span class="identifier">false_</span></code></a>,
and <code class="computeroutput"><a class="link" href="reference/integral_constant.html"
title="integral_constant">integral_constant</a><span class="special"><</span><span
class="identifier">T</span><span class="special">,</span>
<span class="identifier">v</span><span class="special">></span></code>
inherits from <a href="../../../../../libs/mpl/doc/refmanual/integral-c.html" target="_top"><code
class="computeroutput"><span class="identifier">boost</span><span class="special">::</span><span
class="identifier">mpl</span><span class="special">::</span><span class="identifier">integral_c</span><span
class="special"><</span><span class="identifier">T</span><span class="special">,</span><span
class="identifier">V</span><span class="special">></span></code></a>
(provided <code class="computeroutput"><span class="identifier">T</span></code> is not <code
class="computeroutput"><span class="keyword">bool</span></code>)
</p>
</div>
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<td align="left"></td>
<td align="right"><div class="copyright-footer">Copyright \&\#169; 2000, 2011 Adobe Systems Inc, David
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Frederic Bron, Steve Cleary, Beman Dawes, Aleksey Gurtovoy, Howard Hinnant,
Jesse Jones, Mat Marcus, Itay Maman, John Maddock, Alexander Nasonov, Thorsten
Ottosen, Roman Perepelitsa, Robert Ramey, Jeremy Siek, Robert Stewart and Steven Watanabe<p>
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target="_top">http://www.boost.org/LICENSE_1_0.txt</a>)
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href="examples.html"><img src="../../../.././doc/src/images/next.png" alt="Next"></a>
</div>
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]
[section:mpl MPL Interoperability]
All the value based traits in this library conform to MPL's requirements for an [@ ../../../../libs/mpl/doc/refmanual/integral-constant.html Integral Constant type]: that includes a number of rather intrusive workarounds for broken compilers.
Purely as an implementation detail, this means that `_true_type` inherits from [@../../../../libs/mpl/doc/refmanual/bool.html `boost::mpl::true_`], - _false_type`inherits from [@../../../../libs/mpl/doc/refmanual/bool.html`boost::mpl::false_`], and `__integral_constant<T, v>`inherits from [@ ../../../../libs/mpl/doc/refmanual/integral-c.html`boost::mpl::integral_c<T,v>`] (provided `T`is not`bool`)
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<?xml version=" 1.0 " encoding="utf-8"?>

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<para>
    The following is the overall license for the boost date_time
    library. This notice is found in all source files related to the
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<!--hr / -->
<ulink url="mailto:jeff@crystalclearsoftware.com">Jeff Garland</ulink>
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Maybe this should pass?
This is an attempt to acknowledge early contributions to the garbage collector. Later contributions should instead be mentioned in README.changes.

```

\section*{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 Dosser (dosser@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.) This package was debianized by Vladimir Prus <ghost@cs.msu.su> on Wed, 17 July 2002, 19:27:00 +0400.

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```

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*
*/
\#include "licence_info.hpp"
\#include "bcp_imp.hpp"
\#include "fileview.hpp"
\#include <fstream>
\#include <iomanip>
\#include <cstring>
\#include <stdexcept>
\#include <boost/lexical_cast.hpp>
\#include <boost/filesystem/operations.hpp>
\#include <boost/throw_exception.hpp>

\section*{//}
// split_path is a small helper for outputting a path name,
// complete with a link to that path:
//
struct split_path
\{
const fs::path\& root;
const fs::path\& file;
split_path(const fs::path\& r, const fs::path\& f)
\(: \operatorname{root}(\mathrm{r})\), file(f) \(\}\)
private:
split_path\& operator=(const split_path\&);
\};
std::ostream\& operator << (std::ostream\& os, const split_path\& p)
\{
os << "<a href=|"" << (p.root / p.file).string() <<"\">" << p.file.string() << "</a>";
return os;
\}
std::string make_link_target(const std::string\& s)
\{
```

// convert an arbitrary string into something suitable
// for an <a> name:
std::string result;
for(unsigned i = 0; i < s.size(); ++i)
{
result.append(1, static_cast[std::string::value_type](std::string::value_type)(std::isalnum(s[i]) ? s[i] : '_'));
}
return result;
}
void bcp_implementation::output_license_info()
{
std::pair<const license_info*, int> licenses = get_licenses();
std::map<int, license_data>::const_iterator i, j;
i = m_license_data.begin();
j = m_license_data.end();
std::ofstream os(m_dest_path.string().c_str());
if(!os)
{
std::string msg("Error opening ");
msg += m_dest_path.string();
msg += " for output.";
std::runtime_error e(msg);
boost::throw_exception(e);
}
os <<
"<!DOCTYPE HTML PUBLIC \"-//W3C//DTD HTML 4.0 Transitional//EN\">\n"
"<html>\n"
"<head>\n"
"<title>Boost Licence Dependency Information";
if(m_module_list.size() == 1)
{
os << " for " << *(m_module_list.begin());
}
os <<
"</title>\n"
"</head>\n"
"<body>\n"
"<H1>Boost Licence Dependency Information";
if(m_module_list.size() == 1)
{
os << " for " << *(m_module_list.begin());
}
os <<
"</H1>\n"

```
```

    "<H2>Contents</h2>\n"
    "<pre><a href=\"#input\">Input Information</a>\n";
    if(!m_bsl_summary_mode)
os << "<a href=\"\#summary\">Licence Summary</a>\n";
os << "<a href=\"\#details\">Licence Details</a>\n";
while(i != j)
{
// title:
os << " <A href=\"\#" << make_link_target(licenses.first[i->first].license_name)
<< "\">" << licenses.first[i->first].license_name << "</a>\n";
++i;
}
os << "<a href=\"\#files\">Files with no recognised license</a>\n"
"<a href=\"\#authors\">Files with no recognised copyright holder</a>\n";
if(!m_bsl_summary_mode)
{
os <<
"Moving to the Boost Software License...\n"
" <a href=\"\#bsl-converted\">Files that can be automatically converted to the Boost Software License</a>\n"
" <a href=\"\#to-bsl\">Files that can be manually converted to the Boost Software License</a>\n"
" <a href=\"\#not-to-bsl\">Files that can <b>NOT</b> be moved to the Boost Software License</a>\n"
" <a href=\"\#need-bsl-authors\">Authors we need to move to the Boost Software License</a>\n"
"<a href=\"\#copyright\">Copyright Holder Information</a>\n";
}
os <<
"<a href=\"\#depend\">File Dependency Information</a>\n"
"</pre>";
//
// input Information:
//
os << "<a name=\"input\"></a><h2>Input Information</h2>\n";
if(m_scan_mode)
os << "<P>The following files were scanned for boost dependencies:<BR>";
else
os << "<P>The following Boost modules were checked:<BR>";
std::list[std::string](std::string)::const_iterator si = m_module_list.begin();
std::list[std::string](std::string)::const_iterator sj = m_module_list.end();
while(si != sj)
{
os << *si << "<BR>";
++si;
}
os << "</p><p>The Boost path was: <code>" << m_boost_path.string() << "</code></P>";
//

```
```

// extract the boost version number from the boost directory tree,
// not from this app (which may have been built from a previous
// version):
//
fileview version_file(m_boost_path / "boost/version.hpp");
static const boost::regex version_regex(
"^[[:blank:]]*\#[[:blank:]]*define[[:blank:]]+BOOST_VERSION[[:blank:]]+(\ld+)");
boost::cmatch what;
if(boost::regex_search(version_file.begin(), version_file.end(), what, version_regex))
{
int version = boost::lexical_cast<int>(what.str(1));
os << "<p>The Boost version is: " << version / 100000 << "." << version / 100 % 1000 << "." << version % 100
<<"</P>\n";
}
//
// output each license:
//
i = m_license_data.begin();
j = m_license_data.end();
if(!m_bsl_summary_mode)
{
//
// start with the summary:
//
os << "<a name=\"summary\"></a><h2>Licence Summary</h2>\n";
while(i != j)
{
// title:
os <<
"<H3>" << licenses.first[i->first].license_name << "</H3>\n";
// license text:
os << "<BLOCKQUOTE>" << licenses.first[i->first].license_text << "</BLOCKQUOTE>";
// Copyright holders:
os << "<P>This license is used by " << i->second.authors.size()
<< " authors and " << i->second.files.size()
<< " files <a href=\"\#" << make_link_target(licenses.first[i->first].license_name) << "\">(see details)</a>";
os << "</P></BLOCKQUOTE>\n";
++i;
}
}
//
// and now the details:
//
i = m_license_data.begin();
j = m_license_data.end();
int license_index = 0;
os << "<a name=\"details\"></a><h2>Licence Details</h2>\n";

```
```

while(i != j)
{
// title:
os <<
"<H3><A name=\"" << make_link_target(licenses.first[i->first].license_name)
<< "\"></a>" << licenses.first[i->first].license_name << "</H3>\n";
// license text:
os << "<BLOCKQUOTE>" << licenses.first[i->first].license_text << "</BLOCKQUOTE>";
if(!m_bsl_summary_mode || (license_index >= 3))
{
// Copyright holders:
os << "<P>This license is used by the following " << i->second.authors.size() << " copyright
holders:</P>\n<BLOCKQUOTE><P>";
std::set[std::string](std::string)::const_iterator x, y;
x = i->second.authors.begin();
y = i->second.authors.end();
while(x != y)
{
os << *x << "<BR>\n";
++x;
}
os << "</P></BLOCKQUOTE>\n";
// Files using this license:
os << "<P>This license applies to the following " << i->second.files.size() <<"
files:</P>\n<BLOCKQUOTE><P>";
std::set<fs::path, path_less>::const_iterator m, n;
m = i->second.files.begin();
n = i->second.files.end();
while(m != n)
{
os << split_path(m_boost_path, *m) << "<br>\n";
++m;
}
os << "</P></BLOCKQUOTE>\n";
}
else
{
os << "<P>This license is used by " << i->second.authors.size() << " authors (list omitted for brevity).</P>\n";
os << "<P>This license applies to " << i->second.files.size() << " files (list omitted for brevity).</P>\n";
}
++license_index;
++i;
}
//
// Output list of files not found to be under license control:
//
os <<"<h2><a name=\"files\"></a>Files With No Recognisable Licence</h2>\n"
"<P>The following " << m_unknown_licenses.size() << " files had no recognisable license

```
```

information:</P><BLOCKQUOTE><P>\n";
std::set<fs::path, path_less>::const_iterator i2, j2;
i2 = m_unknown_licenses.begin();
j2 = m_unknown_licenses.end();
while(i2 != j2)
{
os << split_path(m_boost_path, *i2) << "<br>\n";
++i2;
}
os << "</p></BLOCKQUOTE>";
//
// Output list of files with no found copyright holder:
//
os <<"<h2><a name=\"authors\"></a>Files With No Recognisable Copyright Holder</h2>\n"
"<P>The following " << m_unknown_authors.size() << " files had no recognisable copyright
holder:</P>\n<BLOCKQUOTE><P>";
i2 = m_unknown_authors.begin();
j2 = m_unknown_authors.end();
while(i2 != j2)
{
os << split_path(m_boost_path, *i2) << "<br>\n";
++i2;
}
os << "</p></BLOCKQUOTE>";
if(!m_bsl_summary_mode)
{
//
// Output list of files that have been moved over to the Boost
// Software License, along with enough information for human
// verification.
//
os << "<h2><a name=\"bsl-converted\"></a>Files that can be automatically converted to the Boost Software
License</h2>\n"
<< "<P>The following " << m_converted_to_bsl.size() << " files can be automatically converted to the Boost
Software License, but require manual verification before they can be committed to CVS:</P>\n";
if (!m_converted_to_bsl.empty())
{
typedef std::map<fs::path, std::pair<std::string, std::string>, path_less>
::const_iterator conv_iterator;
conv_iterator i = m_converted_to_bsl.begin(),
ie = m_converted_to_bsl.end();
int file_num = 1;
while (i != ie)
{
os << "<P>[" << file_num << "] File: <tt>" << split_path(m_boost_path, i->first)
<<"</tt><br>\n<table border=\"1\">\n <tr>\n <td><pre>"
                << i->second.first << "</pre></td>\n <td><pre>"
                        << i->second.second << "</pre></td>\n </tr>\n</table>\n";

```
```

        ++i;
        ++file_num;
    }
    }
    //
    // Output list of files that could be moved over to the Boost Software License
    //
    ```
    os <<"<h2><a name=|"to-bsl|"></a>Files that could be converted to the Boost Software License</h2>|n"
    " < P > The following " \ll m_can_migrate_to_bsl.size() <<" files could be manually converted to the Boost
Software License, but have not yet been:</P>\n<BLOCKQUOTE><P>";
    i2 = m_can_migrate_to_bsl.begin();
    \(\mathrm{j} 2=\mathrm{m} \_\)can_migrate_to_bsl.end () ;
    while(i2 != j2)
    \{
        os << split_path(m_boost_path, *i2) << "<br>\n";
        ++i2;
    \}
    os <<"</p></BLOCKQUOTE>";
    //
    // Output list of files that can not be moved over to the Boost Software License
    //
    os <<"<h2><a name=|"not-to-bsl|"></a>Files that can NOT be converted to the Boost Software
License</h2>\n"
    " < P > The following " < m _cannot_migrate_to_bsl.size() \ll " files cannot be converted to the Boost Software
License because we need the permission of more authors: \(</ \mathrm{P}>\backslash \mathrm{n}<\mathrm{BLOCKQUOTE}><\mathrm{P}>{ }^{\prime}\);
    i2 \(=m_{-}\)cannot_migrate_to_bsl.begin();
    \(\mathrm{j} 2=\mathrm{m}\) _cannot_migrate_to_bsl.end();
    while(i2 != j2)
    \{
        os << split_path(m_boost_path, *i2) << "<br>\n";
        ++i2;
\}
os <<"</p></BLOCKQUOTE>";
//
// Output list of authors that we need permission for to move to the BSL
//
os <<"<h2><a name=\"need-bsl-authors\"></a>Authors we need for the BSL</h2>|n"
    "<P>Permission of the following authors is needed before we can convert to the Boost Software License. The
list of authors that have given their permission is contained in <code>more/blanket-
permission.txt</code>.</P>|n<BLOCKQUOTE><P>";
    std::copy(m_authors_for_bsl_migration.begin(), m_authors_for_bsl_migration.end(),
        std::ostream_iterator<std::string>(os, "<br>\n"));
    os <<"</p></BLOCKQUOTE>";
//
// output a table of copyright information:
//
os <<"<H2><a name=\"copyright|"></a>Copyright Holder Information</H2><table border=|"1\">\n";
std::map<std::string, std::set<fs::path, path_less>>::const_iterator ad, ead;
```

    ad = m_author_data.begin();
    ead = m_author_data.end();
    while(ad != ead)
    {
        os << "<tr><td>" << ad->first << "</td><td>";
        std::set<fs::path, path_less>::const_iterator fi, efi;
        fi = ad->second.begin();
        efi = ad->second.end();
        while(fi != efi)
        {
            os << split_path(m_boost_path, *fi) << " ";
            ++fi;
        }
        os << "</td></tr>\n";
        ++ad;
    }
    os << "</table>\n";
    }
//
// output file dependency information:
//
os << "<H2><a name=\"depend\"></a>File Dependency Information</H2><BLOCKQUOTE><pre>\n";
std::map<fs::path, fs::path, path_less>::const_iterator dep, last_dep;
std::set<fs::path, path_less>::const_iterator fi, efi;
fi = m_copy_paths.begin();
efi = m_copy_paths.end();
// if in summary mode, just figure out the "bad" files and print those only:
std::set<fs::path, path_less> bad_paths;
if(m_bsl_summary_mode)
{
bad_paths.insert(m_unknown_licenses.begin(), m_unknown_licenses.end());
bad_paths.insert(m_unknown_authors.begin(), m_unknown_authors.end());
bad_paths.insert(m_can_migrate_to_bsl.begin(), m_can_migrate_to_bsl.end());
bad_paths.insert(m_cannot_migrate_to_bsl.begin(), m_cannot_migrate_to_bsl.end());
typedef std::map<fs::path, std::pair<std::string, std::string>, path_less>
::const_iterator conv_iterator;
conv_iterator i = m_converted_to_bsl.begin(),
ie = m_converted_to_bsl.end();
while(i != ie)
{
bad_paths.insert(i->first);
++i;
}
fi = bad_paths.begin();
efi = bad_paths.end();
os << "<P> For brevity, only files not under the BSL are shown</P>\n";
}

```
```

while(fi != efi)
{
os << split_path(m_boost_path, *fi);
dep =m_dependencies.find(*fi);
last_dep = m_dependencies.end();
std::set<fs::path, path_less> seen_deps;
if (dep != last_dep)
while(true)
{
os << " -> ";
if(fs::exists(m_boost_path / dep->second))
os << split_path(m_boost_path, dep->second);
else if(fs::exists(dep->second))
os << split_path(fs::path(), dep->second);
else
os << dep->second.string();
if(seen_deps.find(dep->second) != seen_deps.end())
{
os << " <I>(Circular dependency!)</I>";
break; // circular dependency!!!
}
seen_deps.insert(dep->second);
last_dep = dep;
dep = m_dependencies.find(dep->second);
if((dep == m_dependencies.end()) | (0 == compare_paths(dep->second, last_dep->second)))
break;
}
os << "\n";
++fi;
}
os << "</pre></BLOCKQUOTE>\n";
os <<"</body></html>\n";
if(!os)
{
std::string msg("Error writing to ");
msg += m_dest_path.string();
msg += ".";
std::runtime_error e(msg);
boost::throw_exception(e);
}
}
Index: boost/mpl/print.hpp
--- boost/mpl/print.hpp(revision 83411)
+++ boost/mpl/print.hpp(working copy)

```
```

@ @ -45,22 +45,21 @ @
: mpl::identity<T>
\#if defined(__MWERKS__)
, aux::print_base
-\#endif
+\#endif
{
\#if defined(BOOST_MSVC)
enum {n= sizeof(T)+-1 };
\#elif defined(__MWERKS__)
void f(int);
-\#else

- enum {
- n =
-\# if defined(__EDG_VERSION__)
- aux::dependent_unsigned<T>::value > -1
-\# else
- sizeof(T)>-1
-\# endif
- };
-\#endif
+\#elif defined(__EDG_VERSION__)
+ enum {n = aux::dependent_unsigned<T>::value > -1 };
+\#elif defined(BOOST_GCC)
+ enum {n1 };
+ enum {n2 };
+ enum {n=n1 != n2 };
+\#else
+ enum {n= sizeof(T)>-1};
+\#endif
};
\#if defined(BOOST_MSVC)

```

\subsection*{1.16 btrfs-progs 4.9.1 :1.el7}

\subsection*{1.16.1 Available under license :}

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

\subsection*{1.18 ca-certificates 2018.2.22 :70.0.el7_5}

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One of the key reasons we got delayed on the CentOS-6 release was lack of suitable build resources, especially when we had to repeatedly build large chunks of code. Norwood S came forward and worked with me to setup a large build machine, then tune the build process and help improve the overall build, test and validate process we were using. This build machine he donated to the project was about 5 times more capable than the entire buildsystem we had. And he did this out of his own pocket, from his own time, and has since upgraded the machine as well. It's now a 128GB, 48 core machine, with 4 SSD's and 4 sata disks : but the key metric is that it can build from source, the entire CentOS-7 distro in under 22 hrs .

Having this capability was key in our ability to build, test and deliver CentOS-7 as rapidly as we have been able to.

We'd like to dedicate the CentOS-7 Release to Mr Norwood S, of Phoenix, AZ, USA for his continued support for the project.

\section*{Contributors:}

The Red Hat developers, without whom CentOS would look very different
```

Akemi Matsuno-Yagi
Alain Reguera Delgado
Alan Bartlett
Andreas Thienemann
Anssi Johansson
Athmane Madjoudj
Bonnie King
Brian Stinson
Carl Trieloff
Christoph Galuschka
Fabian Arrotin
Jakub Filak
James Moger
Jeff Sheltren
Jim Perrin
Johnny Hughes Jr
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Kay Williams
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Ajay Joshi <jaj@google.com>
Balzs Dn <balazs.dan@gmail.com>
Bharat Mediratta <bharat@menalto.com>
Chandler Carruth <chandlerc@google.com>
Chris Prince <cprince @ google.com>
Chris Taylor <taylorc@google.com>
Dan Egnor <egnor@google.com>
Eric Roman <eroman@chromium.org>
Hady Zalek <hady.zalek@gmail.com>
Jeffrey Yasskin <jyasskin@google.com>
Ji Sigursson <joi@google.com>
Keir Mierle <mierle@gmail.com>
Keith Ray <keith.ray@gmail.com>
Kenton Varda <kenton@google.com>
Manuel Klimek <klimek@google.com>
Markus Heule <markus.heule@gmail.com>
Mika Raento <mikie@iki.fi>
Mikls Fazekas <mfazekas@szemafor.com>
Pasi Valminen <pasi.valminen@gmail.com>

Patrick Hanna <phanna@google.com>
Patrick Riley <pfr@google.com>
Peter Kaminski <piotrk@google.com>
Preston Jackson <preston.a.jackson@gmail.com>
Rainer Klaffenboeck <rainer.klaffenboeck@dynatrace.com>
Russ Cox <rsc@google.com>
Russ Rufer <russ@pentad.com>
Sean Mcafee <eefacm@gmail.com>
Sigurur sgeirsson <siggi@google.com>
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Benoit Sigoure <tsuna@google.com>
Bogdan Piloca <boo@google.com>

Chandler Carruth <chandlerc@google.com>
Dave MacLachlan <dmaclach@gmail.com>
David Anderson <danderson@google.com>
Dean Sturtevant
Gene Volovich < gv@cite.com>
Hal Burch <gmock@hburch.com>
Jeffrey Yasskin <jyasskin@google.com>
Jim Keller <jimkeller@google.com>
Joe Walnes <joe@truemesh.com>
Jon Wray <jwray@google.com>
Keir Mierle <mierle@ gmail.com>
Keith Ray <keith.ray@gmail.com>
Kostya Serebryany <kcc@google.com>
Lev Makhlis
Manuel Klimek <klimek@google.com>
Mario Tanev <radix@google.com>
Mark Paskin
Markus Heule <markus.heule@gmail.com>
Matthew Simmons <simmonmt@acm.org>
Mike Bland <mbland@google.com>
Neal Norwitz <nnorwitz@gmail.com>
Nermin Ozkiranartli <nermin@google.com>
Owen Carlsen <ocarlsen@google.com>
Paneendra Ba <paneendra@google.com>
Paul Menage <menage@google.com>
Piotr Kaminski <piotrk@google.com>
Russ Rufer <russ@pentad.com>
Sverre Sundsdal <sundsdal@gmail.com>
Takeshi Yoshino <tyoshino@google.com>
Vadim Berman <vadimb@google.com>
Vlad Losev <vladl@google.com>
Wolfgang Klier <wklier@google.com>
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Version 3, 29 June 2007

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Version 3, 29 June 2007

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<signature of Ty Coon>, 1 April 1990
Ty Coon, President of Vice

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EFFECTIVE OCT 2008, LICENSE IS BEING CHANGED TO LGPL-2.1 (though not reflected in released code until Nov 2009 - slow release cycle...)
\(\qquad\)

Discussion thread from mailing list archive, with approval from everyone actively involved or holding original licensing rights included.
[Cracklib-devel] cracklib license
From: Mike Frysinger <vapier@ge...>-2007-10-02 01:16

Attachments: Message as HTML
looks like 2.8.11 is out and marked as "GPL-2" ... releasing libraries unde= \(\mathrm{r}=20\)

GPL-2 is not desirable at all ... this is why the LGPL-2.1 exists \(=2\) Dmike

Re: [Cracklib-devel] cracklib license
From: Neulinger, Nathan <nneul@um...>-2007-10-02 01:18

I understand that, and you're welcome to bring it up with Alec directly and see if he wants to relicense his code as LGPL... but at this point, it was enough to just get it consistent and documented as to what it was released under. This wasn't actually a license change, just a clarification of the licensing that was already in place.\(=20\)
-- Nathan
\(=20\)

Nathan Neulinger EMail: nneul@um...
University of Missouri - Rolla Phone: (573) 341-6679
UMR Information Technology Fax: (573) 341-4216
> -----Original Message-----
> From: cracklib-devel-bounces@li...
> [mailto:cracklib-devel-bounces@li...] On Behalf Of
> Mike Frysinger
> Sent: Monday, October 01, 2007 8:15 PM
> To: cracklib-devel@li...
> Subject: [Cracklib-devel] cracklib license
\(>=20\)
\(>\) looks like 2.8 .11 is out and marked as "GPL-2" ... releasing
\(>\) libraries under
> GPL-2 is not desirable at all ... this is why the LGPL-2.1 exists
>-mike

\section*{Re: [Cracklib-devel] cracklib license}

From: Mike Frysinger <vapier@ge...> - 2007-10-02 01:33

Attachments: Message as HTML
On Monday 01 October 2007, Neulinger, Nathan wrote:
> I understand that, and you're welcome to bring it up with Alec directly
\(>\) and see if he wants to relicense his code as LGPL... but at this point,
> it was enough to just get it consistent and documented as to what it was
\(>\) released under. This wasn't actually a license change, just a
\(>\) clarification of the licensing that was already in place.
the original license (before moving to sourceforge -- aka, 2.7) was not=20
GPL-2 ... it was a modified artistic license ... i didnt notice the license= \(=20\)
change until it was mentioned in the latest notes.
unlike the old license, GPL-2 prevents people from using cracklib unless th=
eir=20
applications are also GPL-2 which imo is just wrong. it isnt the place of \(=\) \(a=20\)
library to dictact to application writes what license they should be using.=
\(=20\)
thus LGPL-2.1 enters to fill this void.
\(=2\) Dmike

Re: [Cracklib-devel] cracklib license
From: Neulinger, Nathan <nneul@um...> - 2007-10-02 01:46
Seems like the ideal thing here would be for you and the other distro maintainers to get together with Alec in a conversation and come to a decision as to what licensing scheme y'all want. I haven't really done much other than cleaning up the packaging and patches and a small bit of additional code, so whatever licensing y'all come up with is fine by me.
-- Nathan
\(=20\)

Nathan Neulinger EMail: nneul@um...
University of Missouri - Rolla Phone: (573) 341-6679
UMR Information Technology Fax: (573) 341-4216
> -----Original Message-----
> From: cracklib-devel-bounces@li...
\(>\) [mailto:cracklib-devel-bounces@li...] On Behalf Of
> Mike Frysinger
> Sent: Monday, October 01, 2007 8:33 PM
\(>\) To: Neulinger, Nathan
> Cc: cracklib-devel@li...; Alec Muffett
> Subject: Re: [Cracklib-devel] cracklib license
\(>=20\)
\(>\) On Monday 01 October 2007, Neulinger, Nathan wrote:
\gg I understand that, and you're welcome to bring it up with Alec
\(>\) directly
\(\gg\) and see if he wants to relicense his code as LGPL... but at this
\(>\) point,
\gg it was enough to just get it consistent and documented as to what
\(>\) it was
\(\gg\) released under. This wasn't actually a license change, just a
\(\gg\) clarification of the licensing that was already in place.
\(>=20\)
\(>\) the original license (before moving to sourceforge -- aka, 2.7) was
\(>\) not
> GPL-2 ... it was a modified artistic license ... i didnt notice the
\(>\) license
\(>\) change until it was mentioned in the latest notes.
\(>=20\)
\(>\) unlike the old license, GPL-2 prevents people from using cracklib
\(>\) unless their
> applications are also GPL-2 which imo is just wrong. it isnt the
\(>\) place of a
\(>\) library to dictact to application writes what license they should
\(>\) be using.
\(>\) thus LGPL-2.1 enters to fill this void.
>-mike

Re: [Cracklib-devel] cracklib license
From: Alec Muffett <alecm@cr...>-2007-10-02 08:57
\(>\) Seems like the ideal thing here would be for you and the other distro
\(>\) maintainers to get together with Alec in a conversation and come to a
\(>\) decision as to what licensing scheme y'all want. I haven't really done
\(>\) much other than cleaning up the packaging and patches and a small
\(>\) bit of
\(>\) additional code, so whatever licensing y'all come up with is fine \(>\) by me.

I am sympathetic. Guys, what do you reckon?

What I am hearing so far is that LGPL makes sense, since it can be linked with any code, not just GPL...
-a

Re: [Cracklib-devel] cracklib license
From: Devin Reade <gdr@gn...>-2007-10-02 15:04
I would like to see it under LGPL as well. I think it is in everyone's best interests to have as secure systems as possible, and I think tainting it via GPL will just make it less likely that the library gets used, and will not usually cause companies/developers to GPL the dependent code (where it is not already GPL).

I like GPL, I use it when I can, but I don't think that it's the correct license in this situation.

Devin
--
If it's sinful, it's more fun.

Re: [Cracklib-devel] cracklib license
From: Nalin Dahyabhai <nalin@re...>-2008-01-28 16:32
On Tue, Oct 02, 2007 at 09:57:31AM +0100, Alec Muffett wrote:
\gg Seems like the ideal thing here would be for you and the other distro
\(\gg\) maintainers to get together with Alec in a conversation and come to a
\(\gg\) decision as to what licensing scheme y'all want. I haven't really done
\gg much other than cleaning up the packaging and patches and a small
```

>> bit of
>> additional code, so whatever licensing y'all come up with is fine
> by me.
>
> I am sympathetic. Guys, what do you reckon?
>
> What I am hearing so far is that LGPL makes sense, since it can be
> linked with any code, not just GPL...
My apologies for not chiming in in anything resembling a reasonable timeframe.

```

I'd also suggest the LGPL, for the reason you noted above. Alternately, GPLv2 with the option of using the library under a later version of the GPL would permit applications which were released under version 3 of the GPL to use the library, too, which would be sufficient for the packages which are included in Fedora. FWIW, I'd personally lean toward LGPL.

In any case, I thank you both for working on sorting this out.

Cheers,

Nalin

Re: [Cracklib-devel] cracklib license
From: Mike Frysinger <vapier@ge...> - 2008-10-05 21:27

Attachments: Message as HTML
On Monday 28 January 2008, Nalin Dahyabhai wrote:
> On Tue, Oct 02, 2007 at 09:57:31AM +0100, Alec Muffett wrote:
\ggg Seems like the ideal thing here would be for you and the other distro
\ggg maintainers to get together with Alec in a conversation and come to a
\ggg decision as to what licensing scheme y'all want. I haven't really done
\(\ggg\) much other than cleaning up the packaging and patches and a small
\(\ggg\) bit of
\ggg additional code, so whatever licensing y'all come up with is fine
\(\ggg\) by me.
\(\gg\)
\gg I am sympathetic. Guys, what do you reckon?
>>
\gg What I am hearing so far is that LGPL makes sense, since it can be
\gg linked with any code, not just GPL...
\(>\)
> My apologies for not chiming in in anything resembling a reasonable
\(>\) timeframe.
\(>\)
> I'd also suggest the LGPL, for the reason you noted above. Alternately,
```

> GPLv2 with the option of using the library under a later version of the
> GPL would permit applications which were released under version 3 of the
> GPL to use the library, too, which would be sufficient for the packages
> which are included in Fedora. FWIW, I'd personally lean toward LGPL.
>
> In any case, I thank you both for working on sorting this out.
looks like everyone is OK with LGPL-2.1 (GNU Lesser license), so can we make
the change now ?
-mike

```
Re: [Cracklib-devel] cracklib license
From: Alec Muffett <alecm@cr...>-2008-10-05 23:18
>> In any case, I thank you both for working on sorting this out.
>
> looks like everyone is OK with LGPL-2.1 (GNU Lesser license), so can we make
\(>\) the change now?
yes. go for it. thanks++
-a
Re: [Cracklib-devel] cracklib license
From: Mike Frysinger <vapier@ge...>-2008-10-25 22:34
Attachments: Message as HTML
On Sunday 05 October 2008, Alec Muffett wrote:
\gg> In any case, I thank you both for working on sorting this out.
\(\gg\)
\gg looks like everyone is OK with LGPL-2.1 (GNU Lesser license), so can we
\(\gg\) make the change now ?
>
\(>\) yes. go for it. thanks++
Nathan Neulinger is the only one who can actually make said change ...
-mike

\section*{BELOW IS ORIGINAL LICENSING DISCUSSION RE CHANGING TO GPL from Artistic.}

CrackLib was originally licensed with a variant of the Artistic license. In the interests of wider acceptance and more modern licensing, it was switched with the original author's blessing to GPL v2.

This approval was carried out in email discussions in 2005, and has been reconfirmed as of 2007-10-01 with the following email from Alec Muffett.

The below email references nneul@umr.edu address, as that is the address that was used at the time. For any future emails regarding this, please use nneul@neulinger.org.

From alecm@crypticide.com Mon Oct 1 12:26:03 2007
Received: from umr-exproto2.cc.umr.edu ([131.151.0.192]) by UMR-CMAIL1.umr.edu with Microsoft SMTPSVC(6.0.3790.3959);

Mon, 1 Oct 2007 12:26:03-0500
Received: from scansrv2.srv.mst.edu ([131.151.1.114]) by umr-exproto2.cc.umr.edu with Microsoft SMTPSVC(6.0.3790.3959);
Mon, 1 Oct 2007 12:26:02-0500
Received: (qmail 8022 invoked from network); 1 Oct 2007 16:59:55-0000
Received: from smtp1.srv.mst.edu (131.151.1.43)
by scanin-ipvs.cc.umr.edu with SMTP; 1 Oct 2007 16:59:55-0000
Received: from spunkymail-mx8.g.dreamhost.com (mx1.spunky.mail.dreamhost.com [208.97.132.47])
by smtp1.srv.mst.edu (8.13.1/8.13.1) with ESMTP id 191Gxtpr020623
for <nneul@umr.edu>; Mon, 1 Oct 2007 11:59:55-0500
Received: from rutherford.zen.co.uk (rutherford.zen.co.uk [212.23.3.142])
by spunkymail-mx8.g.dreamhost.com (Postfix) with ESMTP id 2C7734D311
for <nneul@ neulinger.org>; Mon, 1 Oct 2007 09:59:50-0700 (PDT)
Received: from [82.68.43.14] (helo=[192.168.1.3])
by rutherford.zen.co.uk with esmtp (Exim 4.50)
id 1IcOcX-0004Qt-6L
for nneul@neulinger.org; Mon, 01 Oct 2007 16:59:49 +0000
Mime-Version: 1.0 (Apple Message framework v752.2)
In-Reply-To: <1b1b3fd80710010908k11dac0afp1f2dd471059ff9a4@mail.gmail.com>
References: <1190922867.3457.147.camel@localhost.localdomain>
<EC90713277D2BE41B7110CCD74E235CEF44F38@UMR-CMAIL1.umr.edu>
<1b1b3fd80710010908k11dac0afp1f2dd471059ff9a4@mail.gmail.com>
Content-Type: text/plain; charset=US-ASCII; delsp=yes; format=flowed
Message-Id: <117A1264-F6DC-4E25-B0DD-56FBFEBE6E9F@crypticide.com>
Content-Transfer-Encoding: 7bit
From: Alec Muffett <alecm@crypticide.com>
Subject: Re: cracklib license
Date: Mon, 1 Oct 2007 17:59:46 +0100
To: Nathan Neulinger <nneul@neulinger.org>
X-Mailer: Apple Mail (2.752.2)
X-Originating-Rutherford-IP: [82.68.43.14]
Return-Path: alecm@crypticide.com
X-OriginalArrivalTime: 01 Oct 2007 17:26:03.0008 (UTC) FILETIME=[2420C000:01C80450]

Status: RO
Content-Length: 585
Lines: 21
\(>\)
> ---------- Forwarded message
> From: Neulinger, Nathan <nneul@umr.edu>
> Date: Sep 27, 2007 2:58 PM
> Subject: RE: cracklib license
> To: alecm@crypto.dircon.co.uk
\(>\)
> Any chance you could write me a self-contained email stating clearly
\(>\) that the license is being changed to GPL, so I could include that
\(>\) email
\(>\) in the repository and clean up the repository/tarballs? I have all the
\(>\) original discussion, but something succinct and self contained
\(>\) would be
> ideal.

The license for my code in the Cracklib distribution is henceforth GPL.

Happy now? :-)
-a
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\# Copyright 2009, 2012 Jan Dittberner <jan@dittberner.info>
\#
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* @(\#)bitstring.h8.1 (Berkeley) 7/19/93
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```

\subsection*{1.32 cryptsetup 1.7.4 :4.el7}

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* admin/check-style.sh, admin/check-style-common.awk, admin/check-style-cpp.awk, admin/check-style-shell.awk: These files, except the first one, were first implemented in the Buildtool project. They were later adapted to be part of Boost.Process and, during that process, the shell script was created.

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<xsl:param name="text"/>
<xsl:value-of select="\$isc.copyright.leader"/>
<xsl:value-of select="normalize-space(substring-before(\$text, '\&\#10;'))"/>
<xsl:text>\&\#10;</xsl:text>
<xsl:variable name="rest" select="substring-after(\$text, '\&\#10;')"/>
<xsl:if test="translate(\$rest, '\&\#9;\&\#32;', ")">
<xsl:call-template name="isc.copyright.format">
<xsl:with-param name="text" select="\$rest"/>
</xsl:call-template>
</xsl:if>
</xsl:template>
<xsl:variable name="isc.copyright.text">
<xsl:text>
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</xsl:text>
</xsl:variable>
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<xsl:variable name="isc.copyright">
<xsl:call-template name="isc.copyright.format">
<xsl:with-param name="text">
<xsl:for-each select="/refentry/docinfo/copyright |/book/bookinfo/copyright">
[xsl:text](xsl:text)Copyright (C) </xsl:text>
<xsl:call-template name="copyright.years">
<xsl:with-param name="years" select="year"/>
</xsl:call-template>
[xsl:text](xsl:text) </xsl:text>
<xsl:value-of select="holder"/>
[xsl:text](xsl:text)&#10;</xsl:text>
</xsl:for-each>
<xsl:value-of select="\$isc.copyright.text"/>
</xsl:with-param>
</xsl:call-template>
</xsl:variable>
</xsl:stylesheet>

<!--
- Local variables:
- mode: sgml
- End:
-->

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Version 3, 29 June 2007

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/*

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Index: tdbsa/tdb.c
--- tdbsa.orig/tdb.c
+++ tdbsa/tdb.c
@ @ -4,11+4,11 @ @ Rev: 23371
Last Changed Date: 2007-06-06 20:14:06-0400 (Wed, 06 Jun 2007)
*/
/*
- Unix SMB/CIFS implementation.
+ trivial database library - standalone version
- trivial database library - private includes
- Copyright (C) Andrew Tridgell 2005
+ Copyright (C) Andrew Tridgell 1999-2005
+ Copyright (C) Jeremy Allison 2000-2006
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** NOTE! The following LGPL license applies to the tdb
** library. This does NOT imply that all of Samba is released
\#
\# This is a Makefile stub which handles the creation of BSD shared
\# libraries.
\#
\# In order to use this stub, the following makefile variables must be defined.
\#
\# BSDLIB_VERSION \(=1.0\)
\# BSDLIB_IMAGE \(=\) libce
\# BSDLIB_MYDIR \(=\) et
\# BSDLIB_INSTALL_DIR \(=\) \$(SHLIBDIR)
\#
all:: image
real-subdirs:: Makefile
@echo "MKDIR pic"
@mkdir -p pic

BSD_LIB = \$(BSDLIB_IMAGE).so.\$(BSDLIB_VERSION)
BSDLIB_PIC_FLAG \(=-\) fpic
image:\$(BSD_LIB)
\$(BSD_LIB): \$(OBJS)
```

(cd pic; ld -Bshareable -o \$(BSD_LIB) \$(LDFLAGS) \$(OBJS))
$(MV) pic/$(BSD_LIB).
$(RM) -f ../$(BSD_LIB)
(cd ..; \$(LN) \$(LINK_BUILD_FLAGS) \
`echo $(my_dir) | sed -e 's;lib/;;"/$(BSD_LIB) \$(BSD_LIB))
install-shlibs install:: \$(BSD_LIB)
@echo "INSTALL_PROGRAM $(BSDLIB_INSTALL_DIR)/$(BSD_LIB)"
@\$(INSTALL_PROGRAM) \$(BSD_LIB)\
$(DESTDIR)$(BSDLIB_INSTALL_DIR)/$(BSD_LIB)
@-$(LDCONFIG)
install-strip: install
install-shlibs-strip: install-shlibs
uninstall-shlibs uninstall::
\$(RM) -f $(DESTDIR)$(BSDLIB_INSTALL_DIR)/\$(BSD_LIB)
clean::
\$(RM) -rf pic
\$(RM) -f \$(BSD_LIB)
$(RM) -f ../$(BSD_LIB)
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```
Gadi Oxman, August 1995

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\subsection*{1.48 ebtables 2.0.10 :16.el7}

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Version 2, June 1991

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Version 2.1, February 1999

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\subsection*{1.52 elfutils 0.170 :4.el7}

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\subsection*{1.53 epel-release 7 :11}

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Version 2, June 1991

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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.)

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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.
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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.

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Version 2.1, February 1999

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Version 2.1, February 1999

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Version 3.1, 31 March 2009

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```

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along with GCC; see the file COPYING3. If not see
[http://www.gnu.org/licenses/](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 gfdl
@ settitle GNU Free Documentation License
@c man begin SEEALSO
gpl(7), fsf-funding(7).
@c man end
@c man begin COPYRIGHT
Copyright @copyright{} 2000, 2001, 2002, 2007, 2008 Free Software Foundation, Inc.
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Everyone is permitted to copy and distribute verbatim copies
of this license document, but changing it is not allowed.
@c This file is intended to be included within another document,
@c hence no sectioning command or @ node.
@cman end
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@c Special handling for inclusion in the install manual.
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@ var \{program\} Copyright (C) @var\{year\} @var\{name of author\}
This program comes with ABSOLUTELY NO WARRANTY; for details type @ samp \{show w\}.
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@end smallexample

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@c man end
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\begin{abstract}
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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.
\end{abstract}

\section*{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 Dosser (dosser@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 88 K 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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\#
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```


# 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

```
\(\qquad\)
\(\qquad\)
``` (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',
        'Itmain.sh',
        'Itoptions.m4',
        'ltsugar.m4',
        'Itversion.m4',
        'lt~obsolete.m4',
        'missing',
        'mkdep',
        'mkinstalldirs',
        '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):
```

def get_line_filter (self, dir, filename):
if filename.startswith ('ChangeLog'):
if filename.startswith ('ChangeLog'):
\# Ignore references to copyright in changelog entries.
\# Ignore references to copyright in changelog entries.
return re.compile ('\t')
return re.compile ('\t')
return None
return None
def skip_file (self, dir, filename):
def skip_file (self, dir, filename):
if filename in self.skip_files:
if filename in self.skip_files:
return True
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

```
\(\qquad\)
``` (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 = '[lw.,-]'
    # 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]opyrightls+\([Cc]\)'
        '[[Cc]opyright\s+%s'
        '|[Cc]opyrightls+&copy;'
        '[[Cc]opyright\s+@copyright{ }'
        '|@ setls+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
```

$\qquad$
$\qquad$

``` (self, year):
        self.year = year
    def
```

$\qquad$
$\qquad$

``` (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():].1strip()
    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.

$$
\begin{aligned}
\text { line } & =(\text { line }[: \text { match.start }(4)] \\
& + \text { canon_form } \\
& + \text { line[match.end }(4):])
\end{aligned}
$$

\# 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.__in
        it_
        (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
```

$\qquad$

``` nit (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
```

$\qquad$
$\qquad$

``` (self):
GenericFilter. _init
```

$\qquad$

``` (self)
self.skip_extensions \(\mid=\) set ([ \# Don't change the tests, which could be woend by anyone. '.c',
'. \(\mathrm{C}^{\prime}\),
'.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
```

$\qquad$

``` init
``` \(\qquad\)
``` (self):
GenericFilter.
``` \(\qquad\)
\(\qquad\)
``` (self)
    self.skip_extensions |= set ([
            # Maintained by the translation project.
            '.po',
            # Automatically-generated.
            '.pot',
            ])
class LibGCCFilter (GenericFilter):
    def
```

$\qquad$

``` init (self): GenericFilter. _init (self)
        self.skip_dirs |= set ([
            # Imported from GLIBC.
            'soft-fp',
            ])
class LibJavaFilter (GenericFilter):
    def
```

$\qquad$

``` nit_ (self):
```

$\qquad$

``` GenericFilter (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
$\qquad$ _ (self):
$\qquad$
GenericFilter. _init (self)
self.skip_dirs |= set ([
\# Handled separately.
'testsuite',
])
class LibStdCxxFilter (GenericFilter):
def $\qquad$ 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 ('// $\backslash(\mathrm{C} \backslash)$ Copyright Jeremy Siek') return GenericFilter.get_line_filter (self, dir, filename)
class GCCCopyright (Copyright):
def $\qquad$ (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.')
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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 ('Ito-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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<para>
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</listitem>
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<para>
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<para>

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</para>
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</listitem>
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    <para>
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</listitem>
<listitem>
<para>
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    only occasionally and noncommercially, and only if you received the
    object code with such an offer, in accord with subsection 6b.
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</listitem>
<listitem>
<para>
    Convey the object code by offering access from a designated place
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</listitem>
<listitem>
    <para>
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    </para>
</listitem>
</orderedlist>
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<para>
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</para>
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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.

\section*{@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.

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\section*{@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.)

\section*{@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.

\section*{@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.

\section*{@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.

\section*{@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.

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\section*{@enumerate a}

\section*{@item}

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\section*{@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
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@appendixsubsec How to Apply These Terms to Your New Libraries

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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>");
            }
            }
            result.append("</dl>");
            return result.toString();
        }
        else {
            return null;
        }
        }
    }
}
/* Permission.java -- The superclass for all permission objects
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```

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package java.security;
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.
*
* < \(\mathrm{p}>\) 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 = -5636570222231596674L;
/**
    * 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 <code>Guard</code> interface for this class.
    * It calls the <code>checkPermission</code> method in
    * <code>SecurityManager</code> with this <code>Permission</code> as its
    * argument. This method returns silently if the security check succeeds
    * or throws an exception if it fails.
* 
* @ param obj the <code>Object</code> 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 <code>Permission</code> implies that the

```
```

* specified <code>Permission</code> is also granted.
* 
* @ param perm the <code>Permission</code> 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 <code>implies</code>, rather
* than <code>equals</code>, 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 <code>Permission</code>. It
* must satisfy the contract of <code>Object.hashCode</code>: 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 <code>Permission</code>.
* 
* @ return the name
*/
public final String getName()
{
return name;
}
/**
    * This method returns the list of actions for this <code>Permission</code>
    * as a <code>String</code>. The string should be in canonical order, for
    * example, both <code>new FilePermission(f, "write,read")</code> and
    * <code>new FilePermission(f, "read,write")</code> have the action list
    * "read,write".
    * 
    * @return the action list for this <code>Permission</code>
*/
public abstract String getActions();
/**
    * This method returns an empty <code>PermissionCollection</code> object
    * that can store permissions of this type, or <code>null</code> if no

```
```

* such collection is defined. Subclasses must override this to provide
* an appropriate collection when one is needed to accurately calculate
* <code>implies</code>.
* 
* @return a new <code>PermissionCollection</code>
*/
public PermissionCollection newPermissionCollection()
{
return null;
}
/**
    * This method returns a <code>String</code> representation of this
    * <code>Permission</code> object. This is in the format:
    * <code>'(' + getClass().getName() + ' ' + getName() + ' ' + getActions
    *         + ')'</code>.
* 
* @ return this object as a <code>String</code>
*/
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
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```

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package java.security.acl;
```

/**

* This interface provides information about a permission that can be
* granted. Note that this is <em>not</em> the same as the class
* <code>java.security.Permission</code>.
* 
* @ version 0.0
* 
* @author Aaron M. Renn (arenn@urbanophile.com)
*/
public interface Permission
{
/**
* This method tests whether or not a specified <code>Permission</code>
* (passed as an <code>Object</code>) is the same as this permission.
* 
* @ param perm The permission to check for equality
* 
* @return <code>true</code> if the specified permission is the same as this one, <code>false</code> otherwise
*/

```

> boolean equals (Object perm);
```

/**
* This method returns this <code>Permission</code> as a <code>String</code>.
*
* @return A <code>String</code> representing this permission.
*/
String toString();
}
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Version 3, 29 June 2007

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strategy to use in any particular case, based on the explanations below.

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

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

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

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

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

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

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

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

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

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The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)
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d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.
(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

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

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\subsection*{1.72 glibc 2.17 :222.el7}

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license, the GNU Library General Public License, applies to certain designated libraries. This license is quite different from the ordinary one; be sure to read it in full, and don't assume that anything in it is the same as in the ordinary license.

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

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

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

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

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

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

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

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6,
whether or not they are linked directly with the Library itself.
6. As an exception to the Sections above, you may also compile or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:
a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)
b) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.
c) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.
d) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

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

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.
7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:
a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.
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\section*{END OF TERMS AND CONDITIONS}

Appendix: How to Apply These Terms to Your New Libraries

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To apply these terms, attach the following notices to the library. It is
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@ subheading Preamble

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

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

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

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

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

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

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

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

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

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

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

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

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

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run.
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@enumerate 0
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This License Agreement applies to any software library or other program which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Lesser General Public License (also called "this License"). Each licensee is addressed as "you".

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

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term " modification".)
"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

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

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

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You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.
@item
If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.
(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)
@end enumerate

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

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

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

\section*{@item}

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

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

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

\section*{@item}

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

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to
distribute the source code, even though third parties are not compelled to copy the source along with the object code.
@item
A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

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

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

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

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

\section*{@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:
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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.)

\section*{@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.

\section*{@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.

\section*{@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.

\section*{@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

\section*{@item}

You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:
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@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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@ page
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From ac610b87289530bccadb9e245912c4491c1affd5 Mon Sep 17 00:00:00 2001
From: Niels de Vos <ndevos@redhat.com>
Date: Thu, 6 Jul 2017 17:04:17 +0200
Subject: [PATCH 551/557] nfs: add permission checking for mounting over WebNFS

Solaris 10 uses WebNFS and not the MOUNT protocol. All permission checks for allowing/denying clients to mount are done through the MNT handlers. These handlers will not give out a filehandle to the NFS-client when mounting is denied. This prevents clients from successful mounting. However, over WebNFS a well known 'root-filehandle' is used directly with the NFSv3 protocol.

When WebNFS was used, no permission checks (the "nfs.export-dir" option) were applied. Now the WebNFS mount-handler in Gluster/NFS calls the mnt3_parse_dir_exports() function that takes care of the permission checking.

Cherry picked from commit e304f48fa262e5cdbe181fb3fee5dfb9c893108c:
> BUG: 1468291
> Change-Id: Ic9dfd092473ba9c1c7b5fa38401cf9c0aa8395bb
> Signed-off-by: Niels de Vos <ndevos@redhat.com>
> Reviewed-on: https://review.gluster.org/17718
> Smoke: Gluster Build System <jenkins@build.gluster.org>
> Reviewed-by: soumya k <skoduri@redhat.com>
> CentOS-regression: Gluster Build System <jenkins@build.gluster.org>
> Reviewed-by: Kaleb KEITHLEY <kkeithle@redhat.com>

Change-Id: Ic9dfd092473ba9c1c7b5fa38401cf9c0aa8395bb
BUG: 1451224
Signed-off-by: Niels de Vos <ndevos@redhat.com>
Reviewed-on: https://code.engineering.redhat.com/gerrit/111770
Reviewed-by: Atin Mukherjee <amukherj@redhat.com>
---
```

xlators/nfs/server/src/mount3.c | 60 ++++++++++++++++++++++------------
xlators/nfs/server/src/mount3.h | 7 ++++
xlators/nfs/server/src/nfs-common.c | 25 +++++++------
xlators/nfs/server/src/nfs3.c | 71 ++++++++++++++++++++++++-----------------

```
```

diff --git a/xlators/nfs/server/src/mount3.c b/xlators/nfs/server/src/mount3.c
index b735038..a5b081b 100644
--- a/xlators/nfs/server/src/mount3.c
+++ b/xlators/nfs/server/src/mount3.c
@ @ -945,7 +945,7 @ @ err:

* we need to strip out the volume name first.
*/
char *
-__volume_subdir (char *dirpath, char **volname)
+mnt3_get_volume_subdir (char *dirpath, char **volname)
{
char *subdir = NULL;
int volname_len = 0;
@ @ -1024,10 +1024,6 @ @ mnt3_resolve_subdir_cbk (call_frame_t *frame, void *cookie, xlator_t *this,
struct iatt *buf, dict_t *xattr,
struct iatt *postparent);
-int
-mnt3_parse_dir_exports (rpcsvc_request_t *req, struct mount3_state *ms,
- char *subdir);
- 

int32_t
mnt3_readlink_cbk (call_frame_t *frame, void *cookie, xlator_t * this,
int32_t op_ret, int32_t op_errno, const char *path,
@@ -1310,7 +1306,8 @ @ mnt3_readlink_cbk (call_frame_t *frame, void *cookie, xlator_t *this,
/* After the resolving the symlink , parsing should be done
* for the populated mount path
*/

- ret = mnt3_parse_dir_exports (mres->req, mres->mstate, real_loc);
+ ret = mnt3_parse_dir_exports (mres->req, mres->mstate, real_loc,
+ _gf_true);
if (ret) {
gf_msg (GF_MNT, GF_LOG_ERROR, 0, NFS_MSG_RESOLVE_ERROR,
@ @ -1518,7 +1515,8 @ @ mnt3_verify_auth (struct sockaddr_in *client_addr, struct mnt3_export *export)
int
mnt3_resolve_subdir (rpcsvc_request_t *req, struct mount3_state *ms,
- struct mnt3_export *exp, char *subdir)
+ struct mnt3_export *exp, char *subdir,
+ gf_boolean_t send_reply)
{
mnt3_resolve_t *mres = NULL;
int ret = -EFAULT;
@ @ -1542,6+1540,10 @ @ mnt3_resolve_subdir (rpcsvc_request_t *req, struct mount3_state *ms,
}

```
\}
```

+ /* no reply is needed (WebNFS permissions checking), just return */
+ if (!send_reply)
+ return 0; /* no error, mnt3_verify_auth() allowed it */
+ mres = GF_CALLOC (1, sizeof (mnt3_resolve_t), gf_nfs_mt_mnt3_resolve);
if (!mres) {
gf_msg (GF_MNT, GF_LOG_ERROR, ENOMEM, NFS_MSG_NO_MEMORY,
@ @ -1586,11+1588,11 @ @ mnt3_resolve_export_subdir (rpcsvc_request_t *req, struct mount3_state *ms,
if ((!req) | (!ms) | (!exp))
return ret;
- volume_subdir = __volume_subdir (exp->expname, NULL);
+ volume_subdir = mnt3_get_volume_subdir (exp->expname, NULL);
if (!volume_subdir)
goto err;
- ret = mnt3_resolve_subdir (req, ms, exp, volume_subdir);
+ ret = mnt3_resolve_subdir (req, ms, exp, volume_subdir,_gf_true);
if (ret < 0) {
gf_msg (GF_MNT, GF_LOG_ERROR, ret, NFS_MSG_RESOLVE_SUBDIR_FAIL,
"Failed to resolve export dir: %s", exp->expname);
@ @ -1687,7 +1689,7 @ @ err:
return ret;
}
-static int
+int
mnt3_check_client_net_tcp (rpcsvc_request_t *req, char *volname)
{
rpcsvc_t *svc = NULL;
@@ -1761,25+1763,41 @ @ err:
int
mnt3_parse_dir_exports (rpcsvc_request_t *req, struct mount3_state *ms,
- char*subdir)
+ char *path, gf_boolean_t send_reply)
{
char volname[1024] = {0,};
struct mnt3_export *exp = NULL;
char *volname_ptr = NULL;
+ char *subdir = NULL;
int ret = -ENOENT;
struct nfs_state *nfs = NULL;
- if ((!ms)|(!subdir))
+ if ((!ms) || (!path))

```
return -1 ;
```

    volname_ptr = volname;
    - subdir = __volume_subdir (subdir, \&volname_ptr);
- if (!subdir)
+ subdir = mnt3_get_volume_subdir (path, \&volname_ptr);
+ if (!subdir) {
+ gf_msg_trace (GF_MNT, 0, "Could not parse volname/subdir from "
+ "%s", path);
goto err;
}
exp = mnt3_mntpath_to_export (ms, volname,_gf_false);
- if (!exp)
- goto err;
+ /* first try to match the full export/subdir */
+ exp = mnt3_mntpath_to_export (ms, path, _gf_false);
+ if (!exp) {
+ gf_msg_trace (GF_MNT, 0, "Could not find exact matching export "
"for path=%s", path);
+ /* if no exact match is found, look for a fallback */
exp = mnt3_mntpath_to_export (ms, volname,_gf_true);
+ if (!exp) {
+ gf_msg_trace (GF_MNT, 0, "Could not find export for "
+ "volume %s", volname);
+ goto err;
+ }
+ }
+ gf_msg_trace (GF_MNT, 0, "volume %s and export %s will be used for "
+ "path %s", exp->vol->name, exp->expname, path);
nfs = (struct nfs_state *)ms->nfsx->private;
if (!nfs)
@ @ -1798,7 +1816,7 @ @ mnt3_parse_dir_exports (rpcsvc_request_t *req, struct mount3_state *ms,
goto err;
}
- ret = mnt3_resolve_subdir (req, ms, exp, subdir);
+ ret = mnt3_resolve_subdir (req, ms, exp, subdir, send_reply);
if (ret < 0) {
gf_msg (GF_MNT, GF_LOG_ERROR, ret, NFS_MSG_RESOLVE_SUBDIR_FAIL,
"Failed to resolve export dir: %s", subdir);
@ @ - 1841,7 +1859,7 @ @ mnt3_find_export (rpcsvc_request_t *req, char *path, struct mnt3_export **e)
goto err;
}
- ret = mnt3_parse_dir_exports (req, ms, path);
+ ret = mnt3_parse_dir_exports (req, ms, path,_gf_true);

```
```

err:
return ret;
@ @ -2914,7 +2932,7 @ @ nfs3_rootfh (struct svc_req *req, xlator_t *nfsx,
* 3. If a subdir is exported using nfs.export-dir,
* then the mount type would be MNT3_EXPTYPE_DIR,
* so make sure to find the proper path to be

-     * resolved using __volume_subdir()
+     * resolved using mnt3_get_volume_subdir()
        * 3. Make sure subdir export is allowed.
*/
ms = __mnt3udp_get_mstate(nfsx);
@ @ -2937,7 +2955,7 @ @ nfs3_rootfh (struct svc_req *req, xlator_t *nfsx,
return NULL;
}
- path = __volume_subdir (path, \&volptr);
+ path = mnt3_get_volume_subdir (path, \&volptr);
if (exp == NULL)
exp = mnt3_mntpath_to_export (ms, volname , _gf_false);
}
diff --git a/xlators/nfs/server/src/mount3.h b/xlators/nfs/server/src/mount3.h
index ce01a6c..8868aec 100644
--- a/xlators/nfs/server/src/mount3.h
+++ b/xlators/nfs/server/src/mount3.h
@@ -178,4+178,11@@ struct mount3_resolve_state {
typedef struct mount3_resolve_state mnt3_resolve_t;
+int
+mnt3_parse_dir_exports (rpcsvc_request_t *req, struct mount3_state *ms,
+ char *subdir, gf_boolean_t send_reply);
+ 

+char*
+mnt3_get_volume_subdir (char *path, char **volname);
+
\#endif
diff --git a/xlators/nfs/server/src/nfs-common.c b/xlators/nfs/server/src/nfs-common.c
index 5269188..2f742d4 100644
--- a/xlators/nfs/server/src/nfs-common.c
+++ b/xlators/nfs/server/src/nfs-common.c
@@ -73,8+73,8 @@ nfs_xlator_to_xlid (xlator_list_t *cl, xlator_t *xl)
xlator_t *
nfs_mntpath_to_xlator (xlator_list_t *cl, char *path)
{

- char *volname = NULL;
- char *volptr = NULL;
+ char *volname = NULL; /* volume name only */

```
```

+ char *volptr = NULL; /* ptr to original volname */
size_t pathlen = -1;
xlator_t *targetxl = NULL;
int i = 0;
@ @ -82,14 +82,16 @ @ nfs_mntpath_to_xlator (xlator_list_t *cl, char *path)
if ((!cl) || (!path))
return NULL;
- volname = strdupa (path);
- pathlen = strlen (volname);
gf_msg_trace (GF_NFS, 0, "Subvolume search: %s", path);
+ 
+ volname = volptr = gf_strdup (path);
+ if (!volname)
+ return NULL;
+ if (volname[0] == '/')
- volptr = \&volname[1];
- else
- volptr = \&volname[0];
+ volname++;
+ pathlen = strlen (volname);
for (i = 0; i < pathlen; i++) {
if (volname[i] == '/') {
volname[i] = '\0';
@ @ -98,10+100,10 @ @ nfs_mntpath_to_xlator (xlator_list_t *cl, char *path)
}
while (cl) {
- gf_msg_trace (GF_NFS, 0, "Volptr: %s and cl->xlator->name: %s",
- volptr, cl->xlator->name);
+ gf_msg_trace (GF_NFS, 0, "Volname: %s and cl->xlator->name: %s",
+ volname, cl->xlator->name);
- if (strcmp (volptr, cl->xlator->name) == 0) {
+ if (strcmp (volname, cl->xlator->name) == 0) {
targetxl = cl->xlator;
break;
}
@ @ -109,8 +111,9 @ @ nfs_mntpath_to_xlator (xlator_list_t *cl, char *path)
cl = cl->next;
}
- return targetxl;
+ GF_FREE (volptr);
+ return targetxl;

```
```

diff --git a/xlators/nfs/server/src/nfs3.c b/xlators/nfs/server/src/nfs3.c
index bb68bc1..7443dbc 100644
--- a/xlators/nfs/server/src/nfs3.c
+++ b/xlators/nfs/server/src/nfs3.c
@@ -349,44+349,51 @ @ out:
}

```
-static enum nfsstat3
-nfs3_funge_webnfs_zerolen_fh (struct nfs3_state *nfs3st, struct nfs3_fh *fhd,
- char *name)
+static int
+nfs3_funge_webnfs_zerolen_fh (rpcsvc_request_t *req, struct nfs3_state *nfs3st,
\(+\quad\) struct nfs3_fh *fhd, char *name)
\{
- xlator_t *fungexl = NULL;
- glfs_t *fs = NULL;
- loc_t loc \(=\{0\),\(\} ;\)
- enum nfsstat3 nfsstat = NFS3ERR_SERVERFAULT;
- int ret \(=-1\);
- \(\quad\) size_t \(\quad\) namelen \(=-1\);
+ xlator_t *fungexl = NULL;
+ struct nfs_state \(*_{\text {nfs }} \quad=\) NULL;
+ glfs_t \(\quad\) fss \(\quad\) NULL;
+ loc_t loc \(=\{0\),\(\} ;\)
+ int ret \(=-1\);
+ char \(\quad\) subdir \(=\) NULL;
+ char \(\quad\) volname[NAME_MAX] \(=\{0\),\(\} ;\)
    fungexl \(=\) nfs_mntpath_to_xlator (nfs3st->exportslist, name);
    if (!fungexl) \{
        nfsstat \(=\) NFS3ERR_NOENT;
\(+\quad\) gf_msg_trace (GF_NFS3, 0, "failed to find xlator for volume");
\(+\quad\) ret \(=-E N O E N T\);
\(+\quad\) goto out;
\(+\quad\}\)
\(+\quad\) / fungexl is valid, set for nfs3_request_xlator_deviceid() */
\(+\quad\) rpcsvc_request_set_private (req, fungexl);
\(+\)
\(+\quad / *\) Permission checks are done through mnt3_parse_dir_exports(). The
\(+\quad\) * "nfs.export-dir" option gets checked as well. */
\(+\quad \mathrm{nfs}=\mathrm{nfs}\) _state \((\mathrm{nfs} 3 \mathrm{st}->\mathrm{nfsx})\);
\(+\quad\) ret \(=\) mnt3_parse_dir_exports (req, nfs->mstate, name, _gf_false);
\(+\quad\) if (ret) \(\{\)
\(+\quad\) gf_msg_trace (GF_NFS3, -ret, "mounting not possible");
goto out;
\}
```

    /* glfs_resolve_at copied from UDP MNT support */
    fs = glfs_new_from_ctx (fungexl->ctx);
    if (!fs) {
        nfsstat = NFS3ERR_NOENT;
    + gf_msg_trace (GF_NFS3, 0, "failed to create glfs instance");
+ ret = -ENOENT;
goto out;
}
- /* strip volname/ from 'name' */
- namelen = strlen(name);
- while (namelen != 0) {
- name++;
- if (name[0] == '/') {
- break;
- }
- namelen--;
- }
- gf_msg_debug (GF_NFS, 0, "NAME :%s ", name);
+ /* split name "volname/sub/dir/s" into pieces */
+ subdir = mnt3_get_volume_subdir (name, (char**) \&volname);
- ret = glfs_resolve_at (fs, fungexl, NULL, name, \&loc, NULL, 1, 0);
+ ret = glfs_resolve_at (fs, fungexl, NULL, subdir, \&loc, NULL, 1, 0);
if (ret != 0) {
- nfsstat = NFS3ERR_NOENT;
+ gf_msg_trace (GF_NFS3, 0, "failed to resolve %s", subdir);
+ ret = -ENOENT;
goto out;
}

```
@ @ -399,17+406,17 @ @ nfs3_funge_webnfs_zerolen_fh (struct nfs3_state *nfs3st, struct nfs3_fh *fhd,
                                    fungexl);
    else \{
        if (__nfs3_get_volume_id (nfs3st, fungexl, fhd->exportid) < 0) \{
            nfsstat \(=\) NFS3ERR_STALE;
\(+\quad\) ret \(=\)-ESTALE;
            goto out;
        \}
    \}
- \(\quad\) nfsstat \(=\) NFS3_OK;
\(+\quad\) ret \(=0\);
out:
    if (fs)
```

glfs_free_from_ctx (fs);

```
- return nfsstat;
\(+\quad\) return ret;
\}
@ @ -470, \(8+477,10\) @ @ nfs3_solaris_zerolen_fh (struct nfs3_fh *fh, int fhlen)
        if (nfs3_fh_validate (fh))
            return 0;
- \(\quad\) if (fhlen \(==0\) )
\(+\quad\) if (fhlen \(==0\) ) \(\{\)
\(+\quad\) gf_msg_trace (GF_NFS3, 0, "received WebNFS request");
        return 1;
\(+\quad\}\)
    return 0;
\}
@ @ -1544,8+1553,8 @ @ nfs3_lookup (rpcsvc_request_t *req, struct nfs3_fh *fh, int fhlen, char *name)
                    name);
    nfs3_validate_nfs3_state (req, nfs3, stat, nfs3err, ret);
    if (nfs3_solaris_zerolen_fh (fh, fhlen)) \{

- \(\quad\) if (stat != NFS3_OK)
\(+\quad\) ret \(=\mathrm{nfs} 3\) _funge_webnfs_zerolen_fh (req, nfs3, fh, name);
\(+\quad\) if (ret < 0)
            goto nfs3err;
            /* this fh means we're doing a mount, name is no more useful */
@ @ -1564,12+1573,12 @ @ nfs3_lookup (rpcsvc_request_t *req, struct nfs3_fh *fh, int fhlen, char *name)
        if (ret < 0) \{
            gf_msg (GF_NFS, GF_LOG_ERROR, -ret,
                NFS_MSG_HARD_RESOLVE_FAIL,
- "failed to start hard reslove");
- \(\quad\) stat \(=\) nfs3_errno_to_nfsstat3 (-ret);
\(+\quad\) "failed to start hard resolve");
    \}
nfs3err:
    if \((\) ret \(<0)\{\)
\(+\quad\) stat \(=\) nfs3_errno_to_nfsstat3 (-ret);
    nfs3_log_common_res (rpcsvc_request_xid (req),
                                    NFS3_LOOKUP, stat, -ret,
                                    cs ? cs->resolvedloc.path : NULL);
1.8.3.1

This change will have no effect on the existing users as
IATT_UPDATE_FLAGS is currently used only by md-cache. And the changes in md-cache to consume cache invalidation is not part of any release yet.

Change-Id: I7efad44972add152f5f981d733fb8191dc7ef8ef
BUG: 1284873
Signed-off-by: Poornima G <pgurusid@redhat.com>
Reviewed-on: http://review.gluster.org/15301
NetBSD-regression: NetBSD Build System <jenkins@build.gluster.org>
CentOS-regression: Gluster Build System <jenkins@build.gluster.org>
Smoke: Gluster Build System <jenkins@build.gluster.org>
Reviewed-by: Raghavendra G <rgowdapp@redhat.com>
Reviewed-by: Prashanth Pai <ppai@redhat.com>
Reviewed-by: Jeff Darcy <jdarcy@redhat.com>
Reviewed-on: https://code.engineering.redhat.com/gerrit/87039
Reviewed-by: Rajesh Joseph <rjoseph@redhat.com>
Tested-by: Rajesh Joseph <rjoseph@redhat.com>
---
libglusterfs/src/upcall-utils.h | 2 +-
1 files changed, 1 insertions(+), 1 deletions(-)
diff --git a/libglusterfs/src/upcall-utils.h b/libglusterfs/src/upcall-utils.h
index f4b15e3..64571c5 100644
--- a/libglusterfs/src/upcall-utils.h
+++ b/libglusterfs/src/upcall-utils.h
@ @ -53,7+53,7 @ @
\#define UP_NLINK_FLAGS (UP_NLINK | UP_TIMES)
\#define IATT_UPDATE_FLAGS (UP_NLINK|UP_MODE |UP_OWN|UP_SIZE|\
- UP_TIMES|UP_ATIME)
\(+\quad\) UP_TIMES | UP_ATIME | UP_PERM)
typedef enum \{
GF_UPCALL_EVENT_NULL,
-
1.7.1

From a2cb732a71d341edb65e4cdbf103a3fec35e8589 Mon Sep 17 00:00:00 2001
From: Susant Palai <spalai@redhat.com>
Date: Wed, 17 Aug 2016 15:10:04 +0530

Subject: [PATCH 72/86] cluster/dht: heal root permission post add-brick

Post add-brick event the new brick will have permission of 755 by default. If the root directory permission was other than 755, that does not get healed to the new brick leading to permission errors/inconsistencies.

For choosing source of attr heal we can trust the subvols which have layouts with latest ctime(as part of missing directory heal, we heal the proper attr). In case none of the subvols have layout, return ESTALE to retrigger a fresh lookup.

Note: This patch heals the permission of the root directories only. Since, permission healing of directory is not straight forward and required intrusive fix, those are not addressed here.
```

> Reviewed-on: http://review.gluster.org/15195
> Smoke: Gluster Build System [jenkins@build.gluster.org](mailto:jenkins@build.gluster.org)
> CentOS-regression: Gluster Build System [jenkins@build.gluster.org](mailto:jenkins@build.gluster.org)
> NetBSD-regression: NetBSD Build System [jenkins@build.gluster.org](mailto:jenkins@build.gluster.org)
>Reviewed-by: Raghavendra G [rgowdapp@redhat.com](mailto:rgowdapp@redhat.com)
>Reviewed-on: http://review.gluster.org/15465
>Smoke: Gluster Build System [jenkins@build.gluster.org](mailto:jenkins@build.gluster.org)
>NetBSD-regression: NetBSD Build System [jenkins@build.gluster.org](mailto:jenkins@build.gluster.org)
>CentOS-regression: Gluster Build System [jenkins@build.gluster.org](mailto:jenkins@build.gluster.org)
>Reviewed-by: Raghavendra G [rgowdapp@redhat.com](mailto:rgowdapp@redhat.com)
Change-Id: If894e3895d070d46b62d2452e52c leaafcf56c29
BUG: 1294035
Signed-off-by: Susant Palai [spalai@redhat.com](mailto:spalai@redhat.com)
Reviewed-on: https://code.engineering.redhat.com/gerrit/84877
Reviewed-by: Atin Mukherjee [amukherj@redhat.com](mailto:amukherj@redhat.com)
Tested-by: Atin Mukherjee [amukherj@redhat.com](mailto:amukherj@redhat.com)
tests/bugg/distribute/bug-1368012.t | 50 +++++++++++++++++++++++++++++++++++
xlators/cluster/dht/src/dht-common.c | 32 +++++++++++++++++++++-
xlators/cluster/dht/src/dht-selfheal.c | 16 ++++++++--
3 files changed, }93\mathrm{ insertions(+),5 deletions(-)
create mode 100644 tests/bugs/distribute/bug-1368012.t
diff --git a/tests/bugs/distribute/bug-1368012.t b/tests/bugs/distribute/bug-1368012.t
new file mode 100644
index 0000000..f89314b
--- /dev/null
+++ b/tests/bugs/distribute/bug-1368012.t
@ @ -0,0 +1,50 @ @
+\#!/bin/bash

```
```

+ 

+. \$(dirname \$0)/../../include.rc
+. \$(dirname \$0)/../../volume.rc
+
+cleanup;
+
+function get_permission {

+ stat -c "%A" \$1
+}
+ 

+\#\# Start glusterd
+TEST glusterd;
+TEST pidof glusterd;
+TEST \$CLI volume info;
+
+\#\# Lets create volume
+TEST \$CLI volume create \$V0 $H0:/${V0}{1,2};
+
+\#\# Verify volume is created
+EXPECT "\$V0" volinfo_field \$V0 'Volume Name';
+EXPECT 'Created' volinfo_field \$V0 'Status';
+\#\# Start volume and verify
+TEST \$CLI volume start \$V0;
+TEST \$CLI volume set \$V0 performance.stat-prefetch off
+EXPECT 'Started' volinfo_field \$V0 'Status';
+TEST glusterfs -s $H0 --volfile-id=$V0 \$M0
+
+\#\#Test case: Add-brick
+\#-------------------------------------------------------------------
+\#change permission of both root
+TEST chmod 444 \$M0
+
+\#store permission for comparision
+TEST permission_root=`stat -c "%A" $M0`
+TEST echo \$permission_root
+\#Add-brick
+TEST \$CLI volume add-brick \$V0 $H0:/${V0}3
+
+\#Allow one lookup to happen
+TEST pushd \$M0
+TEST ls
+\#Generate another lookup
+echo 3 > /proc/sys/vm/drop_caches
+TEST ls
+\#check root permission
+EXPECT_WITHIN "5" \$permission_root get_permission \$M0
+\#check permission on the new-brick
+EXPECT $permission_root get_permission /${V0}3

```
```

+cleanup
diff --git a/xlators/cluster/dht/src/dht-common.c b/xlators/cluster/dht/src/dht-common.c
index 5fd0a16..2eb44a1 100644
--- a/xlators/cluster/dht/src/dht-common.c
+++ b/xlators/cluster/dht/src/dht-common.c
@ @ -735,6 +735,27 @ @ out:
return ret;
}
+int static
+is_permission_different (ia_prot_t *prot1, ia_prot_t *prot2)
+{

+ if ((prot1->owner.read != prot2->owner.read) |
+ (prot1->owner.write != prot2->owner.write)|
+ (prot1->owner.exec != prot2->owner.exec)|
+ (prot1->group.read != prot2->group.read)|
+ (prot1->group.write != prot2->group.write) |
+ (prot1->group.exec != prot2->group.exec)|
+ (prot1->other.read != prot2->other.read)|
+ (prot1->other.write != prot2->other.write)|
+ (prot1->other.exec != prot2->other.exec)|
+ (prot1->suid != prot2->suid)|
+ (prot1->sgid != prot2->sgid)|
+ (prot1->sticky != prot2->sticky)) {
+ return 1;
+ } else {
+ return 0;
+ }
+}
+ 

int
dht_revalidate_cbk (call_frame_t *frame, void *cookie, xlator_t *this,
int op_ret, int op_errno,
@ @ -856,14+877,21 @ @ dht_revalidate_cbk (call_frame_t *frame, void *cookie, xlator_t *this,
local->stbuf.ia_ctime_nsec,
stbuf->ia_ctime,
stbuf->ia_ctime_nsec)) {
+
/* Choose source */
local->prebuf.ia_gid = stbuf->ia_gid;
local->prebuf.ia_uid = stbuf->ia_uid;
+

+ if (__is_root_gfid (stbuf->ia_gfid))
+                       local->prebuf.ia_prot = stbuf->ia_prot;
              }
    
}
if (local->stbuf.ia_type != IA_INVAL)
{
if ((local->stbuf.ia_gid != stbuf->ia_gid) |

```
```

- (local->stbuf.ia_uid != stbuf->ia_uid)) {
+ (local->stbuf.ia_uid != stbuf->ia_uid) |
+ (_is_root_gfid (stbuf->ia_gfid) \&\&
+ is_permission_different (\&local->stbuf.ia_prot,
+ \&stbuf->ia_prot))) {
local->need_selfheal = 1;
}
}
@ @ -928,6 +956,8 @ @ out:
gf_uuid_copy (local->gfid, local->stbuf.ia_gfid);
local->stbuf.ia_gid = local->prebuf.ia_gid;
local->stbuf.ia_uid = local->prebuf.ia_uid;
+ if (__is_root_gfid(local->stbuf.ia_gfid))
+ local->stbuf.ia_prot = local->prebuf.ia_prot;
copy = create_frame (this, this->ctx->pool);
if (copy) {
copy_local = dht_local_init (copy, \&local->loc,
diff --git a/xlators/cluster/dht/src/dht-selfheal.c b/xlators/cluster/dht/src/dht-selfheal.c
index 520a3f3..f43a235 100644
--- a/xlators/cluster/dht/src/dht-selfheal.c
+++ b/xlators/cluster/dht/src/dht-selfheal.c
@@ -2240,11+2240,19 @ @ dht_dir_attr_heal (void *data)
for (i = 0; i < call_cnt; i++) {
subvol = conf->subvolumes[i];
- if (!subvol || (subvol == dht_first_up_subvol (this)))
+ if (!subvol)
continue;
- ret = syncop_setattr (subvol, \&local->loc, \&local->stbuf,
- (GF_SET_ATTR_UID | GF_SET_ATTR_GID),
- NULL, NULL, NULL, NULL);
+ 
+ if (__is_root_gfid (local->stbuf.ia_gfid)) {
+ ret = syncop_setattr (subvol, \&local->loc, \&local->stbuf,
+ (GF_SET_ATTR_UID|GF_SET_ATTR_GID | GF_SET_ATTR_MODE),
+ NULL, NULL, NULL, NULL);
+ } else {
+ ret = syncop_setattr (subvol, \&local->loc, \&local->stbuf,
+ (GF_SET_ATTR_UID|GF_SET_ATTR_GID),
+ NULL, NULL, NULL, NULL);
+ }
+ if (ret) {
gf_uuid_unparse(local->loc.gfid, gfid);
1.7.1

```

\subsection*{1.74 gmp 6.0.0 :15.el7}

\subsection*{1.74.1 Available under license :}

\author{
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}

Version 2, June 1991

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Version 3, 29 June 2007

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

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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.
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@item
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\section*{@item}

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\section*{@enumerate a}
@item
Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by the Corresponding Source fixed on a durable physical medium customarily used for software interchange.

\section*{@item}

Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by a written offer, valid for at least three years and valid for as long as you offer spare parts or customer support for that product model, to give
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\section*{@item}

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\section*{@item}

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\section*{@item}

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@ end enumerate

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AUTHOR
\(\qquad\)
Peter Schaffter (peter@schaffter.ca)
1-355 Lafontaine Ave
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. The file `src/libs/snprintf/snprintf.c', written by Mark Martinec <mark.martinec@ijs.si>.

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```

src/preproc/grn/gprint.h
src/preproc/grn/hdb.cpp
src/preproc/grn/hgraph.cpp
src/preproc/grn/hpoint.cpp
src/preproc/grn/main.cpp

```
. The `gxditview' output device. It is based on X11's `xditview' program and thus has the X license.
src/devices/xditview/DESC.in
src/devices/xditview/Dvi.c
src/devices/xditview/Dvi.h
src/devices/xditview/DviP.h
src/devices/xditview/FontMap
src/devices/xditview/GXditview.ad
src/devices/xditview/Menu.h
src/devices/xditview/ad2c
src/devices/xditview/device.c
src/devices/xditview/device.h
src/devices/xditview/draw.c
src/devices/xditview/font.c
src/devices/xditview/gray1.bm
src/devices/xditview/gray2.bm
src/devices/xditview/gray3.bm
src/devices/xditview/gray4.bm
src/devices/xditview/gray5.bm
src/devices/xditview/gray6.bm
src/devices/xditview/gray7.bm
src/devices/xditview/gray8.bm
src/devices/xditview/gxditview.man
src/devices/xditview/lex.c
src/devices/xditview/page.c
src/devices/xditview/parse.c
src/devices/xditview/xdit.bm
src/devices/xditview/xdit_mask.bm
src/devices/xditview/xditview.c
src/include/DviChar.h
src/include/XFontName.h
src/libs/libxutil/DviChar.c
src/libs/libxutil/XFontName.c

\section*{Macro Packages}
. The -mdoc macro set, using the BSD license.
tmac/doc.tmac
tmac/doc-old.tmac
tmac/doc-common
tmac/doc-ditroff
tmac/doc-nroff
tmac/doc-syms
tmac/groff_mdoc.man
. The -me macro set, using the BSD license.
tmac/e.tmac
tmac/groff_me.man
doc/meintro.me
doc/meref.me

\section*{Hyphenation Patterns}
. The file `tmac/hyphen.us' is identical to the file `hyphen.tex', part of the TeX system written by Donald E. Knuth; the master file can be found at
ftp://labrea.stanford.edu/pub/tex/dist/lib/hyphen.tex

It has been renamed for consistency, i.e., to make patterns available under the filenames `hyphen.<language>', e.g. `hyphen.de' or `hyphen.uk'.

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. The file `tmac/hyphen.fr' contains the same patterns as the file ‘frhyph.tex' (for TeX), which can be found at http://dante.ctan.org/CTAN/language/hyphenation/frhyph.tex

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. The file `tmac/hyphen.sv' is identical to the file `svhyph.tex', which can be found at
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. The files `tmac/hyphen.det' and `tmac/hyphen.den' contain the same patterns as the files `dehyphn.tex' and `dehypht.tex' (for TeX), which can be found at
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```

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```
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From 0df1a50e41fb12fbeb6709575e5f12d64ed73b66 Mon Sep 17 00:00:00 2001
From: Stephane Rochoy <sheda>
Date: Sun, 22 Jun 2014 01:35:52 +0200
Subject: [PATCH 085/260] * grub-core/loader/i386/bsd.c (grub_netbsd_boot):
Pass pointer to EFI system table.
\[
\begin{array}{lr}
\text { ChangeLog } & 5+++++ \\
\text { grub-core/loader/i386/bsd.c } & 8++++++++
\end{array}
\]
```

include/grub/i386/netbsd_bootinfo.h | 7 ++++++++
3 files changed, 20 insertions(+)
diff --git a/ChangeLog b/ChangeLog
index abf8f4b27..0cdd095a4 100644
--- a/ChangeLog
+++ b/ChangeLog
@@ -1,5 +1,10 @ @
2014-06-21 Stephane Rochoy <sheda>
+* grub-core/loader/i386/bsd.c (grub_netbsd_boot): Pass pointer to
+EFI system table.
+
+2014-06-21 Stephane Rochoy <sheda>
+

* grub-core/commands/efi/lsefisystab.c (grub_cmd_lsefisystab): Show
EFI system table physical address.
diff --git a/grub-core/loader/i386/bsd.c b/grub-core/loader/i386/bsd.c
index 41ef9109e..8f691e0e2 100644
--- a/grub-core/loader/i386/bsd.c
+++ b/grub-core/loader/i386/bsd.c
@ @ -1145,6+1145,14 @ @ grub_netbsd_boot (void)
if (err)
return err;
+\#ifdef GRUB_MACHINE_EFI
+ err = grub_bsd_add_meta (NETBSD_BTINFO_EFI,
+ \&grub_efi_system_table,
+ sizeof (grub_efi_system_table));
+ if (err)
+ return err;
+\#endif
+ {
struct bsd_tag *tag;
tag_buf_len = 0;
diff --git a/include/grub/i386/netbsd_bootinfo.h b/include/grub/i386/netbsd_bootinfo.h
index e48c19b40..9b4f46041 100644
--- a/include/grub/i386/netbsd_bootinfo.h
+++ b/include/grub/i386/netbsd_bootinfo.h
@ @ -58,6 +58,8 @ @
\#define NETBSD_BTINFO_BOOTWEDGE10
\#define NETBSD_BTINFO_MODULES11
\#define NETBSD_BTINFO_FRAMEBUF12
+\#define NETBSD_BTINFO_USERCONFCOMMANDS 13
+\#define NETBSD_BTINFO_EFI 14

```
```

struct grub_netbsd_bootinfo
{
@ @ -146,4+148,9 @ @ struct grub_netbsd_btinfo_framebuf
\#define GRUB_NETBSD_MAX_ROOTDEVICE_LEN 16
+struct grub_netbsd_btinfo_efi
+{

+ void *pa_systbl; /* Physical address of the EFI System Table */
+};
+ 

\#endif
--
2.13.0

```

\subsection*{1.86 grubby 8.28 :23.el7}

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Version 2, June 1991

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\#\# -*-makefile-*-
\#\# BSD-specific setup (FreeBSD, OpenBSD, NetBSD, *BSD)
\#\# Copyright (c) 1999-2009, International Business Machines Corporation and \#\# others. All Rights Reserved.
\#\# Commands to generate dependency files
GEN_DEPS.c=\$(CC) -E -MM \$(DEFS) \$(CPPFLAGS)
GEN_DEPS.cc=\$(CXX) -E -MM \$(DEFS) \$(CPPFLAGS)
\#\# Flags for position independent code
SHAREDLIBCFLAGS = -fPIC
SHAREDLIBCXXFLAGS \(=-\)-fPIC
SHAREDLIBCPPFLAGS \(=-\) DPIC
\#\# Additional flags when building libraries and with threads
THREADSCPPFLAGS = -D_REENTRANT
LIBCPPFLAGS =
\#\# Compiler switch to embed a runtime search path
LD_RPATH=
LD_RPATH_PRE=-Wl,-rpath,
\#\# Compiler switch to embed a library name
LD_SONAME = -Wl,-soname -Wl,\$(notdir \$(MIDDLE_SO_TARGET))
\#\# Shared library options
LD_SOOPTIONS= -Wl,-Bsymbolic
\#\# Shared object suffix
\(\mathrm{SO}=\mathrm{so}\)
\#\# Non-shared intermediate object suffix
STATIC_O = ao
\#\# Compilation rules
\%.\$(STATIC_O): \$(srcdir)/\%.c
\$(COMPILE.c) \$(STATICCPPFLAGS) \$(STATICCFLAGS) -o \$@ \$<
\%.o: \$(srcdir)/\%.c
\$(COMPILE.c) \$(DYNAMICCPPFLAGS) \$(DYNAMICCFLAGS) -o \$ @
\%.\$(STATIC_O): \$(srcdir)/\%.cpp
\$(COMPILE.cc) \$(STATICCPPFLAGS) \$(STATICCXXFLAGS) -o \$ @ \$
\%.o: \$(srcdir)/\%.cpp
\$(COMPILE.cc) \$(DYNAMICCPPFLAGS) \$(DYNAMICCXXFLAGS) -o \$@ \$<
\#\# Dependency rules
\%.d: \$(srcdir)/\%.c
@echo "generating dependency information for \$<"
@ \$(SHELL) -ec '\$(GEN_DEPS.c) \$ 1
| sed '\"s \(\wedge(\$ *)\) ).o[ :]*^1.o \$@ :/g'\" > \$ @; \
[-s \$@] ||rm-f\$@'
\%.d: \$(srcdir)/\%.cpp
@echo "generating dependency information for \$<"
@ \(\$(\) SHELL \()\)-ec ' \(\$(\) GEN_DEPS.cc) \(\$<1\)
| sed 'l"s \(\wedge(\$ *))\).o[ : \(]^{*} \wedge 1.0\) \$@ : /g'\" > \$@; \
[-s \$@] ||rm-f \$@'
\#\# Versioned libraries rules
\%.\$(SO).\$(SO_TARGET_VERSION_MAJOR): \%.\$(SO).\$(SO_TARGET_VERSION)
\$(RM) \$@ \&\& ln -s \$ \(\{<\mathrm{F}\}\) \$@
\(\% . \$(\mathrm{SO}): \% . \$(\mathrm{SO}) . \$\left(\mathrm{SO} \_\mathrm{TARGET}\right.\) _VERSION_MAJOR)
\$(RM) \$@ \&\& ln -s \$ * \(\left.^{*} \mathrm{~F}\right\} . \$(\mathrm{SO}) . \$(\) SO_TARGET_VERSION) \(\$ @\)
\#\# End FreeBSD-specific setup

\subsection*{1.92 initscripts 9.49.41 :1.el7_5.1}

\subsection*{1.92.1 Available under license :}

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rJ



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rJ
~~vvvvnn8||8`j
 00x8`x8x<lx8`x000xxxx|p00000000`0`0`00`x00|x0xff|ff<ff<lffflbhxhbbhxh`<ff>x00000xxflxlf "'bf8l18ff|`xxff|lfx px0000xxx0181x00x0fx"‥"x`0xx8100x|v`|ffxx|vxx81"`v|`lvff0p000xx`flxlp00000xxxff|`v|vf|x0|004vx01181|0d0000
 x\|<ll>~3ff3|||pp0000p0`p0p|0f\{;x0d``8l18|f3f~~~~x00x0`fく`0x0xxxvxxxxx>x<ff<x`0bxbbxb8lbxbllbxb`0x000x0x 000xxx000xx000xlfflv`0xx0xxxxxvxxxx1881>11`0x0xxxx0x0x`|f|†0x|v0x|v81x|vvx|vllx|v818x|v~~~xxp`0xxxxxxxxx
`0p00x0p00x pp00xp00xxp|xv`0xx0xx0xxxvxxxx0000|`0v0vxvv0|'xllx`
\#
\# PC Screen (console) Fonts - psf1 header
\#
0 leshort 0x0436 psf screen font data
\(>2\) byte \(0 \quad 256\) characters, no index
\(>2\) byte 1 512 characters, no index
>2byte2256 characters, Unicode index
>2byte3512 characters, Unicode index
>2byte4256 characters, Unicode level 2 index
>2byte5512 characters, Unicode level 2 index
>3bytex8x\%d
\#
\# PC Screen (console) Fonts - psf2 header
\#
0 lelong0x864ab572psf2 screen font data
>12lelong\&11with Unicode index

\subsection*{1.102 kernel 3.10.0 :862.11.6.el7}

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Please keep the following list in alphabetical order.

\section*{Suman Anna}

Sripal Bagadia
Felipe Balbi
Ohad Ben-Cohen
Phil Carmody
Deepak Chitriki
Felipe Contreras
Hiroshi Doyu
Seth Forshee
Ivan Gomez Castellanos
Mark Grosen
Ramesh Gupta G
Fernando Guzman Lugo
Axel Haslam
Janet Head
Shivananda Hebbar
Hari Kanigeri
Tony Lindgren
Antonio Luna
Hari Nagalla
Nishanth Menon
Ameya Palande
Vijay Pasam
Gilbert Pitney
Omar Ramirez Luna
Ernesto Ramos
Chris Ring
Larry Schiefer
Rebecca Schultz Zavin
Bhavin Shah
Andy Shevchenko

\section*{Jeff Taylor}

Roman Tereshonkov
Armando Uribe de Leon
Nischal Varide
Wenbiao Wang
/* nicstar.c v0.22 Jawaid Bazyar (bazyar@hypermall.com)
* nicstar.c, M. Welsh (matt.welsh@cl.cam.ac.uk)
*
* Hacked October, 1997 by Jawaid Bazyar, Interlink Advertising Services Inc.
* http://www.hypermall.com/
* 10/1/97 - commented out CFG_PHYIE bit - we don't care when the PHY
*interrupts us (except possibly for removal/insertion of the cable?)
* 10/4/97 - began heavy inline documentation of the code. Corrected typos
*and spelling mistakes.
* 10/5/97 - added code to handle PHY interrupts, disable PHY on
*loss of link, and correctly re-enable PHY when link is
*re-established. (put back CFG_PHYIE)
*
* Modified to work with the IDT7721 nicstar -- AAL5 (tested) only.
*
* R. D. Rechenmacher <ron@fnal.gov>, Aug. 6, 1997
*
* Linux driver for the IDT77201 NICStAR PCI ATM controller.
* PHY component is expected to be 155 Mbps S/UNI-Lite or IDT 77155;
* see init_nicstar() for PHY initialization to change this. This driver
* expects the Linux ATM stack to support scatter-gather lists
* (skb->atm.iovent != 0) for Rx skb's passed to vcc->push.
*
* Implementing minimal-copy of received data:
* IDT always receives data into a small buffer, then large buffers
* as needed. This means that data must always be copied to create
* the linear buffer needed by most non-ATM protocol stacks (e.g. IP)
* Fix is simple: make large buffers large enough to hold entire
* SDU, and leave <small_buffer_data> bytes empty at the start. Then
* copy small buffer contents to head of large buffer.
* Trick is to avoid fragmenting Linux, due to need for a lot of large
* buffers. This is done by 2 things:
* 1) skb->destructor / skb->atm.recycle_buffer
* combined, allow nicstar_free_rx_skb to be called to
* recycle large data buffers
* 2) skb_clone of received buffers
* See nicstar_free_rx_skb and linearize_buffer for implementation
* details.
*
*
*
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* Foundation, Inc., 675 Mass Ave, Cambridge, MA 02139, USA.
*
* M. Welsh, 6 July 1996
*
*
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Temple Place - Suite 330, Boston, MA 02111-1307, USA.
\#ifndef _LICENSE_H
\#define \(\qquad\)
```

static inline int license_is_gpl_compatible(const char *license)
{
return (strcmp(license, "GPL") == 0
| strcmp(license, "GPL v2") == 0
| strcmp(license, "GPL and additional rights") == 0
| strcmp(license, "Dual BSD/GPL") == 0
| strcmp(license, "Dual MIT/GPL") == 0
| strcmp(license, "Dual MPL/GPL") == 0);
}

```

\section*{\#endif}
```

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QLogic Linux qlge NIC Driver

```

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(in case you are wondering where CyberLogin is, EON changed its login
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Andreas Oberritter <obi@linuxtv.org>
Dennis Noermann <dennis.noermann@ noernet.de>
Felix Domke <tmbinc@elitedvb.net>
Florian Schirmer <jolt@tuxbox.org>
Ronny Strutz <3des@elitedvb.de>

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Taylor Jacob <rtjacob@earthlink.net>
for the nxt2002 frontend driver
```

Jean-Francois Thibert [jeanfrancois@sagetv.com](mailto:jeanfrancois@sagetv.com)
for the nxt2004 frontend driver
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Alan Cox [alan@lxorguk.ukuu.org.uk](mailto:alan@lxorguk.ukuu.org.uk)
Video4Linux interface and 2.1.x kernel adaptation
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### 1.106 kmod 20 :21.el7

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lib/kdb/iprop.x
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lib/kdb/kdb_log.c
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lib/krb5/kdb/kdb_hdr.h
lib/krb5/kdb/kdb_log.c
lib/krb5/kdb/kdb_log.h
lib/libgss/g_accept_sec_context.c
lib/libgss/g_acquire_cred.c
lib/libgss/g_canon_name.c
lib/libgss/g_compare_name.c
lib/libgss/g_context_time.c
lib/libgss/g_delete_sec_context.c
lib/libgss/g_dsp_name.c
lib/libgss/g_dsp_status.c
lib/libgss/g_dup_name.c
lib/libgss/g_exp_sec_context.c
lib/libgss/g_export_name.c
lib/libgss/g_glue.c
lib/libgss/g_imp_name.c
lib/libgss/g_imp_sec_context.c
lib/libgss/g_init_sec_context.c
lib/libgss/g_initialize.c
lib/libgss/g_inquire_context.c
lib/libgss/g_inquire_cred.c
lib/libgss/g_inquire_names.c
lib/libgss/g_process_context.c
lib/libgss/g_rel_buffer.c
lib/libgss/g_rel_cred.c
lib/libgss/g_rel_name.c
lib/libgss/g_rel_oid_set.c
lib/libgss/g_seal.c
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lib/libgss/g_store_cred.c
lib/libgss/g_unseal.c
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lib/libgss/g_utils.c
lib/libgss/g_verify.c
lib/libgss/gssd_pname_to_uid.c
uts/common/gssapi/include/gssapi_err_generic.h
uts/common/gssapi/include/mechglueP.h

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```
*/
/* _*- mode: c; c-basic-offset: 4; indent-tabs-mode: nil -*- */
/*
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/*

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# and license statements in source code comments.
import os
import sys
import re
def warn(fname, ln, msg):
    print '%s: %d: %s' % (fname, ln + 1, msg)
def indicates_license(line):
    return 'Copyright' in line or 'COPYRIGHT' in line or 'License' in line
# Check a comment for boilerplate violations. Return true if the comment
# is a license statement
def check_comment(comment, fname, ln, code_seen, nonlicense_seen):
    text_seen = False
    is_license = False
    for line in comment:
        if not is_license and indicates_license(line):
            is_license = True
            if text_seen:
                    warn(fname, ln, 'License begins after first line of comment')
            elif code_seen:
                    warn(fname, ln, 'License after code')
            elif nonlicense_seen:
                    warn(fname, ln, 'License after non-license comments')
            break
            # DB2 licenses start with '/*-' and we don't want to change them.
            if line != " and line != '-':
                text_seen = True
    return is_license
def check_file(lines, fname):
    # Skip emacs mode line if present.
    ln=0
    if '_*- mode: c;' in lines[ln]:
        ln += 1
```

```
    # Check filename comment if present.
    m = re.match(r'^* ([^ ]*)( - .*)? \*/', lines[ln])
    if m:
        if m.group(1) != fname:
            warn(fname, ln, 'Wrong filename in comment')
        ln += 1
    # Scan for license statements.
    in_comment = False
    code_seen = False
    nonlicense_seen = False
    for line in lines[ln:]:
        # Strip out whitespace and comments contained within a line.
        if not in_comment:
            line = re.sub(r'^*.*?\*/', ", line)
        line = line.strip()
        if not in_comment and '/*' in line:
            (line, sep, comment_part) = line.partition('/*')
            comment = [comment_part.strip()]
            comment_starts_at = ln
            in_comment = True
    elif in_comment and '*/' not in line:
            comment.append(line.lstrip('*').lstrip())
        elif in_comment:
            (comment_part, sep, line) = line.partition('*/')
            comment.append(comment_part.strip())
            is_license = check_comment(comment, fname, comment_starts_at,
                    code_seen, nonlicense_seen)
            nonlicense_seen = nonlicense_seen or not is_license
            in_comment = False
    elif line.strip() != ":
            code_seen = True
        ln += 1
for fname in sys.argv[1:]:
    if fname.startswith('./'):
        fname = fname[2:]
    f = open(fname)
    lines = f.readlines()
    f.close()
    check_file(lines, fname)
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```

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```
.. toctree::
    :hidden:
    copyright.rst
.. include:: notice.rst
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
```

```
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
    <meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
    <title>MIT Kerberos License information &mdash; MIT Kerberos Documentation</title>
    <link rel="stylesheet" href="_static/agogo.css" type="text/css" />
    <link rel="stylesheet" href="_static/pygments.css" type="text/css" />
    <link rel="stylesheet" href="_static/kerb.css" type="text/css" />
    <script type="text/javascript">
    var DOCUMENTATION_OPTIONS = {
        URL_ROOT: './',
        VERSION: '1.15.1',
        COLLAPSE_INDEX: false,
        FILE_SUFFIX: '.html',
        HAS_SOURCE: true
    };
    </script>
    <script type="text/javascript" src="_static/jquery.js"></script>
    <script type="text/javascript" src="_static/underscore.js"></script>
    <script type="text/javascript" src="_static/doctools.js"></script>
    <link rel="author" title="About these documents" href="about.html" />
    <link rel="copyright" title="Copyright" href="copyright.html" />
    <link rel="top" title="MIT Kerberos Documentation" href="index.html" />
    <link rel="up" title="MIT Kerberos features" href="mitK5features.html" />
    <link rel="next" title="Copyright" href="copyright.html" />
    <link rel="prev" title="MIT Kerberos features" href="mitK5features.html" />
</head>
<body>
```

```
<div class="header-wrapper">
    <div class="header">
        <h1><a href="index.html">MIT Kerberos Documentation</a></h1>
        <div class="rel">
    <a href="index.html" title="Full Table of Contents"
        accesskey="C">Contents</a> |
    <a href="mitK5features.html" title="MIT Kerberos features"
        accesskey="P">previous</a> |
    <a href="copyright.html" title="Copyright"
        accesskey="N">next</a> |
    <a href="genindex.html" title="General Index"
        accesskey="I">index</a> |
    <a href="search.html" title="Enter search criteria"
        accesskey="S">Search</a> |
<a href="mailto:krb5-bugs@mit.edu?subject=Documentation__MIT Kerberos License
information">feedback</a>
        </div>
        </div>
</div>
<div class="content-wrapper">
<div class="content">
    <div class="document">
<div class="documentwrapper">
    <div class="bodywrapper">
        <div class="body">
<div class="section" id="mit-kerberos-license-information">
<span id="mitk5license"></span><h1>MIT Kerberos License information<a class="headerlink" href="#mit-
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<div class="highlight-python"><div class="highlight"><pre><span class="n">lib</span><span
class="o">/</span><span class="n">gssapi</span><span class="o">/</span><span
class="n">generic</span><span class="o">/</span><span class="n">gssapi_err_generic</span><span
class="o">.</span><span class="n">et</span>
<span class="n">lib</span><span class="o">/</span><span class="n">gssapi</span><span
class="o">/</span><span class="n">mechglue</span><span class="o">/</span><span
class="n">g_accept_sec_context</span><span class="o">.</span><span class="n">c</span>
<span class="n">lib</span><span class="o">/</span><span class="n">gssapi</span><span
class="o">/</span><span class="n">mechglue</span><span class="o">/</span><span
class="n">g_acquire_cred</span><span class="o">.</span><span class="n">c</span>
<span class="n">lib</span><span class="o">/</span><span class="n">gssapi</span><span
class="o">/</span><span class="n">mechglue</span><span class="o">/</span><span
class="n">g_canon_name</span><span class="o">.</span><span class="n">c</span>
<span class="n">lib</span><span class="o">/</span><span class="n">gssapi</span><span
class="o">/</span><span class="n">mechglue</span><span class="o">/</span><span class="n">g_compare_name</span><span class="o">.</span><span class="n">c</span> <span class="n">lib</span><span class="o">/</span><span class="n">gssapi</span><span
class="o">/</span><span class="n">mechglue</span><span class="o">/</span><span class="n">g_context_time</span><span class="o">.</span><span class="n">c</span> <span class="n">lib</span><span class="o">/</span><span class="n">gssapi</span><span class="o">/</span><span class="n">mechglue</span><span class="o">/</span><span class="n">g_delete_sec_context</span><span class="o">.</span><span class="n">c</span> <span class="n">lib</span><span class="o">/</span><span class="n">gssapi</span><span class="o">/</span><span class="n">mechglue</span><span class="o">/</span><span class="n">g_dsp_name</span><span class="o">.</span><span class="n">c</span> <span class="n">lib</span><span class="o">/</span><span class="n">gssapi</span><span class="o">/</span><span class="n">mechglue</span><span class="o">/</span><span class="n">g_dsp_status</span><span class="o">.</span><span class="n">c</span> <span class="n">lib</span><span class="o">/</span><span class="n">gssapi</span><span class="o">/</span><span class="n">mechglue</span><span class="o">/</span><span class="n">g_dup_name</span><span class="o">.</span><span class="n">c</span> <span class="n">lib</span><span class="o">/</span><span class="n">gssapi</span><span class="o">/</span><span class="n">mechglue</span><span class="o">/</span><span class="n">g_exp_sec_context</span><span class="o">.</span><span class="n">c</span> <span class="n">lib</span><span class="o">/</span><span class="n">gssapi</span><span class="o">/</span><span class="n">mechglue</span><span class="o">/</span><span class="n">g_export_name</span><span class="o">.</span><span class="n">c</span> <span class="n">lib</span><span class="o">/</span><span class="n">gssapi</span><span class="o">/</span><span class="n">mechglue</span><span class="o">/</span><span class="n">g_glue</span><span class="o">.</span><span class="n">c</span> <span class="n">lib</span><span class="o">/</span><span class="n">gssapi</span><span class="o">/</span><span class="n">mechglue</span><span class="o">/</span><span class="n">g_imp_name</span><span class="o">.</span><span class="n">c</span> <span class="n">lib</span><span class="o">/</span><span class="n">gssapi</span><span class="o">/</span><span class="n">mechglue</span><span class="o">/</span><span class="n">g_imp_sec_context</span><span class="o">.</span><span class="n">c</span> <span class="n">lib</span><span class="o">/</span><span class="n">gssapi</span><span class="o">/</span><span class="n">mechglue</span><span class="o">/</span><span class="n">g_init_sec_context</span><span class="o">.</span><span class="n">c</span> <span class="n">lib</span><span class="o">/</span><span class="n">gssapi</span><span class="o">/</span><span class="n">mechglue</span><span class="o">/</span><span class="n">g_initialize</span><span class="o">.</span><span class="n">c</span> <span class="n">lib</span><span class="o">/</span><span class="n">gssapi</span><span class="o">/</span><span class="n">mechglue</span><span class="o">/</span><span class="n">g_inquire_context</span><span class="o">.</span><span class="n">c</span> <span class="n">lib</span><span class="o">/</span><span class="n">gssapi</span><span class="o">/</span><span class="n">mechglue</span><span class="o">/</span><span class="n">g_inquire_cred</span><span class="o">.</span><span class="n">c</span> <span class="n">lib</span><span class="o">/</span><span class="n">gssapi</span><span class="o">/</span><span class="n">mechglue</span><span class="o">/</span><span class="n">g_inquire_names</span><span class="o">.</span><span class="n">c</span> <span class="n">lib</span><span class="o">/</span><span class="n">gssapi</span><span class="o">/</span><span class="n">mechglue</span><span class="o">/</span><span class="n">g_process_context</span><span class="o">.</span><span class="n">c</span> <span class="n">lib</span><span class="o">/</span><span class="n">gssapi</span><span
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</div>
< $\mathrm{p}>$ and the initial implementation of incremental propagation, including
the following new or changed files: </p>

<div class="highlight-python"><div class="highlight"><pre><span class="n">include</span><span class="o">/</span><span class="n">iprop_hdr</span><span class="o">.</span><span class="n">h</span> <span class="n">kadmin</span><span class="o">/</span><span class="n">server</span><span class="o">/</span><span class="n">ipropd_svc</span><span class="o">.</span><span class="n">c</span> <span class="n">lib</span><span class="o">/</span><span class="n">kdb</span><span class="o">/</span><span class="n">iprop</span><span class="o">.</span><span class="n">x</span> <span class="n">lib</span><span class="o">/</span><span class="n">kdb</span><span class="o">/</span><span class="n">kdb_convert</span><span class="o">.</span><span class="n">c</span> <span class="n">lib</span><span class="o">/</span><span class="n">kdb</span><span class="o">/</span><span class="n">kdb_log</span><span class="o">.</span><span class="n">c</span> <span class="n">lib</span><span class="o">/</span><span class="n">kdb</span><span class="o">/</span><span class="n">kdb_log</span><span class="o">.</span><span class="n">h</span> <span class="n">lib</span><span class="o">/</span><span class="n">krb5</span><span
class="o">/</span><span class="n">error_tables</span><span class="o">/</span><span
class="n">kdb5_err</span><span class="o">.</span><span class="n">et</span>
<span class="n">slave</span><span class="o">/</span><span class="n">kpropd_rpc</span><span
class="o">.</span><span class="n">c</span>
<span class="n">slave</span><span class="o">/</span><span class="n">kproplog</span><span
class="o">.</span><span class="n">c</span>
</pre></div>
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</ul>
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    </div>
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        </div>
        <div class="left">
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        >Contents</a> |
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        >index</a>
    <a href="search.html" title="Enter search criteria"
        >Search</a> |
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</div>
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    COLLAPSE_INDEX: false,
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<link rel="author" title="About these documents" href="about.html" />
<link rel="copyright" title="Copyright" href="#" />
<link rel="top" title="MIT Kerberos Documentation" href="index.html" />
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<link rel="next" title="How to build this documentation from the source" href="build_this.html" />
<link rel="prev" title="MIT Kerberos License information" href="mitK5license.html" />
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    accesskey="C">Contents</a> 
    <a href="mitK5license.html" title="MIT Kerberos License information"
        accesskey="P">previous</a> |
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        accesskey="S">Search</a> |
<a href="mailto:krb5-bugs@mit.edu?subject=Documentation__Copyright">feedback</a>
        </div>
    </div>
</div>
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<div class="documentwrapper">
    <div class="bodywrapper">
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</div>
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</div>
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<div class="sidebar">
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<li><a class="reference internal" href="\#">Copyright</a></li>
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</div>
</body>
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The implementations of GSSAPI mechglue in GSSAPI-SPNEGO in
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lib/gssapi/mechglue/g_acquire_cred.c
lib/gssapi/mechglue/g_canon_name.c
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lib/gssapi/mechglue/g_dsp_name.c
lib/gssapi/mechglue/g_dsp_status.c

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lib/gssapi/mechglue/g_unseal.c
lib/gssapi/mechglue/g_userok.c
lib/gssapi/mechglue/g_utils.c
lib/gssapi/mechglue/g_verify.c
lib/gssapi/mechglue/gssd_pname_to_uid.c
lib/gssapi/mechglue/mglueP.h
lib/gssapi/mechglue/oid_ops.c
lib/gssapi/spnego/gssapiP_spnego.h
lib/gssapi/spnego/spnego_mech.c
and the initial implementation of incremental propagation, including the following new or changed files:
.. parsed-literal::
include/iprop_hdr.h
kadmin/server/ipropd_svc.c
lib/kdb/iprop.x
lib/kdb/kdb_convert.c
lib/kdb/kdb_log.c
lib/kdb/kdb_log.h
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@ifinfo
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@ page
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\subsection*{1.113 libcgroup 0.41 :15.el7}

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Yoyodyne, Inc., hereby disclaims all copyright interest in the library `Frob' (a library for tweaking knobs) written by James Random Hacker.
<signature of Ty Coon>, 1 April 1990
Ty Coon, President of Vice

That's all there is to it!

\subsection*{1.114 libcroco 0.6.11 :1.el7}

\subsection*{1.114.1 Available under license : \\ GNU LIBRARY GENERAL PUBLIC LICENSE}

Version 2, June 1991

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

Preamble

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)
"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

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

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2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:
a) The modified work must itself be a software library.
b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.
c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.
d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.
(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

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

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

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.
3. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

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

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.
4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.
5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

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

Section 6 states terms for distribution of such executables.

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

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

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.
6. As an exception to the Sections above, you may also compile or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:
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b) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.
c) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.
d) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

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

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.
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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.
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Appendix: How to Apply These Terms to Your New Libraries

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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.
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\subsection*{1.115 libdaemon 0.14 :7.el7}

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Version 2.1, February 1999

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

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

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

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

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

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

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

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

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

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

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

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

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.
2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:
a) The modified work must itself be a software library.
b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.
c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.
d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.
(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

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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.

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\subsection*{1.116 libdb 5.3.21 :24.el7}

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\subsection*{1.118 libdrm 2.4.83 :2.el7}

\subsection*{1.119 libedit 3.0 :12.20121213cvs.el7}

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\subsection*{1.120 libestr 0.1.9 :2.el7}

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)
"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.
1. You may copy and distribute verbatim copies of the Library's complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and distribute a copy of this License along with the Library.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a
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2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:
a) The modified work must itself be a software library.
b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.
c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.
d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.
(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

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

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

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of
a storage or distribution medium does not bring the other work under the scope of this License.
3. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

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

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.
4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.
5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

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

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

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

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.
6. As an exception to the Sections above, you may also compile or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:
a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)
b) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.
c) If distribution of the work is made by offering access to copy
from a designated place, offer equivalent access to copy the above specified materials from the same place.
d) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

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

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.
7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:
a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.
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If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances.

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\section*{DAMAGES.}

\section*{END OF TERMS AND CONDITIONS}

Appendix: How to Apply These Terms to Your New Libraries

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

To apply these terms, attach the following notices to the library. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.
<one line to give the library's name and a brief idea of what it does.> Copyright (C) <year> <name of author>

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

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

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

Yoyodyne, Inc., hereby disclaims all copyright interest in the library `Frob' (a library for tweaking knobs) written by James Random Hacker.
<signature of Ty Coon>, 1 April 1990
Ty Coon, President of Vice

That's all there is to it!

\subsection*{1.126 libgpg-error 1.12 :3.el7}

\subsection*{1.126.1 Available under license :}

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Version 2.1, February 1999

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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.

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

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

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

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

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

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

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

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You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.
2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:
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Version 2.1, February 1999

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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.)

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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.
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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.

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This is the licence that applies to the libiscsi library and its use.
```

src/ld_iscsi.c

```

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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.)

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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
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\subsection*{1.133 libnfnetlink 1.0.1 :4.el7}

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\subsection*{1.134 libnl3 3.2.28 :4.el7}

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```

/*************************************************************************
*

* $Id$
* 
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* 

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

* Private functions, types, etc. used for callback functions.
* 
* The ref pointer is an opaque type and should remain as such.
* Private data must only be accessible through the getter and

```
```

* setter functions.
* 

************************************************************************/

# libtool (GNU libtool) 2.4.2

# Written by Gordon Matzigkeit [gord@gnu.ai.mit.edu](mailto:gord@gnu.ai.mit.edu), 1996

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Here is a list of the main contributors to lm-sensors version 3 .
* Frodo Looijaard

Original author of libsensors, sensors-detect, sensors and isadump.
* Merlin Hughes

Original author of sensord.
* Bob Schlaermann

Dynamic chip feature detection (a.k.a. generic chip support) in
libsensors and sensors.
* Mark M. Hoffman

Many improvements to the libsensors configuration file scanner.
* Jean Delvare

New libsensors API, and migration of sensors and sensord thereto.
Many optimizations in libsensors and sensors.
Configuration file converter.
Rewrite of sensors-detect.
Support for multiple configuration files in libsensors.

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Version 3, 29 June 2007

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The MariaDB packages were initally made by http://ourdelta.org/, and are now managed by the MariaDB development team, maria-developers@lists.launchpad.net

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'\#-----------------------BS_STVARS_040_01---------------------------
SELECT COUNT(@ @GLOBAL.license);
COUNT(@ @GLOBAL.license)
1
1 Expected
'\#----------------------BS_STVARS_040_02------------------------
SET @ @ GLOBAL.license=1;
ERROR HY000: Variable 'license' is a read only variable
Expected error 'Read only variable'
SELECT COUNT(@ @GLOBAL.license);
COUNT(@ @ GLOBAL.license)
1
1 Expected
```

'\#--
SELECT @ @GLOBAL.license = VARIABLE_VALUE
FROM INFORMATION_SCHEMA.GLOBAL_VARIABLES
WHERE VARIABLE_NAME='license';
@ @ GLOBAL.license = VARIABLE_VALUE
1
1 Expected
SELECT COUNT(@@GLOBAL.license);
COUNT(@ @GLOBAL.license)
1
1 Expected
SELECT COUNT(VARIABLE_VALUE)
FROM INFORMATION_SCHEMA.GLOBAL_VARIABLES
WHERE VARIABLE_NAME='license';
COUNT(VARIABLE_VALUE)
1
1 Expected
'\#-------------------------------------------------------
SELECT @ @license = @ @ GLOBAL.license;
@ @license = @ @GLOBAL.license
1
1 Expected
'\#-
BS_STVARS_040_05---------------------------
SELECT COUNT(@ @license);
COUNT(@@license)
1
1 Expected
SELECT COUNT(@@local.license);
ERROR HY000: Variable 'license' is a GLOBAL variable
Expected error 'Variable is a GLOBAL variable'
SELECT COUNT(@ @SESSION.license);
ERROR HY000: Variable 'license' is a GLOBAL variable
Expected error 'Variable is a GLOBAL variable'
SELECT COUNT(@ @GLOBAL.license);
COUNT(@ @GLOBAL.license)
1
1 Expected
SELECT license = @ @ SESSION.license;
ERROR 42S22: Unknown column 'license' in 'field list'
Expected error 'Readonly variable'
\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\# mysql-test\t\license_basic.test \#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#

# 

# Variable Name: license

    #
    
# Scope: Global

# Access Type: Static

    #
    
# Data Type: string

# 

```
```


# 

# 

# Creation Date: 2008-02-07

# Author : Sharique Abdullah

# 

# 

# Description:Test Cases of Dynamic System Variable license

# that checks the behavior of this variable in the following ways

# * Value Check

# * Scope Check

# 

# Reference: http://dev.mysql.com/doc/refman/5.1/en/

# server-system-variables.html

# 

\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#
--echo '\#

``` \(\qquad\)
```

                                    BS_STVARS_040_01
    ```
\(\qquad\)
```\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#
```

\# Displaying default value ..... \#

```\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#
SELECT COUNT(@ @GLOBAL.license);
--echo 1 Expected
---cho '#----------------------------------------------------------
#######################################################################
# Check if Value can set #
#####################################################################
--error ER_INCORRECT_GLOBAL_LOCAL_VAR
SET @ @ GLOBAL.license=1;
--echo Expected error 'Read only variable'
SELECT COUNT(@ @GLOBAL.license);
--echo 1 Expected
--echo '#---------------------------------------------------------------------
###################################################################
# Check if the value in GLOBAL Table matches value in variable #
#################################################################
SELECT @ @GLOBAL.license = VARIABLE_VALUE
FROM INFORMATION_SCHEMA.GLOBAL_VARIABLES
WHERE VARIABLE_NAME='license';
--echo 1 Expected
```

SELECT COUNT(@ @GLOBAL.license);
--echo 1 Expected

SELECT COUNT(VARIABLE_VALUE)
FROM INFORMATION_SCHEMA.GLOBAL_VARIABLES
WHERE VARIABLE_NAME='license';
--echo 1 Expected
--echo '\# $\qquad$ -BS_STVARS_040_04 \#'
\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#
\# Check if accessing variable with and without GLOBAL point to same variable \#
\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#
SELECT @ @license = @ @ GLOBAL.license;
--echo 1 Expected
--echo '\#- $\qquad$ -BS_STVARS_040_05 $\qquad$

\# Check if license can be accessed with and without @ @ sign \#
\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#

SELECT COUNT(@ @license);
--echo 1 Expected
--Error ER_INCORRECT_GLOBAL_LOCAL_VAR
SELECT COUNT(@@local.license);
--echo Expected error 'Variable is a GLOBAL variable'
--Error ER_INCORRECT_GLOBAL_LOCAL_VAR
SELECT COUNT(@ @SESSION.license);
--echo Expected error 'Variable is a GLOBAL variable'

SELECT COUNT(@ @GLOBAL.license);
--echo 1 Expected
--Error ER_BAD_FIELD_ERROR
SELECT license = @ @SESSION.license;
--echo Expected error 'Readonly variable'
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Version 2.1, February 1999

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### 1.169 microcode_ctl 2.1 :29.10.el7_5

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This kbase https://access.redhat.com/articles/3436091 includes a table that maps Intel and AMD CPU processor code family names to updated Intel and AMD microcode package versions.

### 1.170 mozjs17 17.0.0 :20.el7

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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.)

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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.)

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

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a textual and legal sense, the linked executable is a combined work, a derivative of the original library, and the ordinary General Public License treats it as such.

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

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

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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.)

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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.
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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
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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.

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On all platforms, Nmap is normally linked with:
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http://code.google.com/p/libdnet/
o PCRE: Perl-compatible regular expressions. PCRE is part of Nmap's version detection and is also made available as an NSE library.
Distributed with Nmap in the libpcre subdirectory.
http://www.pcre.org/
o liblua: Lua programming language. Lua is the implementation language of NSE, the Nmap Scripting Engine. Nmap links with liblua to allow running Lua programs inside Nmap. Distributed with Nmap in the liblua
subdirectory. liblua can be omitted by configuring with the
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http://www.lua.org/
o OpenSSL: Cryptographic library. OpenSSL is used by service detection and by NSE to connect to SSL services. NSE also provides access to OpenSSL functions such as encryption and digest calculation. OpenSSL can be disabled by configuring with the --without-openssl configuration directive. http://www.openssl.org/
o LIBLINEAR. Used for IPv6 OS classifiction. http://www.csie.ntu.edu.tw/~cjlin/liblinear/
o libsvn. The Subversion library, used by the updater program nmap-update. http://subversion.apache.org/
o APR (Apache Portable Runtime). Used by libsvn. http://apr.apache.org/

On Windows only, Nmap uses:
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Zenmap and Ndiff require:
o Python. The binary distributions of Nmap include a Python interpreter and various libraries, built using either py2exe or py2app.
http://www.python.org/

The Windows and Mac OS X binary packages include bundled versions of: o GLib, GTK+, ATK, Pango: These libraries are licensed under the GNU LGPL 2, a copy of which is in the file licenses/LGPL-2. http://www.gtk.org/
o Cairo: graphics library. Dual-licensed under the GNU LGPL 2.1 and the MPL 1.1. See the files licenses/LGPL-2.1 and licenses/MPL-1.1. http://www.cairographics.org/
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Written by: Philip Hazel

Email local part: ph10
Email domain: cam.ac.uk

University of Cambridge Computing Service,
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```

Ajay Joshi [jaj@google.com](mailto:jaj@google.com)
Balzs Dn [balazs.dan@gmail.com](mailto:balazs.dan@gmail.com)
Bharat Mediratta [bharat@menalto.com](mailto:bharat@menalto.com)
Chandler Carruth [chandlerc@google.com](mailto:chandlerc@google.com)
Chris Prince [cprince@google.com](mailto:cprince@google.com)
Chris Taylor [taylorc@google.com](mailto:taylorc@google.com)
Dan Egnor [egnor@google.com](mailto:egnor@google.com)

```
```

Eric Roman [eroman@chromium.org](mailto:eroman@chromium.org)
Hady Zalek [hady.zalek@gmail.com](mailto:hady.zalek@gmail.com)
Jeffrey Yasskin [jyasskin@google.com](mailto:jyasskin@google.com)
Ji Sigursson [joi@google.com](mailto:joi@google.com)
Keir Mierle [mierle@gmail.com](mailto:mierle@gmail.com)
Keith Ray [keith.ray@gmail.com](mailto:keith.ray@gmail.com)
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Pasi Valminen [pasi.valminen@gmail.com](mailto:pasi.valminen@gmail.com)
Patrick Hanna [phanna@google.com](mailto:phanna@google.com)
Patrick Riley [pfr@google.com](mailto:pfr@google.com)
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Preston Jackson <preston.a.jackson@ gmail.com>
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NTP Version 2 as specified in RFC-1119
19. [20]John Hay [jhay@icomtek.csir.co.za](mailto:jhay@icomtek.csir.co.za) IPv6 support and testing
20. [21]Dave Hart [davehart@davehart.com](mailto:davehart@davehart.com) General maintenance, Windows port interpolation rewrite
21. [22]Claas Hilbrecht <neoclock4x @linum.com> NeoClock4X clock driver
22. [23]Glenn Hollinger [glenn@herald.usask.ca](mailto:glenn@herald.usask.ca) GOES clock driver
23. [24]Mike Iglesias [iglesias@uci.edu](mailto:iglesias@uci.edu) DEC Alpha port
24. [25]Jim Jagielski [jim@jagubox.gsfc.nasa.gov](mailto:jim@jagubox.gsfc.nasa.gov) A/UX port
25. [26]Jeff Johnson [jbj@chatham.usdesign.com](mailto:jbj@chatham.usdesign.com) massive prototyping overhaul
26. [27]Hans Lambermont <Hans.Lambermont@ nl.origin-it.com> or [28][H.Lambermont@chello.nl](mailto:H.Lambermont@chello.nl) ntpsweep
27. [29]Poul-Henning Kamp [phk@FreeBSD.ORG](mailto:phk@FreeBSD.ORG) Oncore driver (Original author)
28. [30]Frank Kardel [31]<kardel (at) ntp (dot) org> PARSE <GENERIC> driver (>14 reference clocks), STREAMS modules for PARSE, support scripts, syslog cleanup, dynamic interface handling
29. [32]William L. Jones [jones@hermes.chpc.utexas.edu](mailto:jones@hermes.chpc.utexas.edu) RS/6000 AIX modifications, HPUX modifications
30. [33]Dave Katz [dkatz@cisco.com](mailto:dkatz@cisco.com) RS/6000 AIX port
31. [34]Craig Leres [leres@ee.lbl.gov](mailto:leres@ee.lbl.gov) 4.4BSD port, ppsclock, Magnavox GPS clock driver
32. [35]George Lindholm [lindholm@ucs.ubc.ca](mailto:lindholm@ucs.ubc.ca) SunOS 5.1 port
33. [36]Louis A. Mamakos [louie@ni.umd.edu](mailto:louie@ni.umd.edu) MD5-based authentication
34. [37]Lars H. Mathiesen <thorinn@ diku.dk> adaptation of foundation code for Version 3 as specified in RFC-1305
35. [38]Danny Mayer [mayer@ntp.org](mailto:mayer@ntp.org)Network I/O, Windows Port, Code Maintenance
36. [39]David L. Mills [mills@udel.edu](mailto:mills@udel.edu) Version 4 foundation: clock discipline, authentication, precision kernel; clock drivers: Spectracom, Austron, Arbiter, Heath, ATOM, ACTS, KSI/Odetics; audio clock drivers: CHU, WWV/H, IRIG
37. [40]Wolfgang Moeller [moeller@gwdgv1.dnet.gwdg.de](mailto:moeller@gwdgv1.dnet.gwdg.de) VMS port
38. [41]Jeffrey Mogul [mogul@pa.dec.com](mailto:mogul@pa.dec.com) ntptrace utility
39. [42]Tom Moore [tmoore@fievel.daytonoh.ncr.com](mailto:tmoore@fievel.daytonoh.ncr.com) i386 svr4 port
40. [43]Kamal A Mostafa [kamal@whence.com](mailto:kamal@whence.com)SCO OpenServer port
41. [44]Derek Mulcahy <derek @toybox.demon.co.uk> and [45]Damon Hart-Davis [d@hd.org](mailto:d@hd.org) ARCRON MSF clock driver
42. [46]Rob Neal [neal@ntp.org](mailto:neal@ntp.org) Bancomm refclock and config/parse code maintenance
43. [47]Rainer Pruy [Rainer.Pruy@informatik.uni-erlangen.de](mailto:Rainer.Pruy@informatik.uni-erlangen.de) monitoring/trap scripts, statistics file handling
44. [48]Dirce Richards [dirce@zk3.dec.com](mailto:dirce@zk3.dec.com) Digital UNIX V4.0 port
45. [49]Wilfredo S"nchez [wsanchez@apple.com](mailto:wsanchez@apple.com) added support for NetInfo
46. [50]Nick Sayer [mrapple@quack.kfu.com](mailto:mrapple@quack.kfu.com) SunOS streams modules
47. [51]Jack Sasportas [jack@innovativeinternet.com](mailto:jack@innovativeinternet.com) Saved a Lot of space on the stuff in the html/pic/ subdirectory
48. [52]Ray Schnitzler [schnitz@unipress.com](mailto:schnitz@unipress.com) Unixware1 port
49. [53]Michael Shields [shields@tembel.org](mailto:shields@tembel.org) USNO clock driver
50. [54]Jeff Steinman [jss@pebbles.jpl.nasa.gov](mailto:jss@pebbles.jpl.nasa.gov) Datum PTS clock driver
51. [55]Harlan Stenn [harlan@pfcs.com](mailto:harlan@pfcs.com) GNU automake/autoconfigure makeover, various other bits (see the ChangeLog)
52. [56]Kenneth Stone [ken@sdd.hp.com](mailto:ken@sdd.hp.com) HP-UX port
53. [57]Ajit Thyagarajan [ajit@ee.udel.edu](mailto:ajit@ee.udel.edu)IP multicast/anycast support
54. [58]Tomoaki TSURUOKA [tsuruoka@nc.fukuoka-u.ac.jp](mailto:tsuruoka@nc.fukuoka-u.ac.jp)TRAK clock driver
55. [59]Paul A Vixie [vixie@vix.com](mailto:vixie@vix.com) TrueTime GPS driver, generic

TrueTime clock driver
56. [60]Ulrich Windl [Ulrich.Windl@rz.uni-regensburg.de](mailto:Ulrich.Windl@rz.uni-regensburg.de) corrected and validated HTML documents according to the HTML DTD

## References

1. mailto:\%20takao_abe@xurb.jp
2. mailto:\%20mark_andrews@isc.org
3. mailto:\%20altmeier@atlsoft.de
4. mailto:\%20vbais@ mailman1.intel.co
5. mailto:\%20kirkwood@striderfm.intel.com
6. mailto:\%20michael.barone@lmco.com
7. mailto:\%20karl@owl.HQ.ileaf.com
8. mailto:\%20greg.brackley@bigfoot.com
9. mailto:\%20Marc.Brett@westgeo.com
10. mailto:\%20Piete.Brooks@cl.cam.ac.uk
11. mailto:\%20nelson@bolyard.me
12. mailto:\%20Jean-Francois.Boudreault@ viagenie.qc.ca
13. mailto:\%20reg@dwf.com
14. mailto:\%20clift@ml.csiro.au
15. mailto:casey@csc.co.za
16. mailto:\%20Sven_Dietrich@trimble.COM
17. mailto:\%20dundas@salt.jpl.nasa.gov
18. mailto:\%20duwe@immd4.informatik.uni-erlangen.de
19. mailto:\%20dennis@mrbill.canet.ca
20. mailto:\%20jhay@icomtek.csir.co.za
21. mailto:\%20davehart@ davehart.com
22. mailto:\%20neoclock4x@linum.com
23. mailto:\%20glenn@herald.usask.ca
24. mailto:\%20iglesias@uci.edu
25. mailto:\%20jagubox.gsfc.nasa.gov
26. mailto:\%20jbj@chatham.usdesign.com
27. mailto:Hans.Lambermont@nl.origin-it.com
28. mailto:H.Lambermont@chello.nl
29. mailto:\%20phk@FreeBSD.ORG
30. http://www4.informatik.uni-erlangen.de/\~kardel
31. mailto:\%20kardel(at)ntp(dot)org
32. mailto:\%20jones@hermes.chpc.utexas.edu
33. mailto:\%20dkatz@cisco.com
34. mailto:\%20leres@ee.lbl.gov
35. mailto:\%20lindholm@ucs.ubc.ca
36. mailto:\%20louie@ni.umd.edu
37. mailto:\%20thorinn@diku.dk
38. mailto:\%20mayer@ntp.org
39. mailto:\%20mills@udel.edu
40. mailto:\%20moeller@gwdgv1.dnet.gwdg.de
41. mailto:\%20mogul@pa.dec.com
42. mailto:\%20tmoore@fievel.daytonoh.ncr.com
43. mailto:\%20kamal@whence.com
44. mailto:\%20derek@toybox.demon.co.uk
45. mailto:\%20d@hd.org
46. mailto:\%20neal@ntp.org
47. mailto:\%20Rainer.Pruy@informatik.uni-erlangen.de
48. mailto:\%20dirce@zk3.dec.com
49. mailto:\%20wsanchez@apple.com
50. mailto:\%20mrapple@quack.kfu.com
51. mailto:\%20jack@innovativeinternet.com
52. mailto:\%20schnitz@unipress.com
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55. mailto:\%20harlan@pfcs.com
56. mailto:\%20ken@sdd.hp.com
57. mailto:\%20ajit@ee.udel.edu
58. mailto:\%20tsuruoka@nc.fukuoka-u.ac.jp
59. mailto:\%20vixie@vix.com
60. mailto:\%20Ulrich.Windl@rz.uni-regensburg.de

### 1.183 ntp//sntp/libopts 4.2.6p5 :28.el7.centos

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```

The following individuals contributed in part to the Network Time Protocol Distribution Version 4 and are acknowledged as authors of this work.

1. [1]Takao Abe [takao_abe@xurb.jp](mailto:takao_abe@xurb.jp) Clock driver for JJY receivers
2. [2]Mark Andrews [mark_andrews@isc.org](mailto:mark_andrews@isc.org) Leitch atomic clock controller
3. [3]Bernd Altmeier [altmeier@atlsoft.de](mailto:altmeier@atlsoft.de) hopf Elektronik serial line and PCI-bus devices
4. [4]Viraj Bais [vbais@mailman1.intel.com](mailto:vbais@mailman1.intel.com) and [5]Clayton Kirkwood [kirkwood@striderfm.intel.com](mailto:kirkwood@striderfm.intel.com) port to WindowsNT 3.5
5. [6]Michael Barone <michael, barone@1mco.com> GPSVME fixes
6. [7]Karl Berry [karl@owl.HQ.ileaf.com](mailto:karl@owl.HQ.ileaf.com) syslog to file option
7. [8]Greg Brackley <greg.brackley @bigfoot.com> Major rework of WINNT port. Clean up recvbuf and iosignal code into separate modules.
8. [9]Marc Brett [Marc.Brett@westgeo.com](mailto:Marc.Brett@westgeo.com) Magnavox GPS clock driver
9. [10]Piete Brooks [Piete.Brooks@cl.cam.ac.uk](mailto:Piete.Brooks@cl.cam.ac.uk) MSF clock driver, Trimble PARSE support
10. [11]Nelson B Bolyard [nelson@bolyard.me](mailto:nelson@bolyard.me) update and complete broadcast and crypto features in sntp
11. [12]Jean-Francois Boudreault [Jean-Francois.Boudreault@viagenie.qc.ca](mailto:Jean-Francois.Boudreault@viagenie.qc.ca) IPv6 support
12. [13]Reg Clemens <reg @dwf.com> Oncore driver (Current maintainer)
13. [14]Steve Clift [clift@ml.csiro.au](mailto:clift@ml.csiro.au) OMEGA clock driver
14. [15]Casey Crellin [casey@csc.co.za](mailto:casey@csc.co.za) vxWorks (Tornado) port and help with target configuration
15. [16]Sven Dietrich [sven_dietrich@trimble.com](mailto:sven_dietrich@trimble.com) Palisade reference clock driver, NT adj. residuals, integrated Greg's Winnt port.
16. [17]John A. Dundas III [dundas@salt.jpl.nasa.gov](mailto:dundas@salt.jpl.nasa.gov) Apple A/UX port
17. [18]Torsten Duwe [duwe@immd4.informatik.uni-erlangen.de](mailto:duwe@immd4.informatik.uni-erlangen.de) Linux port
18. [19]Dennis Ferguson [dennis@mrbill.canet.ca](mailto:dennis@mrbill.canet.ca) foundation code for NTP Version 2 as specified in RFC-1119
19. [20]John Hay <jhay @icomtek.csir.co.za> IPv6 support and testing
20. [21]Dave Hart [davehart@davehart.com](mailto:davehart@davehart.com) General maintenance, Windows port interpolation rewrite
21. [22]Claas Hilbrecht <neoclock4x @linum.com> NeoClock4X clock driver
22. [23]Glenn Hollinger [glenn@herald.usask.ca](mailto:glenn@herald.usask.ca) GOES clock driver
23. [24]Mike Iglesias [iglesias@uci.edu](mailto:iglesias@uci.edu) DEC Alpha port
24. [25]Jim Jagielski [jim@jagubox.gsfc.nasa.gov](mailto:jim@jagubox.gsfc.nasa.gov) A/UX port
25. [26]Jeff Johnson [jbj@chatham.usdesign.com](mailto:jbj@chatham.usdesign.com) massive prototyping overhaul
26. [27]Hans Lambermont <Hans.Lambermont@ nl.origin-it.com> or [28][H.Lambermont@chello.nl](mailto:H.Lambermont@chello.nl) ntpsweep
27. [29]Poul-Henning Kamp [phk@FreeBSD.ORG](mailto:phk@FreeBSD.ORG) Oncore driver (Original author)
28. [30]Frank Kardel [31]<kardel (at) ntp (dot) org>PARSE <GENERIC> driver (>14 reference clocks), STREAMS modules for PARSE, support scripts, syslog cleanup, dynamic interface handling
29. [32]William L. Jones [jones@hermes.chpc.utexas.edu](mailto:jones@hermes.chpc.utexas.edu) RS/6000 AIX modifications, HPUX modifications
30. [33]Dave Katz [dkatz@cisco.com](mailto:dkatz@cisco.com) RS/6000 AIX port
31. [34]Craig Leres [leres@ee.lbl.gov](mailto:leres@ee.lbl.gov) 4.4BSD port, ppsclock, Magnavox GPS clock driver
32. [35]George Lindholm [lindholm@ucs.ubc.ca](mailto:lindholm@ucs.ubc.ca) SunOS 5.1 port
33. [36]Louis A. Mamakos [louie@ni.umd.edu](mailto:louie@ni.umd.edu) MD5-based authentication
34. [37]Lars H. Mathiesen [thorinn@diku.dk](mailto:thorinn@diku.dk) adaptation of foundation code for Version 3 as specified in RFC-1305
35. [38]Danny Mayer [mayer@ntp.org](mailto:mayer@ntp.org)Network I/O, Windows Port, Code Maintenance
36. [39]David L. Mills [mills@udel.edu](mailto:mills@udel.edu) Version 4 foundation: clock discipline, authentication, precision kernel; clock drivers:
Spectracom, Austron, Arbiter, Heath, ATOM, ACTS, KSI/Odetics; audio clock drivers: CHU, WWV/H, IRIG
37. [40]Wolfgang Moeller [moeller@gwdgv1.dnet.gwdg.de](mailto:moeller@gwdgv1.dnet.gwdg.de) VMS port
38. [41]Jeffrey Mogul [mogul@pa.dec.com](mailto:mogul@pa.dec.com) ntptrace utility
39. [42]Tom Moore [tmoore@fievel.daytonoh.ncr.com](mailto:tmoore@fievel.daytonoh.ncr.com) i386 svr4 port
40. [43]Kamal A Mostafa [kamal@whence.com](mailto:kamal@whence.com)SCO OpenServer port
41. [44]Derek Mulcahy <derek @toybox.demon.co.uk> and [45]Damon Hart-Davis [d@hd.org](mailto:d@hd.org) ARCRON MSF clock driver
42. [46]Rob Neal [neal@ntp.org](mailto:neal@ntp.org) Bancomm refclock and config/parse code maintenance
43. [47]Rainer Pruy [Rainer.Pruy@informatik.uni-erlangen.de](mailto:Rainer.Pruy@informatik.uni-erlangen.de) monitoring/trap scripts, statistics file handling
44. [48]Dirce Richards [dirce@zk3.dec.com](mailto:dirce@zk3.dec.com) Digital UNIX V4.0 port
45. [49]Wilfredo S"nchez [wsanchez@apple.com](mailto:wsanchez@apple.com) added support for NetInfo
46. [50]Nick Sayer [mrapple@quack.kfu.com](mailto:mrapple@quack.kfu.com) SunOS streams modules
47. [51]Jack Sasportas [jack@innovativeinternet.com](mailto:jack@innovativeinternet.com) Saved a Lot of space on the stuff in the html/pic/ subdirectory
48. [52]Ray Schnitzler [schnitz@unipress.com](mailto:schnitz@unipress.com) Unixware1 port
49. [53]Michael Shields [shields@tembel.org](mailto:shields@tembel.org) USNO clock driver
50. [54]Jeff Steinman [jss@pebbles.jpl.nasa.gov](mailto:jss@pebbles.jpl.nasa.gov) Datum PTS clock driver
51. [55]Harlan Stenn <harlan@ pfcs.com> GNU automake/autoconfigure makeover, various other bits (see the ChangeLog)
52. [56]Kenneth Stone [ken@sdd.hp.com](mailto:ken@sdd.hp.com) HP-UX port
53. [57]Ajit Thyagarajan[ajit@ee.udel.edu](mailto:ajit@ee.udel.edu)IP multicast/anycast support
54. [58]Tomoaki TSURUOKA [tsuruoka@nc.fukuoka-u.ac.jp](mailto:tsuruoka@nc.fukuoka-u.ac.jp)TRAK clock driver
55. [59]Paul A Vixie [vixie@vix.com](mailto:vixie@vix.com) TrueTime GPS driver, generic

TrueTime clock driver
56. [60]Ulrich Windl [Ulrich.Windl@rz.uni-regensburg.de](mailto:Ulrich.Windl@rz.uni-regensburg.de) corrected and validated HTML documents according to the HTML DTD

## References

1. mailto:\%20takao_abe@xurb.jp
2. mailto:\%20mark_andrews@isc.org
3. mailto:\%20altmeier@atlsoft.de
4. mailto:\%20vbais@mailman1.intel.co
5. mailto:\%20kirkwood@ striderfm.intel.com
6. mailto:\%20michael.barone@lmco.com
7. mailto:\%20karl@owl.HQ.ileaf.com
8. mailto:\%20greg.brackley@bigfoot.com
9. mailto:\%20Marc.Brett@westgeo.com
10. mailto:\%20Piete.Brooks@cl.cam.ac.uk
11. mailto:\%20nelson@bolyard.me
12. mailto:\%20Jean-Francois.Boudreault@viagenie.qc.ca
13. mailto:\%20reg@dwf.com
14. mailto:\%20clift@ml.csiro.au
15. mailto:casey@csc.co.za
16. mailto:\%20Sven_Dietrich@trimble.COM
17. mailto:\%20dundas@salt.jpl.nasa.gov
18. mailto:\%20duwe@immd4.informatik.uni-erlangen.de
19. mailto:\%20dennis@mrbill.canet.ca
20. mailto:\%20jhay@icomtek.csir.co.za
21. mailto:\%20davehart@davehart.com
22. mailto:\%20neoclock4x @linum.com
23. mailto:\%20glenn@herald.usask.ca
24. mailto:\%20iglesias@uci.edu
25. mailto:\%20jagubox.gsfc.nasa.gov
26. mailto:\%20jbj@chatham.usdesign.com
27. mailto:Hans.Lambermont@nl.origin-it.com
28. mailto:H.Lambermont@chello.nl
29. mailto:\%20phk@FreeBSD.ORG
30. http://www4.informatik.uni-erlangen.de/\~kardel
31. mailto:\%20kardel(at)ntp(dot)org
32. mailto:\%20jones@hermes.chpc.utexas.edu
33. mailto:\%20dkatz@cisco.com
34. mailto:\%20leres@ee.lbl.gov
35. mailto:\%20lindholm@ucs.ubc.ca
36. mailto:\%20louie@ni.umd.edu
37. mailto:\%20thorinn@diku.dk
38. mailto:\%20mayer@ntp.org
39. mailto:\%20mills@udel.edu
40. mailto:\%20moeller@gwdgv1.dnet.gwdg.de
41. mailto:\%20mogul@pa.dec.com
42. mailto:\%20tmoore@fievel.daytonoh.ncr.com
43. mailto:\%20kamal@whence.com
44. mailto:\%20derek@toybox.demon.co.uk
45. mailto:\%20d@hd.org
46. mailto:\%20neal@ntp.org
47. mailto:\%20Rainer.Pruy@informatik.uni-erlangen.de
48. mailto:\%20dirce@zk3.dec.com
49. mailto:\%20wsanchez@apple.com
50. mailto:\%20mrapple@quack.kfu.com
51. mailto:\%20jack@innovativeinternet.com
52. mailto:\%20schnitz@unipress.com
53. mailto:\%20shields@tembel.org
54. mailto:\%20pebbles.jpl.nasa.gov
55. mailto:\%20harlan@pfcs.com
56. mailto:\%20ken@sdd.hp.com
57. mailto:\%20ajit@ee.udel.edu
58. mailto:\%20tsuruoka@nc.fukuoka-u.ac.jp
59. mailto:\%20vixie@vix.com
60. mailto:\%20Ulrich.Windl@rz.uni-regensburg.de

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### 1.184 numactl 2.0.9 :7.el7

### 1.185 oniguruma 5.9.5 :3.el7

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### 1.186 open-vm-tools 10.1.10 :3.el7_5.1

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### 1.188 openssh 7.4p1 :16.el7

### 1.188.1 Available under license :

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-mode2016-12-19 05:59:41.000000000 +0100
+++ openssh-7.4p1/sftp-server.82017-02-09 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-mode2017-02-09 10:22:36.498019921 +0100
+++ openssh-7.4p1/sftp-server.c2017-02-09 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 $==1)\{\quad / *$ Force perm if -m is set */
+ mode $=$ permforcemode;
+old_umask $=\operatorname{umask}(0) ; / *$ 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] "
"[-1 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 = pwcopy(user_pw);
while (!skipargs \&\& (ch = getopt(argc, argv,
- "d:f:1:P:p:Q:u:cehR")) !=-1) \{
+ "d:f:1: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 $=\operatorname{strtol}($ optarg, $\& \mathrm{cp}, 8)$;
+if (permforcemode $<0 \|$ permforcemode $>0777 \|$
$+\quad$ *cp != ' 10 ' || (permforcemode $==0$ \&\&
+ errno !=0))
+fatal("Invalid file mode $\backslash " \% s \backslash "$ ", optarg);
+break;
case ' h ':
default:
sftp_server_usage();
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```
#ifndef HAVE_SETRESGID
intsetresgid(gid_t, gid_t, gid_t);
#endif
#ifndef HAVE SETRESUID
intsetresuid(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;
shortevents;
shortrevents;
} pollfd_t;
typedef unsigned intnfds_t;
```

```
#definePOLLIN0x0001
#definePOLLOUT0x0004
#definePOLLERR0x0008
#definePOLLHUP0x0010
#definePOLLNVAL0x0020
#if 0
/* the following are currently not implemented */
#definePOLLPRIOx0002
#definePOLLRDNORM0x0040
#define POLLNORMPOLLRDNORM
#define POLLWRNORM POLLOUT
#definePOLLRDBAND0x0080
#definePOLLWRBAND0x0100
#endif
#define INFTIM(-1)/* not standard */
int poll(struct pollfd *, nfds_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 potental 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 WCOREFLAG0x80
#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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#if !defined(HAVE_POLL) && !defined(HAVE_POLL_H)
#ifndef_COMPAT_POLL_H_
#define_COMPAT_POLL_H_
```

typedef struct pollfd \{
int fd;
shortevents;
shortrevents;
\} pollfd_t;
typedef unsigned intnfds_t;
\#definePOLLIN0x0001
\#definePOLLOUT0x0004
\#definePOLLERR0x0008
\#if 0
/* the following are currently not implemented */
\#definePOLLPRI0x0002
\#definePOLLHUP0x0010
\#definePOLLNVAL0x0020
\#definePOLLRDNORM0x0040
\#define POLLNORMPOLLRDNORM
\#define POLLWRNORM POLLOUT
\#definePOLLRDBAND0x0080
\#definePOLLWRBAND0x0100
\#endif
\#define $\operatorname{INFTIM}(-1) / *$ 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 potental 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 WCOREFLAG0x80
#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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*
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*
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### 1.189 openssl 1.0.2k :12.el7

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### 1.195 pciutils 3.5.1 :3.el7

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## THE BASIC LIBRARY FUNCTIONS

Written by: Philip Hazel
Email local part: ph10

Email domain: cam.ac.uk

University of Cambridge Computing Service, Cambridge, England.

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From: Father Chrysostomos [sprout@cpan.org](mailto:sprout@cpan.org)
Date: Sun, 23 Sep 2012 12:42:15-0700
Subject: $[$ PATCH $]=?$ UTF-8?q?Don=E2=80=99t=20leak=20if=20hh=20copying=20dies?= MIME-Version: 1.0

Content-Type: text/plain; charset=UTF-8
Content-Transfer-Encoding: 8bit

When $\%^{\wedge} \mathrm{H}$ is copied on entering a new scope, if it happens to have been tied it can die. This was resulting in leaks, because no protections were added to handle that case.

The two things that were leaking were the new hash in hv_copy_hints_hv and the new value (for an element) in newSVsv.

By fixing newSVsv itself, this also fixes any potential leaks when other pieces of code call newSVsv on explosive values.

Petr Pisar: Ported to 5.16.3
hv.c | 6 ++++++
sv.c | 7 ++++---
t/op/svleak.t | 22 +++++++++++++++++++++++-
3 files changed, 31 insertions(+), 4 deletions(-)
diff --git a/hv.c b/hv.c
index 3c35341..29d6352 100644
--- a/hv.c
+++ b/hv.c
@ @ -1440,6 +1440,9 @ @ Perl_hv_copy_hints_hv(pTHX_HV *const ohv)
const I32 riter = HvRITER_get(ohv);
HE * const eiter $=$ HvEITER_get(ohv);
+ENTER;
+SAVEFREESV(hv);
$+$
while (hv_max \&\& hv_max + $1>=$ hv_fill * 2)
hv_max = hv_max / 2;
HvMAX(hv) = hv_max;
@ @ -1461,6 +1464,9 @ @ Perl_hv_copy_hints_hv(pTHX_HV *const ohv)
\}
HvRITER_set(ohv, riter);
HvEITER_set(ohv, eiter);
$+$

```
+SvREFCNT_inc_simple_void_NN(hv);
+LEAVE;
    }
    hv_magic(hv, NULL, PERL_MAGIC_hints);
    return hv;
diff --git a/sv.c b/sv.c
index a43feac..597d71b 100644
--- a/sv.c
+++ b/sv.c
@ @ -8764,11 +8764,12 @ @ Perl_newSVsv(pTHX_register SV *const old)
Perl_ck_warner_d(aTHX_packWARN(WARN_INTERNAL), "semi-panic: attempt to dup freed string");
return NULL;
    }
+ /* Do this here, otherwise we leak the new SV if this croaks. */
+ SvGETMAGIC(old);
    new_SV(sv);
- /* SV_GMAGIC is the default for sv_setv()
- SV_NOSTEAL prevents TEMP buffers being, well, stolen, and saves games
+ /* SV_NOSTEAL prevents TEMP buffers being, well, stolen, and saves games
        with SvTEMP_off and SvTEMP_on round a call to sv_setsv. */
- sv_setsv_flags(sv, old, SV_GMAGIC|SV_NOSTEAL);
+ sv_setsv_flags(sv, old, SV_NOSTEAL);
    return sv;
}
diff --git a/t/op/svleak.t b/t/op/svleak.t
index 2f09af3..011c184 100644
--- a/t/op/svleak.t
+++ b/t/op/svleak.t
@@ -13,7+13,7 @ @ BEGIN {
or skip_all("XS::APItest not available");
}
-plan tests => 23;
+plan tests => 24;
# run some code N times. If the number of SVs at the end of loop N is
# greater than (N-1)*delta at the end of loop 1, we've got a leak
@ @ -176,3+176,23 @ @ leak(2, 0, sub {
    each %$h;
    undef $h;
}, 'tied hash iteration does not leak');
+
+# [perl #107000]
+package hhtie {
+ sub TIEHASH { bless [] }
+ sub STORE { $_[0][0]{$_[1]} = $_[2] }
+ sub FETCH { die if $explosive; $_[0][0]{$_[1]} }
```

```
+ sub FIRSTKEY { keys %{$_[0][0]}; each %{$_[0][0]} }
+ sub NEXTKEY { each %{$_[0][0]} }
+}
+leak(2,!!$Config{mad}, sub {
+ eval q
+ BEGIN {
+ $hhtie::explosive = 0;
+ tie %^H, hhtie;
+ $^H{foo} = bar;
+ $hhtie::explosive = 1;
+ }
+{1;}
+ `;
+}, 'hint-hash copying does not leak');
1.8.1.4
```

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

```
use strict;
use lib 't/lib';
use MBTest;
use DistGen;
plan 'no_plan';
# Ensure any Module::Build modules are loaded from correct directory
blib_load('Module::Build');
#------------------------------------------------------------------------------
# Create test distribution
#----------------------------------------------------------------------------
{
my $dist = DistGen->new(
    name => 'Simple::Name',
    version => '0.01',
    license => 'perl'
);
$dist->regen;
$dist->chdir_in;
my $mb = $dist->new_from_context();
isa_ok( $mb, "Module::Build" );
is( $mb->license, 'perl',
    "license 'perl' is valid"
);
my $meta = $mb->get_metadata( fatal => 0 );
is( $meta-> {license} => 'perl', "META license will be 'perl'" );
is( $meta-> {resources}{license}, "http://dev.perl.org/licenses/",
    "META license URL is correct"
);
}
{
my $dist = DistGen->new(
    name => 'Simple::Name',
    version => '0.01',
    license => 'VaporWare'
);
```

```
$dist->regen;
$dist->chdir_in;
my $mb = $dist->new_from_context();
isa_ok( $mb, "Module::Build" );
is( $mb->license, 'VaporWare',
    "license 'VaporWare' is valid"
);
my $meta = $mb->get_metadata( fatal => 0 );
is( $meta-> {license} => 'unrestricted', "META license will be 'unrestricted'" );
is( $meta-> {resources} {license}, "http://example.com/vaporware/",
    "META license URL is correct"
);
}
# Test with alpha number
# vim:ts=2:sw=2:et:sta:sts=2
This module is free software; you can redistribute it and/or
modify it under the same terms as Perl itself.
abstract: 'Build and install Perl modules'
author:
- 'Ken Williams <kwilliams@cpan.org>'
- "Development questions, bug reports, and patches should be sent to thelnModule-Build mailing list at <module-
build@ perl.org>."
build_requires:
File::Temp: 0.15
Test::Harness: 3.16
Test::More: 0.49
generated_by: 'Module::Build version 0.3608'
license: gpl
meta-spec:
url: http://module-build.sourceforge.net/META-spec-v1.4.html
version: 1.4
name: Module-Build
resources:
MailingList: mailto:module-build@ perl.org
license: http://dev.perl.org/licenses/
repository: http://github.com/dagolden/module-build/
version: 3
```


### 1.198 perl-Carp 1.26 :244.el7

### 1.198.1 Available under license :

### 1.199 perl-constant 1.27 :2.el7

### 1.199.1 Available under license :

From RPM File Metadata:GPL+ or Artistic

### 1.200 perl-Encode 2.51 :7.el7

### 1.200.1 Available under license :

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### 1.201 perl-Error 0.17020 :2.el7

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### 1.202 perl-Exporter 5.68 :3.el7

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### 1.203 perl-File-Path 2.09 :2.el7

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### 1.204 perl-File-Temp 0.23.01 :3.el7

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Message-ID: [rt-4.0.18-2172-1384790768-1347.90483-6-0@rt.cpan.org](mailto:rt-4.0.18-2172-1384790768-1347.90483-6-0@rt.cpan.org)
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MIME-Version: 1.0
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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.)

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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.

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

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.
6. As an exception to the Sections above, you may also compile or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit
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### 1.229 postfix 2.10.1 :6.el7

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Included for the use of the fix_strcasecmp.c module which works around a Solaris problem.

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A C-program for MT19937, with initialization improved 2002/1/26.
Coded by Takuji Nishimura and Makoto Matsumoto.

Before using, initialize the state by using init_genrand(seed)
or init_by_array(init_key, key_length).

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The :mod:`socket` module uses the functions, :func:`getaddrinfo`, and :func:'getnameinfo', which are coded in separate source files from the WIDE Project, http://www.wide.ad.jp/. ::

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L. Peter Deutsch
ghost@aladdin.com

Independent implementation of MD5 (RFC 1321).

This code implements the MD5 Algorithm defined in RFC 1321, whose text is available at
http://www.ietf.org/rfc/rfc1321.txt
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The original and principal author of md5.h is L. Peter Deutsch [ghost@aladdin.com](mailto:ghost@aladdin.com). Other authors are noted in the change history that follows (in reverse chronological order):

2002-04-13 lpd Removed support for non-ANSI compilers; removed references to Ghostscript; clarified derivation from RFC 1321; now handles byte order either statically or dynamically. 1999-11-04 lpd Edited comments slightly for automatic TOC extraction. 1999-10-18 lpd Fixed typo in header comment (ansi2knr rather than md5); added conditionalization for $\mathrm{C}++$ compilation from Martin Purschke [purschke@bnl.gov](mailto:purschke@bnl.gov). 1999-05-03 lpd Original version.

Asynchronous socket services

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UUencode and UUdecode functions

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Modified by Jack Jansen, CWI, July 1995:

- Use binascii module to do the actual line-by-line conversion between ascii and binary. This results in a 1000 -fold speedup. The C version is still 5 times faster, though.
- Arguments more compliant with Python standard

XML Remote Procedure Calls

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strtod and dtoa

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### 1.242 python-chardet 2.2.1 :1.el7_1

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### 1.243 python-configobj 4.7 .2 :7.el7

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Hi Mark,

I am the new maintainer of the Python Cryptography Toolkit, and I am working on a new release at http://www.pycrypto.org/.

People often ask me what license PyCrypto is covered by, if it's GPL-compatible, etc. Right now, I'm not really sure what to tell them. The text in the current LICENSE file (quoted below) is not entirely clear on the point of whether distributing modified versions is allowed. (It says "distribute and use", but not "modify".)


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for [dwon@rivest.dlitz.net](mailto:dwon@rivest.dlitz.net); Mon, 20 Apr 2009 19:25:37-0400 (EDT)
Received: from localhost (localhost [127.0.0.1])
by goedel.dlitz.net (Postfix) with QMQP id DE41F4025F
for [dwon@rivest.dlitz.net](mailto:dwon@rivest.dlitz.net); Mon, 20 Apr 2009 17:25:36-0600 (CST)
Received: (vmailmgr-postfix 7604 invoked by uid 1003); 20 Apr 2009 17:25:36-0600
Delivered-To: m-dlitz-dlitz@dlitz.net
Received-SPF: none (yahoo.com: No applicable sender policy available) receiver=goedel.dlitz.net; identity=mfrom; envelope-from="markmoraes@yahoo.com"; helo=web32405.mail.mud.yahoo.com; client-ip=68.142.207.198
Received: from web32405.mail.mud.yahoo.com (web32405.mail.mud.yahoo.com [68.142.207.198])
by goedel.dlitz.net (Postfix) with SMTP id B5EAF401EE
for [dlitz@dlitz.net](mailto:dlitz@dlitz.net); Mon, 20 Apr 2009 17:25:36-0600 (CST)
Received: (qmail 34697 invoked by uid 60001); 20 Apr 2009 23:25:33-0000

bh=OvxqbYnCg7R6tUN3YmlgFURM3CuHh1JeHyXhDzkaThU=; h=Message-ID:X-YMail-OSG:Received:X-
Mailer:Date:From:Reply-To:Subject:To:MIME-Version:Content-Type;
b=F2h2bFzpQxyKFZ8BhenniyupGw4Zvlekb9BSk91qKU+51W/TkSGBij5YZIhkLQdkQk0qLz5f4g8dT6bOME3s
EY1j10hlx0K0u2UD0yoYTINBCmsdMQRoJ7ph9bmt+p/EJhRpe+FiV6aoLV0FONWiHfGDghPT1dulWXfVTqgB
$2 \mathrm{aU}=$
DomainKey-Signature:a=rsa-sha1; q=dns; c=nofws;
s=s1024; d=yahoo.com;
h=Message-ID:X-YMail-OSG:Received:X-Mailer:Date:From:Reply-To:Subject:To:MIME-Version:Content-Type; $\mathrm{b}=\mathrm{r} 6 \mathrm{RShFF} 5 \mathrm{VzQLg}+9 \mathrm{tcn} 1 x$ Kuo4Rs4IVvXF6fdqOpQrMyRCxeFooebhuTE35grGqlomOJLwM0+mZwRb6rGkDj7 63caOAlo8Ect/qlADW5izXfmVQaDchTbTqmpsJBmQnTQs9iZ+InrG+3UIwtUSGfX7fhEWmI9P/HBzxf9Wp4b3j eo=;
Message-ID: [551071.34569.qm@web32405.mail.mud.yahoo.com](mailto:551071.34569.qm@web32405.mail.mud.yahoo.com)
X-YMail-OSG:
FrK8aWMVM1mFJtLpMGbUbCLjbUQC.i.JkIAKUHSFsFn7t9PbtewAewXJ2uhZGCOlGCX6oVnG3u.CgqzAffY 4vZSnfTT8wnCkzZNZ_g6k.XUc3ipo_6e.92TX14p8MxDGAf1tpNF5nXPwcQ7aREs7jGoWWVJYVytp50clsUFS Hzf7Zbpa8P1Yoe_xSzf3OAgRSh5fCrbFCC8sHPCuwrL3YhasbtHmkWffteSS.x6gEcBaxf03oz4FeDb5mpJ54g11X onq8h_TmzX9g84Bin9g_3fJ4WSXm6g6.tohLyfXcUxoz4j036wyWpTKPrWEzIUQaN83Sv_bj_Ghxw--
Received: from [69.124.140.74] by web32405.mail.mud.yahoo.com via HTTP; Mon, 20 Apr 2009 16:25:32 PDT X-Mailer: YahooMailClassic/5.2.15 YahooMailWebService/0.7.289.1
Date: Mon, 20 Apr 2009 16:25:32-0700 (PDT)
From: M Moraes [markmoraes@yahoo.com](mailto:markmoraes@yahoo.com)
Reply-To: moraes@computer.org
Subject: Re: PyCrypto license clarification
To: "Dwayne C. Litzenberger" [dlitz@dlitz.net](mailto:dlitz@dlitz.net)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Status: RO
X-Status: A
Content-Length: 3222

Hi Dwayne.

Sure, the new license sounds fine for all my contributions to PyCrypto, and thanks for taking it on. My apologies for not responding to your previous e-mail.

Regards,
Mark.
--- On Sat, 4/18/09, Dwayne C. Litzenberger [dlitz@dlitz.net](mailto:dlitz@dlitz.net) wrote:
> From: Dwayne C. Litzenberger [dlitz@dlitz.net](mailto:dlitz@dlitz.net)
> Subject: PyCrypto license clarification
> To: "Mark Moraes" [moraes@computer.org](mailto:moraes@computer.org)
> Date: Saturday, April 18, 2009, 9:14 AM
> Hi Mark,
>
> I am the new maintainer of the Python Cryptography Toolkit,
$>$ and I am
> working on a new release at http://www.pycrypto.org/.
$>$
$>$ People often ask me what license PyCrypto is covered by, if
$>$ it's
$>$ GPL-compatible, etc. Right now, I'm not really sure
$>$ what to tell them.
$>$ The text in the current LICENSE file (quoted below) is not
$>$ entirely clear
$>$ on the point of whether distributing modified versions is
$>$ allowed. (It
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>
>
> =========================================================================1
> Distribute and use freely; there are
> no restrictions on further
> dissemination and usage except those
> imposed by the laws of your
$>\quad$ country of residence. This
$>$ software is provided "as is" without
$>\quad$ warranty of fitness for use or
> suitability for any purpose, express
$>\quad$ or implied. Use at your own risk or
$>$ not at all.
$>$

$>$
$>$ Incorporating the code into commercial
$>$ products is permitted; you do
$>$ not have to make source available or
> contribute your changes back
$>\quad$ (though that would be nice).
$>$
> --amk
$>$
$>$
> (www.amk.ca)
$>$
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$>$ Below, I have quoted a public domain dedication that was
$>$ recommended in
> _Intellectual Property and Open Source: A Practical Guide
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> M. Kuchling, Robey
> Pointer, Wim Lewis, Jeethu Rao, and Barry Warsaw, and they
$>$ have all
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## $>$

$>$ I understand that you have made contributions to
$>$ PyCrypto. May I, on your
$>$ behalf, dedicate to the public domain all your
$>$ contributions to PyCrypto,
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$>$
>
$>$
> The contents of this file are
$>$ dedicated to the public domain. To the
$>$ extent that dedication to the public
$>$ domain is not available, everyone
> is granted a worldwide, perpetual,
> royalty-free, non-exclusive license
$>$ to exercise all rights associated with
$>$ the contents of this file for
$>$ any purpose whatsoever. No
$>$ rights are reserved.
$>$
> =====================================================================12
>
$>$ Regards,
$>$ - Dwayne
$>$
> -- Dwayne C. Litzenberger [dlitz@dlitz.net](mailto:dlitz@dlitz.net)
> Key-signing key - 19E1
$>$ 1FE8 B3CF F273 ED17 4A24 928C EC13 39C2 5CF7
>

From dlitz@dlitz.net Mon Apr 20 20:01:37 2009
Date: Mon, 20 Apr 2009 20:01:37-0400
From: "Dwayne C. Litzenberger" [dlitz@dlitz.net](mailto:dlitz@dlitz.net)
To: moraes@computer.org
Subject: Re: PyCrypto license clarification
Message-ID: [20090421000137.GA29012@rivest.dlitz.net](mailto:20090421000137.GA29012@rivest.dlitz.net)
References: [551071.34569.qm@web32405.mail.mud.yahoo.com](mailto:551071.34569.qm@web32405.mail.mud.yahoo.com)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Disposition: inline
In-Reply-To: [551071.34569.qm@web32405.mail.mud.yahoo.com](mailto:551071.34569.qm@web32405.mail.mud.yahoo.com)
X-Primary-Address: dlitz@dlitz.net
X-Homepage: http://www.dlitz.net/
X-OpenPGP: url=http://www.dlitz.net/go/gpgkey/;
$\mathrm{id}=19 \mathrm{E} 11 \mathrm{FE} 8 \mathrm{~B} 3 \mathrm{CFF} 273 \mathrm{ED} 174 \mathrm{~A} 24928 \mathrm{CEC} 1339 \mathrm{C} 25 \mathrm{CF} 7$ (only for key signing);
preference=unprotected
X-OpenPGP: url=http://www.dlitz.net/go/gpgkey/;
id=4B2AFD82FC7D9E3838D9179F1C11B877E7804B45 (2008);
preference=signencrypt
User-Agent: Mutt/1.5.16 (2007-06-11)
Status: RO
Content-Length: 3677

Thanks a lot, and don't worry about not responding to previous emails. I
do that too much myself. :)

On Mon, Apr 20, 2009 at 04:25:32PM -0700, M Moraes wrote:
$>$
>Hi Dwayne.
>
>Sure, the new license sounds fine for all my contributions to PyCrypto, and thanks for taking it on. My apologies for not responding to your previous e-mail.
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>>
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$\gg===================================================================1$
>> Distribute and use freely; there are
>> no restrictions on further
>> dissemination and usage except those
>> imposed by the laws of your
>> country of residence. This
>> software is provided "as is" without
>> warranty of fitness for use or
>> suitability for any purpose, express
>> or implied. Use at your own risk or
>> not at all.
>>
>> =======================================================================1
>>
>> Incorporating the code into commercial
>> products is permitted; you do
>> not have to make source available or
>> contribute your changes back
>> (though that would be nice).
>>
>> --amk
>>
>>
>> (www.amk.ca)
>>
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>>
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>> The contents of this file are
>> dedicated to the public domain. To the
$\gg$ extent that dedication to the public
> domain is not available, everyone
>> is granted a worldwide, perpetual,

```
>> royalty-free, non-exclusive license
>> to exercise all rights associated with
>> the contents of this file for
>> any purpose whatsoever. No
>> rights are reserved.
>>
>> ============================================================================
>>
>> Regards,
>> - Dwayne
>>
>> -- Dwayne C. Litzenberger <dlitz@dlitz.net>
>> Key-signing key - 19E1
>> 1FE8 B3CF F273 ED17 4A24 928C EC13 39C2 5CF7
>>
>
Dwayne C. Litzenberger <dlitz@dlitz.net>
Key-signing key - 19E1 1FE8 B3CF F273 ED17 4A24 928C EC13 39C2 5CF7
Annual key (2008) - 4B2A FD82 FC7D 9E38 38D9 179F 1C11 B877 E780 4B45
From dlitz@dlitz.net Sat Feb 28 23:24:14 2009
Date: Sat, 28 Feb 2009 23:24:14-0500
From: "Dwayne C. Litzenberger" <dlitz@dlitz.net>
To: Jeethu Rao <jeethurao@ gmail.com>
Subject: PyCrypto license clarification
Message-ID: <20090301042414.GA15122@rivest.dlitz.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Disposition: inline
User-Agent: Mutt/1.5.16 (2007-06-11)
Status: RO
Content-Length: 2513
Hi Jeethu,
I am the new maintainer of the Python Cryptography Toolkit, and I am working on a new release at http://www.pycrypto.org/.
People often ask me what license PyCrypto is covered by, if it's
GPL-compatible, etc. Right now, I'm not really sure what to tell them. The text in the current LICENSE file (quoted below) is not entirely clear on the point of whether distributing modified versions is allowed. (It says "distribute and use", but not "modify".)
```

Distribute and use freely; there are no restrictions on further dissemination and usage except those imposed by the laws of your
country of residence. This software is provided "as is" without warranty of fitness for use or suitability for any purpose, express or implied. Use at your own risk or not at all.

Incorporating the code into commercial products is permitted; you do not have to make source available or contribute your changes back (though that would be nice).
--amk (www.amk.ca)

For the next PyCrypto release, I would like to take steps to move toward a clearer licensing regime. I am asking as many copyright holders as I can find if I can release PyCrypto under something clearer and more standard. Below, I have quoted a public domain dedication that was recommended in _Intellectual Property and Open Source: A Practical Guide to Protecting Code_, by Van Lindberg. I have already contacted A. M. Kuchling, Robey Pointer, and Wim Lewis, and they have all approved the following text for their contributions.

I understand that you have made contributions to PyCrypto. May I, on your behalf, dedicate to the public domain all your contributions to PyCrypto, with the following notice?

The contents of this file are dedicated to the public domain. To the extent that dedication to the public domain is not available, everyone is granted a worldwide, perpetual, royalty-free, non-exclusive license to exercise all rights associated with the contents of this file for any purpose whatsoever. No rights are reserved.

Regards,

- Dwayne

Dwayne C. Litzenberger [dlitz@dlitz.net](mailto:dlitz@dlitz.net)
Key-signing key - 19E1 1FE8 B3CF F273 ED17 4A24 928C EC13 39C2 5CF7

From jeethurao@gmail.com Sun Mar 8 17:28:16 2009
X-Maildir-Dup-Checked: Yes
Return-Path: [jeethurao@gmail.com](mailto:jeethurao@gmail.com)
X-Original-To: dwon@rivest.dlitz.net
Delivered-To: dwon@rivest.dlitz.net
Received: from goedel.dlitz.net (unknown [10.159.255.6])
by rivest.dlitz.net (Postfix) with ESMTP id 0CC83515D9
for [dwon@rivest.dlitz.net](mailto:dwon@rivest.dlitz.net); Sun, 8 Mar 2009 17:28:16-0400 (EDT)
Received: from localhost (localhost [127.0.0.1])
by goedel.dlitz.net (Postfix) with QMQP id 4E58F450CB
for [dwon@rivest.dlitz.net](mailto:dwon@rivest.dlitz.net); Sun, 8 Mar 2009 15:28:15-0600 (CST)
Received: (vmailmgr-postfix 5011 invoked by uid 1003); 8 Mar 2009 15:28:15-0600
Delivered-To: m-dlitz-dlitz@dlitz.net
Received-SPF: pass (gmail.com ... _spf.google.com: 209.85.198.249 is authorized to use 'jeethurao@gmail.com' in 'mfrom' identity (mechanism 'ip4:209.85.128.0/17' matched)) receiver=goedel.dlitz.net; identity=mfrom; envelopefrom="jeethurao@gmail.com"; helo=rv-out-0708.google.com; client-ip=209.85.198.249
Received: from rv-out-0708.google.com (unknown [209.85.198.249])
by goedel.dlitz.net (Postfix) with ESMTP id 3C097449E7
for [dlitz@dlitz.net](mailto:dlitz@dlitz.net); Sun, 8 Mar 2009 15:28:12-0600 (CST)
Received: by rv-out-0708.google.com with SMTP id k29so1252333rvb. 26
for [dlitz@dlitz.net](mailto:dlitz@dlitz.net); Sun, 08 Mar 2009 14:27:56-0700 (PDT)
DKIM-Signature: v=1; a=rsa-sha256; c=relaxed/relaxed;
d=gmail.com; s=gamma;
$\mathrm{h}=$ domainkey-signature:mime-version:received:in-reply-to:references
:date:message-id:subject:from:to:content-type;
bh=YWy9U32WCU/ksRqukHwaOZyJQBUs4Yvt5mI20U6mI/g=;
$\mathrm{b}=\mathrm{oMjI} 221 I x Y i J K g e 2 z N J W 3 r R i U i 9 L q F X m e y 5 W p 0 p L I t u N F+X 3 d u y f h o p T u B A K w 7 M w V Y$
B5E6VQuGVEyzBbNsctyVgq6DhQiQtouCLZymSViobmuDmKn5DtUKoxpDk0xCxQmHYaas L9/A6D3/J66kKrNBgX9mc0GPcZTviVFYkPR0Q=
DomainKey-Signature: a=rsa-sha1; c=nofws;
d=gmail.com; s=gamma;
h=mime-version:in-reply-to:references:date:message-id:subject:from:to
:content-type;
b=Ym7CStuDEfJKay1AJyWZkZmJA11nTcwCG6akBHAXLld8ht6PFcmlsffzZG8hJCIVJ8
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MIME-Version: 1.0
Received: by 10.141.176.13 with SMTP id d13mr2656028rvp.231.1236547674677;
Sun, 08 Mar 2009 14:27:54-0700 (PDT)
In-Reply-To: [20090301042414.GA15122@rivest.dlitz.net](mailto:20090301042414.GA15122@rivest.dlitz.net)
References: [20090301042414.GA15122@rivest.dlitz.net](mailto:20090301042414.GA15122@rivest.dlitz.net)
Date: Mon, 9 Mar 2009 02:57:54 +0530
Message-ID: <e3c0ddba0903081427p3a7b1058g417dd8624df68d6d@ mail.gmail.com>
Subject: Re: PyCrypto license clarification
From: Jeethu Rao <jeethurao @ gmail.com>
To: "Dwayne C. Litzenberger" [dlitz@dlitz.net](mailto:dlitz@dlitz.net)
Content-Type: multipart/alternative; boundary=000e0cd209d0e5a3d40464a23054
Status: RO
Content-Length: 7668
--000e0cd209d0e5a3d40464a23054
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Hi Dwayne,My contribution to pycrypto are very very minimal (The sha256
module, IIRC).
I'd be fine with the public domain license for PyCrypto.

## Jeethu Rao

PS: Apologies for the delay in my response.
I don't really check this email address all that often,
please direct any further correspondence to jeethu@jeethurao.com

On Sun, Mar 1, 2009 at 9:54 AM, Dwayne C. Litzenberger [dlitz@dlitz.net](mailto:dlitz@dlitz.net)wrote:

```
> Hi Jeethu,
>
> I am the new maintainer of the Python Cryptography Toolkit, and I am
> working on a new release at http://www.pycrypto.org/.
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$>$ any purpose whatsoever. No rights are reserved.

```
>
> Regards,
> - Dwayne
>
>-
> Dwayne C. Litzenberger <dlitz@ dlitz.net>
\ Key-signing key - 19E1 1FE8 B3CF F273 ED17 4A24 928C EC13 39C2 5CF7
>
```

--

Jeethu Rao
--000e0cd209d0e5a3d40464a23054
Content-Type: text/html; charset=ISO-8859-1
Content-Transfer-Encoding: quoted-printable

Hi Dwayne, <div>My contribution to pycrypto are very very minimal (The sha25= 6 module, IIRC). $</ \mathrm{div}><\mathrm{div}>$ I\&\#39; d be fine with the public domain license $\mathrm{f}=$ or PyCrypto.</div><div><br></div><div>Jeethu Rao</div><div>PS: Apologies fo= $r$ the delay in my response. $=$ A0</div> <div>I don\&\#39;t really check this email address all that often,</div><div>= please direct any further correspondence to <a href=3D"mailto:jeethu@jeethu= rao.com">jeethu@jeethurao.com</a><br><div><br><div class=3D"gmail_quote">On= Sun, Mar 1, 2009 at 9:54 AM, Dwayne C. Litzenberger <span dir=3D"ltr"><= <a href=3D"mailto:dlitz@dlitz.net">dlitz@dlitz.net</a>></span> wrote:<br= $>$
<blockquote class=3D"gmail_quote" style=3D"margin:0 00 .8ex;border-left:1p= x \#ccc solid;padding-left:1ex;">Hi Jeethu,<br> <br>
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<br>
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```
<br>
=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=
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$=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=$ $=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}<\mathrm{br}>$
Distribute and use freely; there are no restrictions on further<br>
dissemination and usage except those imposed by the laws of your<br> country of residence. $=$ A0This software is provided "as is" withou= t<br>
warranty of fitness for use or suitability for any purpose, express<br> or implied. Use at your own risk or not at all.<br>
$=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=$
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<br>
Incorporating the code into commercial products is permitted; you do<br>
not have to make source available or contribute your changes back<br>
(though that would be nice). $\langle b r>$
<br>
$--\mathrm{amk}=\mathrm{A} 0=\mathrm{A} 0=\mathrm{A} 0=\mathrm{A} 0=\mathrm{A} 0=\mathrm{A} 0=\mathrm{A} 0=\mathrm{A} 0=\mathrm{A} 0=\mathrm{A} 0=\mathrm{A} 0=\mathrm{A} 0=\mathrm{A} 0=\mathrm{A} 0=\mathrm{A} 0=\mathrm{A} 0=\mathrm{A} 0=$
$=\mathrm{A} 0=\mathrm{A} 0=\mathrm{A} 0=\mathrm{A} 0=\mathrm{A} 0=\mathrm{A} 0=\mathrm{A} 0=\mathrm{A} 0=\mathrm{A} 0(<\mathrm{a}$ href $=3 \mathrm{D} " \mathrm{http}: / /$ www.amk.ca" target $=3 \mathrm{D}=$
"_blank">www.amk.ca</a>)<br>
<br>
For the next PyCrypto release, I would like to take steps to move toward $\mathrm{a}=$ clearer licensing regime. $=\mathrm{A} 0 \mathrm{I}$ am asking as many copyright holders as I can= find if I can release PyCrypto under something clearer and more standard. = $=A 0 B e l o w$, I have quoted a public domain dedication that was recommended in $=$ _Intellectual Property and Open Source: A Practical Guide to Protecting Cod= $\mathrm{e}_{-}$, by Van Lindberg. =A0I have already contacted A. M. Kuchling, Robey Poin= ter, and Wim Lewis, and they have all approved the following text for their= contributions. <br>
<br>
I understand that you have made contributions to PyCrypto. =A0May I, on you=
$r$ behalf, dedicate to the public domain all your contributions to PyCrypto,=
with the following notice? <br>
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$=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=$
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The contents of this file are dedicated to the public domain. =A0To the $<\mathrm{br}>$
extent that dedication to the public domain is not available, everyone<br>
is granted a worldwide, perpetual, royalty-free, non-exclusive license<br>
to exercise all rights associated with the contents of this file for<br>
any purpose whatsoever. $=\mathrm{A} 0$ No rights are reserved. $<\mathrm{br}>$
$=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=$
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<br>
Regards, <br>

- Dwayne<br><font color=3D"\#888888">


## <br>

-- <br>
Dwayne C. Litzenberger <<a href=3D"mailto:dlitz@dlitz.net" target=3D"_bl= ank">dlitz@dlitz.net</a>><br>
$=\mathrm{A} 0=\mathrm{A} 0=\mathrm{A} 0$ Key-signing key $=\mathrm{A} 0-19 \mathrm{E} 11 \mathrm{FE} 8 \mathrm{~B} 3 \mathrm{CF}$ F273 ED17 =A04A24 928C EC1= 3 39C2 5CF7<br>
</font></blockquote></div><br><br clear=3D"all"><br>-- <br>Jeethu Rao<br> </div></div>
--000e0cd209d0e5a3d40464a23054--
Date: Sun, 23 Nov 2008 15:54:35-0800
From: Wim Lewis [wiml@hhhh.org](mailto:wiml@hhhh.org)
Subject: Re: PyCrypto license clarification
To: "Dwayne C. Litzenberger" [dlitz@dlitz.net](mailto:dlitz@dlitz.net)
Cc: Wim Lewis [wiml@hhhh.org](mailto:wiml@hhhh.org)
Message-Id: [9D5C3135-7414-47D7-9D41-0AC6C3A84D97@hhhh.org](mailto:9D5C3135-7414-47D7-9D41-0AC6C3A84D97@hhhh.org)
------BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

On November 23, 2008, you wrote:
>Hi Wim,
>
$>$ I am the new maintainer of the Python Cryptography Toolkit, and I am >working on a new release at http://www.pycrypto.org/.
$>$
$>$ I understand that you have made contributions to PyCrypto. May I, on >your behalf, dedicate to the public domain all your contributions to $>$ PyCrypto, with the following notice?
>
$\qquad$
$>$ The contents of this file are dedicated to the public domain. To the
> extent that dedication to the public domain is not available, everyone
$>$ is granted a worldwide, perpetual, royalty-free, non-exclusive license
$>$ to exercise all rights associated with the contents of this file for
$>$ any purpose whatsoever. No rights are reserved.
$\qquad$

Certainly! I think the only code of mine in PyCrypto is the CAST-5 / CAST-128
implementation, which already has a public-domain notice at the top of the file. But I am happy to have that, any any other code of mine that might have wandered in there under an unclear open sourcish license, distributed under the public-domain dedication you quote.

Wim.

## ------BEGIN PGP SIGNATURE--

Version: GnuPG v1.4.6 (Darwin)
iQCVAwUBSSnnA18UnN8n93LBAQLp/gQAhr7x8Av1mstc2kxEJDWTm26PTAZxMz4B
FektbDOzkxgc5580MGGeeX/MVn8aw+1BHg0YD85gsntlDzkcQtb+BR/xAvJ5zKyA
J/Mn/I+I6ekJQ3juh8IPHLAduOXM9Rtguas/yR+Doaq0xOPKoBx+/5+t1lLJtBcZ
wrPEa9Oui9s=
=zSY9
------END PGP SIGNATURE-----
From dlitz@dlitz.net Sat Feb 28 21:45:09 2009
Date: Sat, 28 Feb 2009 21:45:09-0500
From: "Dwayne C. Litzenberger" [dlitz@dlitz.net](mailto:dlitz@dlitz.net)
To: Barry A Warsaw <barry @ python.org>
Subject: PyCrypto license clarification
Message-ID: [20090301024509.GA13195@rivest.dlitz.net](mailto:20090301024509.GA13195@rivest.dlitz.net)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Disposition: inline
User-Agent: Mutt/1.5.16 (2007-06-11)
Status: RO
Content-Length: 2535

Hi Barry,

I am the new maintainer of the Python Cryptography Toolkit, and I am working on a new release at http://www.pycrypto.org/.

People often ask me what license PyCrypto is covered by, if it's
GPL-compatible, etc. Right now, I'm not really sure what to tell them. The text in the current LICENSE file (quoted below) is not entirely clear on the point of whether distributing modified versions is allowed. (It says "distribute and use", but not "modify".)

Distribute and use freely; there are no restrictions on further dissemination and usage except those imposed by the laws of your country of residence. This software is provided "as is" without warranty of fitness for use or suitability for any purpose, express or implied. Use at your own risk or not at all.

Incorporating the code into commercial products is permitted; you do not have to make source available or contribute your changes back (though that would be nice).
--amk (www.amk.ca)

For the next PyCrypto release, I would like to take steps to move toward a clearer licensing regime. I am asking as many copyright holders as I can find if I can release PyCrypto under something clearer and more standard.

Below, I have quoted a public domain dedication that was recommended in _Intellectual Property and Open Source: A Practical Guide to Protecting Code_, by Van Lindberg. I have already contacted A. M. Kuchling, Robey Pointer, and Wim Lewis, and they have all approved the following dedication for their contributions.

I understand that you have made contributions to PyCrypto. May I, on your behalf, dedicate to the public domain all your contributions to PyCrypto, with the following notice?

The contents of this file are dedicated to the public domain. To the extent that dedication to the public domain is not available, everyone is granted a worldwide, perpetual, royalty-free, non-exclusive license to exercise all rights associated with the contents of this file for any purpose whatsoever. No rights are reserved.

Regards,

- Dwayne
--
Dwayne C. Litzenberger [dlitz@dlitz.net](mailto:dlitz@dlitz.net)
Key-signing key - 19E1 1FE8 B3CF F273 ED17 4A24 928C EC13 39C2 5CF7

From barry@ python.org Mon Mar 2 11:29:39 2009
X-Maildir-Dup-Checked: Yes
Return-Path: [barry@python.org](mailto:barry@python.org)
X-Original-To: dwon@rivest.dlitz.net
Delivered-To: dwon@rivest.dlitz.net
Received: from goedel.dlitz.net (unknown [10.159.255.6])
by rivest.dlitz.net (Postfix) with ESMTP id 6E01AC6640B
for [dwon@rivest.dlitz.net](mailto:dwon@rivest.dlitz.net); Mon, 2 Mar 2009 11:29:39-0500 (EST)
Received: from localhost (localhost [127.0.0.1])
by goedel.dlitz.net (Postfix) with QMQP id 0644E1007A
for [dwon@rivest.dlitz.net](mailto:dwon@rivest.dlitz.net); Mon, 2 Mar 2009 10:29:39 -0600 (CST)
Received: (vmailmgr-postfix 8668 invoked by uid 1003); 2 Mar 2009 10:29:39-0600
Delivered-To: m-dlitz-dlitz@dlitz.net
Received-SPF: none (python.org: No applicable sender policy available) receiver=goedel.dlitz.net; identity=mfrom;
envelope-from="barry @python.org"; helo=mail.wooz.org; client-ip=216.15.33.230
Received: from mail.wooz.org (216-15-33-230.c3-0.slvr-ubr2.lnh-slvr.md.static.cable.rcn.com [216.15.33.230])
by goedel.dlitz.net (Postfix) with ESMTP id CCEA110073
for [dlitz@dlitz.net](mailto:dlitz@dlitz.net); Mon, 2 Mar 2009 10:29:38-0600 (CST)
Received: from snowdog.wooz.org (snowdog.wooz.org [192.168.11.202])
by mail.wooz.org (Postfix) with ESMTPSA id ACE30E3C9F
for [dlitz@dlitz.net](mailto:dlitz@dlitz.net); Mon, 2 Mar 2009 11:29:35-0500 (EST)
Message-Id: [09BF1A39-B015-4820-97A3-8642490C8254@python.org](mailto:09BF1A39-B015-4820-97A3-8642490C8254@python.org)
From: Barry Warsaw [barry@python.org](mailto:barry@python.org)

To: Dwayne C. Litzenberger <dlitz@ dlitz.net>
In-Reply-To: [20090301024509.GA13195@rivest.dlitz.net](mailto:20090301024509.GA13195@rivest.dlitz.net)
Content-Type: text/plain; charset=US-ASCII; format=flowed; delsp=yes
Content-Transfer-Encoding: quoted-printable
Mime-Version: 1.0 (Apple Message framework v930.3)
Subject: Re: PyCrypto license clarification
Date: Mon, 2 Mar 2009 11:29:34-0500
References: [20090301024509.GA13195@rivest.dlitz.net](mailto:20090301024509.GA13195@rivest.dlitz.net)
X-Pgp-Agent: GPGMail d55 (v55, Leopard)
X-Mailer: Apple Mail (2.930.3)
Status: RO
Content-Length: 869
------BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

On Feb 28, 2009, at 9:45 PM, Dwayne C. Litzenberger wrote:
> I am the new maintainer of the Python Cryptography Toolkit, and I am =20=
> working on a new release at http://www.pycrypto.org/.

Great! I'm glad to see someone taking up the mantle of this important $=20=$

Python library.
$>$ I understand that you have made contributions to PyCrypto. May I, =20
$>$ on your behalf, dedicate to the public domain all your contributions $=20=$
> to PyCrypto, with the following notice?

Absolutely yes.

Cheers,
Barry
------BEGIN PGP SIGNATURE-----
Version: GnuPG v1.4.9 (Darwin)
iQCVAwUBSawJbnEjvBPtnXfVAQLZjgP/ecG+JdZwNvPJRfsa6rhY6+MHLDHI6agk
evkJnSJQAcVHIZnVIVeR5IXgvDUMakZjU4SOV7MqkhsKA91Iet7PaD9VSYgn3ra5
gElwI2DQDoOy5GExXMm74gqrrb1PCCbCRmpaYNo+DZohwHkeFBjbwDRA3wItOrH7
SK4w9VBJtfY=3D
=3DQduY
------END PGP SIGNATURE-----
Date: Mon, 16 Feb 2009 12:58:00-0800
From: Robey Pointer [robey@lag.net](mailto:robey@lag.net)
Subject: Re: PyCrypto license clarification

To: "Dwayne C. Litzenberger" [dlitz@dlitz.net](mailto:dlitz@dlitz.net)
Received-SPF: pass (goedel.dlitz.net: domain of robey@lag.net designates 69.61.78.186 as permitted sender) Message-Id: [F469A078-6305-4484-BEA8-F4EC38A4154F@lag.net](mailto:F469A078-6305-4484-BEA8-F4EC38A4154F@lag.net)
------BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

On 23 Nov 2008, at 07:42, Dwayne C. Litzenberger wrote:
> For the next PyCrypto release, I would like to take steps to move
$>$ toward a clearer licensing regime. I am asking as many copyright
$>$ holders as I can find if I can release PyCrypto under something
> clearer and more standard. Below, I have quoted a public domain
> dedication that was recommended in _Intellectual Property and Open
> Source: A Practical Guide to Protecting Code_, by Van Lindberg. I
> have already contacted A. M. Kuchling, and he has approved the
$>$ following dedication for his contributions.
$>$
> May I, on your behalf, dedicate to the public domain all your
> contributions to PyCrypto, with the following notice?
$>$
$>$
$>=$
$>$ The contents of this file are dedicated to the public domain. To
$>$ the
$>$ extent that dedication to the public domain is not available,
> everyone
$>$ is granted a worldwide, perpetual, royalty-free, non-exclusive
$>$ license
$>$ to exercise all rights associated with the contents of this file
$>$ for
$>$ any purpose whatsoever. No rights are reserved.
$>$
$>=$
> ===========================================================================1
$>$

In case I haven't replied to this yet: Yes, this is fine with me.
robey
------BEGIN PGP SIGNATURE-----
Version: GnuPG v1.4.8 (Darwin)

## iEYEARECAAYFAkmZ01gACgkQQQDkKvyJ6cOLvQCfQmYYuVODvIlyLg0hgCI9LAbQ <br> SH8AoLJgaq11Ii7/ZYDc+/Cd8VO0xLbr <br> $=\mathrm{Mv} 6 \mathrm{~g}$

## ------END PGP SIGNATURE-----

From dlitz@dlitz.net Sun Nov 23 00:17:22 2008
Date: Sun, 23 Nov 2008 00:17:22-0500
From: "Dwayne C. Litzenberger" [dlitz@dlitz.net](mailto:dlitz@dlitz.net)
To: "A. M. Kuchling" <amk @amk.ca>
Subject: PyCrypto license clarification
Message-ID: [20081123051722.GA29253@rivest.dlitz.net](mailto:20081123051722.GA29253@rivest.dlitz.net)
MIME-Version: 1.0
Content-Type: multipart/signed; micalg=pgp-sha1;
protocol="application/pgp-signature"; boundary="YiEDa0DAkWCtVeE4"
Content-Disposition: inline
X-Primary-Address: dlitz@dlitz.net
X-Homepage: http://www.dlitz.net/
X-OpenPGP: url=http://www.dlitz.net/go/gpgkey/;
$\mathrm{id}=19 \mathrm{E} 11 \mathrm{FE} 8 \mathrm{~B} 3 \mathrm{CFF} 273 \mathrm{ED} 174 \mathrm{~A} 24928 \mathrm{CEC} 1339 \mathrm{C} 25 \mathrm{CF} 7$ (only for key signing); preference=unprotected
X-OpenPGP: url=http://www.dlitz.net/go/gpgkey/;
id=4B2AFD82FC7D9E3838D9179F1C11B877E7804B45 (2008);
preference=signencrypt
User-Agent: Mutt/1.5.16 (2007-06-11)
Status: RO
Content-Length: 3461
Lines: 78

## --YiEDa0DAkWCtVeE4

Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Disposition: inline
Content-Transfer-Encoding: quoted-printable

Hi Andrew,

People often ask me what license PyCrypto is covered by, if it's=20
GPL-compatible, etc. Right now, I'm not really sure what to tell them. $=20$
The text in the current LICENSE file (quoted below) is not entirely clear=
$=20$
on the point of whether distributing modified versions is allowed. ( $\mathrm{It}=20$
says "distribute and use", but not "modify".)

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Distribute and use freely; there are no restrictions on further
dissemination and usage except those imposed by the laws of your
country of residence. This software is provided "as is" without
warranty of fitness for use or suitability for any purpose, express
or implied. Use at your own risk or not at all.

$$
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Incorporating the code into commercial products is permitted; you do not have to make source available or contribute your changes back (though that would be nice).

```
--amk (www.amk.ca)
```

For the next PyCrypto release, I'd like to take steps to move toward a=20
clearer licensing regime. I'm asking as many copyright holders as I can=20 find, starting with you, if I can release PyCrypto under something clearer=
$=20$
and more standard. Below, I have quoted a public domain dedication that=20 was recommended in _Intellectual Property and Open Source: A Practical=20 Guide to Protecting Code_, by Van Lindberg.

May I, on your behalf, dedicate to the public domain your considerable $=20$ contributions to PyCrypto, with the following notice?

$$
\begin{aligned}
&=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}= \\
&=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}= \\
&=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}
\end{aligned}
$$

The contents of this file are dedicated to the public domain. To the extent that dedication to the public domain is not available, everyone is granted a worldwide, perpetual, royalty-free, non-exclusive license to exercise all rights associated with the contents of this file for any purpose whatsoever. No rights are reserved.
$=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=$
$=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=$
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## Regards

- Dwayne
--=20

Dwayne C. Litzenberger [dlitz@dlitz.net](mailto:dlitz@dlitz.net)
Key-signing key - 19E1 1FE8 B3CF F273 ED17 4A24 928C EC13 39C2 5CF7
Annual key (2008) - 4B2A FD82 FC7D 9E38 38D9 179F 1C11 B877 E780 4B45

## --YiEDa0DAkWCtVeE4

Content-Type: application/pgp-signature; name="signature.asc"
Content-Description: Digital signature
Content-Disposition: inline

## ------BEGIN PGP SIGNATURE-----

Version: GnuPG v1.4.5 (GNU/Linux)
iEYEARECAAYFAkko52IACgkQHBG4d+eAS0XPPQCfcyQ2DdAXKg9N7Z+jeSFFD5EZ
yloAn33a3ZjkteyJaTbzEqImOEW8JGpf
=aBEW
------END PGP SIGNATURE-----
--YiEDa0DAkWCtVeE4--

From amk@amk.ca Sun Nov 23 07:51:59 2008
X-Maildir-Dup-Checked: Yes
Return-Path: [amk@amk.ca](mailto:amk@amk.ca)
X-Original-To: dwon@rivest.dlitz.net
Delivered-To: dwon@rivest.dlitz.net
Received: from goedel.dlitz.net (unknown [10.159.255.6])
by rivest.dlitz.net (Postfix) with ESMTP id 5C2C75047D
for [dwon@rivest.dlitz.net](mailto:dwon@rivest.dlitz.net); Sun, 23 Nov 2008 07:51:59-0500 (EST)
Received: from localhost (localhost [127.0.0.1])
by goedel.dlitz.net (Postfix) with QMQP id D632D10111
for [dwon@rivest.dlitz.net](mailto:dwon@rivest.dlitz.net); Sun, 23 Nov 2008 06:51:58-0600 (CST)
Received: (vmailmgr-postfix 12026 invoked by uid 1003); 23 Nov 2008 06:51:58-0600
Delivered-To: m-dlitz-dlitz@dlitz.net
Received-SPF: none (goedel.dlitz.net: domain of amk@amk.ca does not designate permitted sender hosts)
Received: from mail5.sea5.speakeasy.net (mail5.sea5.speakeasy.net [69.17.117.7])
by goedel.dlitz.net (Postfix) with ESMTP id 97DC710105
for [dlitz@dlitz.net](mailto:dlitz@dlitz.net); Sun, 23 Nov 2008 06:51:58-0600 (CST)
Received: (qmail 3992 invoked from network); 23 Nov 2008 12:51:52-0000
Received: from ds1092-163-165.wdc2.dsl.speakeasy.net (HELO localhost) (akuchling @ [66.92.163.165])
(envelope-sender [amk@amk.ca](mailto:amk@amk.ca))
by mail5.sea5.speakeasy.net (qmail-ldap-1.03) with AES256-SHA encrypted SMTP
for [dlitz@dlitz.net](mailto:dlitz@dlitz.net); 23 Nov 2008 12:51:52-0000
Date: Sun, 23 Nov 2008 07:51:34-0500
From: "A.M. Kuchling" [amk@amk.ca](mailto:amk@amk.ca)
To: "Dwayne C. Litzenberger" [dlitz@dlitz.net](mailto:dlitz@dlitz.net)
Subject: Re: PyCrypto license clarification
Message-ID: [20081123125134.GA21239@amk.local](mailto:20081123125134.GA21239@amk.local)
Reply-To: amk@amk.ca
References: [20081123051722.GA29253@rivest.dlitz.net](mailto:20081123051722.GA29253@rivest.dlitz.net)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Disposition: inline
In-Reply-To: [20081123051722.GA29253@rivest.dlitz.net](mailto:20081123051722.GA29253@rivest.dlitz.net)
User-Agent: Mutt/1.5.13 (2006-08-11)
Status: RO
Content-Length: 537
Lines: 15

[^26]$>$ on the point of whether distributing modified versions is allowed. (It > says "distribute and use", but not "modify".)

The intention is that it be public domain.
> May I, on your behalf, dedicate to the public domain your considerable
$>$ contributions to PyCrypto, with the following notice?

You may.
--amk
From dlitz@dlitz.net Sun Aug 2 21:48:25 2009
Date: Sun, 2 Aug 2009 21:48:25-0400
From: "Dwayne C. Litzenberger" [dlitz@dlitz.net](mailto:dlitz@dlitz.net)
To: Paul Swartz [paulswartz@gmail.com](mailto:paulswartz@gmail.com)
Subject: PyCrypto license clarification
Message-ID: [20090803014825.GA1326@rivest.dlitz.net](mailto:20090803014825.GA1326@rivest.dlitz.net)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Disposition: inline
User-Agent: Mutt/1.5.16 (2007-06-11)
Status: RO
Content-Length: 2631

Hi Paul,

I am the new maintainer of the Python Cryptography Toolkit, and I am working on a new release at http://www.pycrypto.org/.

People often ask me what license PyCrypto is covered by, if it's GPL-compatible, etc. Right now, I'm not really sure what to tell them. The text in the current LICENSE file (quoted below) is not entirely clear on the point of whether distributing modified versions is allowed. (It says "distribute and use", but not "modify".)

Distribute and use freely; there are no restrictions on further dissemination and usage except those imposed by the laws of your country of residence. This software is provided "as is" without warranty of fitness for use or suitability for any purpose, express or implied. Use at your own risk or not at all.

Incorporating the code into commercial products is permitted; you do not have to make source available or contribute your changes back (though that would be nice).
--amk
(www.amk.ca)

For the next PyCrypto release, I would like to take steps to move toward a clearer licensing regime. I am asking as many copyright holders as I can find if I can release PyCrypto under something clearer and more standard. Below, I have quoted a public domain dedication that was recommended in _Intellectual Property and Open Source: A Practical Guide to Protecting Code_, by Van Lindberg. I have already contacted A. M. Kuchling, Robey Pointer, Barry Warsaw, Wim Lewis, Jeethu Rao, Joris Bontje, and Mark Moraes, and they have all approved the following dedication for their contributions.

I understand that you have made contributions to PyCrypto, under nickname "z3p" and/or other names. May I, on your behalf, dedicate to the public domain all your contributions to PyCrypto, with the following notice?

The contents of this file are dedicated to the public domain. To the extent that dedication to the public domain is not available, everyone is granted a worldwide, perpetual, royalty-free, non-exclusive license to exercise all rights associated with the contents of this file for any purpose whatsoever. No rights are reserved.

## Regards,

- Dwayne
--
Dwayne C. Litzenberger [dlitz@dlitz.net](mailto:dlitz@dlitz.net)
Key-signing key - 19E1 1FE8 B3CF F273 ED17 4A24 928C EC13 39C2 5CF7

From paulswartz@gmail.com Mon Aug 3 12:14:07 2009
X-Maildir-Dup-Checked: Yes
Return-Path: [paulswartz@gmail.com](mailto:paulswartz@gmail.com)
X-Original-To: dwon@rivest.dlitz.net
Delivered-To: dwon@rivest.dlitz.net
Received: from goedel.dlitz.net (unknown [10.159.255.6])
by rivest.dlitz.net (Postfix) with ESMTP id 30B9D984FC4
for [dwon@rivest.dlitz.net](mailto:dwon@rivest.dlitz.net); Mon, 3 Aug 2009 12:14:07-0400 (EDT)
Received: from localhost (localhost [127.0.0.1])
by goedel.dlitz.net (Postfix) with QMQP id AD9AE81068
for [dwon@rivest.dlitz.net](mailto:dwon@rivest.dlitz.net); Mon, 3 Aug 2009 10:14:06-0600 (CST)
Received: (vmailmgr-postfix 32055 invoked by uid 1003); 3 Aug 2009 10:14:06-0600
Delivered-To: m-dlitz-dlitz@dlitz.net
Received-SPF: pass (gmail.com ... _spf.google.com: 72.14.220.159 is authorized to use 'paulswartz@gmail.com' in 'mfrom' identity (mechanism 'ip4:72.14.192.0/18' matched)) receiver=goedel.dlitz.net; identity=mfrom; envelope-
from="paulswartz@gmail.com"; helo=fg-out-1718.google.com; client-ip=72.14.220.159
Received: from fg-out-1718.google.com (fg-out-1718.google.com [72.14.220.159])
by goedel.dlitz.net (Postfix) with ESMTP id 4E63881066
for [dlitz@dlitz.net](mailto:dlitz@dlitz.net); Mon, 3 Aug 2009 10:14:05-0600 (CST)
Received: by fg-out-1718.google.com with SMTP id d23so1076840fga. 3 for [dlitz@dlitz.net](mailto:dlitz@dlitz.net); Mon, 03 Aug 2009 09:14:04-0700 (PDT)
DKIM-Signature: $v=1$; $a=r s a-s h a 256 ; ~ c=r e l a x e d / r e l a x e d ; ~$
d=gmail.com; $\mathrm{s}=$ gamma;
$\mathrm{h}=$ domainkey-signature:mime-version:received:in-reply-to:references
:from:date:message-id:subject:to:content-type
:content-transfer-encoding;
bh=A0RHBf0TnribKS5qOHJ3WYbkZ+b0cuPeuoKAvpApWcc=; b=gyTqkRhKlHadFKIZCBWsRbnMNVDq1PWIJbyC0EvxPskaoHr3HAR96MWQNBePu/40Ac Vn55qlIqTdom4e9zlUEE6MwZo9kqi/Qw0L/SLib0DlQeNqo/eHYqPmuVswltaYwNAyMJ Y9++76rPGzqYdALsfvsmwv7Q3/bEmjVTr0tQE=
DomainKey-Signature: a=rsa-sha1; c=nofws;
d=gmail.com; $\mathrm{s}=$ gamma;
h=mime-version:in-reply-to:references:from:date:message-id:subject:to :content-type:content-transfer-encoding; b=jze7KSMkUGilfVCXKXaaXMi5NAtGdMQOtVZZfRNyGSy68xOd2sxefjyyig3EfT6Nv6 Q3opUMsT96Q6zjZND55w446kTh2uBTNz4d3NwIeEWJnG3xcliRQu/mXPFp8AzPI3CefL 1ornJLM1eQ2XyuZA73jem+SJtfdHUcSD1UhgI=
MIME-Version: 1.0
Received: by 10.239.157.147 with SMTP id q19mr601802hbc.61.1249316043185; Mon,
03 Aug 2009 09:14:03-0700 (PDT)
In-Reply-To: [20090803014825.GA1326@rivest.dlitz.net](mailto:20090803014825.GA1326@rivest.dlitz.net)
References: [20090803014825.GA1326@rivest.dlitz.net](mailto:20090803014825.GA1326@rivest.dlitz.net)
From: Paul Swartz [paulswartz@gmail.com](mailto:paulswartz@gmail.com)
Date: Mon, 3 Aug 2009 12:13:43-0400
Message-ID: <324cfb540908030913x71d331f0kb069052f74e5ae6b@ mail.gmail.com>
Subject: Re: PyCrypto license clarification
To: "Dwayne C. Litzenberger" [dlitz@dlitz.net](mailto:dlitz@dlitz.net)
Content-Type: text/plain; charset=UTF-8
Content-Transfer-Encoding: quoted-printable
Status: RO
X-Status: A
Content-Length: 1450

On Sun, Aug 2, 2009 at 9:48 PM, Dwayne C. Litzenberger<dlitz@ dlitz.net> wro= te:
> Hi Paul,
$>$
> I am the new maintainer of the Python Cryptography Toolkit, and I am
> working on a new release at http://www.pycrypto.org/.

That's great!
> I understand that you have made contributions to PyCrypto, under nickname
> "z3p" and/or other names. =C2=A0May I, on your behalf, dedicate to the pu=
blic
> domain all your contributions to PyCrypto, with the following notice?
$>=\mathrm{C} 2=\mathrm{A} 0=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=$
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$=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}$
$>=\mathrm{C} 2=\mathrm{A} 0$ The contents of this file are dedicated to the public domain. $=\mathrm{C} 2=$
$=\mathrm{A} 0 \mathrm{To}$ the
$>=\mathrm{C} 2=\mathrm{A} 0$ extent that dedication to the public domain is not available, every=
one
$>=\mathrm{C} 2=\mathrm{A} 0$ is granted a worldwide, perpetual, royalty-free, non-exclusive lice=
nse
$>=\mathrm{C} 2=\mathrm{A} 0$ to exercise all rights associated with the contents of this file fo=
r
$>=\mathrm{C} 2=\mathrm{A} 0$ any purpose whatsoever. $=\mathrm{C} 2=\mathrm{A} 0$ No rights are reserved.
$>=\mathrm{C} 2=\mathrm{A} 0=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=$
$=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=$
$=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}=3 \mathrm{D}$

Yes, that's fine. Good luck with the new release!
-p
--=20
Paul Swartz
paulswartz at gmail dot com
http://paulswartz.net/
AIM: z3penguin

From dlitz@dlitz.net Mon Aug 3 14:35:01 2009
Date: Mon, 3 Aug 2009 14:35:01-0400
From: "Dwayne C. Litzenberger" [dlitz@dlitz.net](mailto:dlitz@dlitz.net)
To: Paul Swartz [paulswartz@gmail.com](mailto:paulswartz@gmail.com)
Subject: Re: PyCrypto license clarification
Message-ID: [20090803183501.GA17472@rivest.dlitz.net](mailto:20090803183501.GA17472@rivest.dlitz.net)
References: [20090803014825.GA1326@rivest.dlitz.net](mailto:20090803014825.GA1326@rivest.dlitz.net)
<324cfb540908030913x71d331f0kb069052f74e5ae6b@ mail.gmail.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=iso-8859-1; format=flowed
Content-Disposition: inline
Content-Transfer-Encoding: 8bit
In-Reply-To: [324cfb540908030913x71d331f0kb069052f74e5ae6b@mail.gmail.com](mailto:324cfb540908030913x71d331f0kb069052f74e5ae6b@mail.gmail.com)
X-Primary-Address: dlitz@dlitz.net
X-Homepage: http://www.dlitz.net/
X-OpenPGP: url=http://www.dlitz.net/go/gpgkey/;
id=19E11FE8B3CFF273ED174A24928CEC1339C25CF7 (only for key signing);
preference=unprotected
X-OpenPGP: url=http://www.dlitz.net/go/gpgkey/;
id=4B2AFD82FC7D9E3838D9179F1C11B877E7804B45 (2008);
preference=signencrypt

Status: RO
Content-Length: 1250

On Mon, Aug 03, 2009 at 12:13:43PM -0400, Paul Swartz wrote:
>On Sun, Aug 2, 2009 at 9:48 PM, Dwayne C. Litzenberger[dlitz@dlitz.net](mailto:dlitz@dlitz.net) wrote:
>> Hi Paul,
>>
>> I am the new maintainer of the Python Cryptography Toolkit, and I am
>> working on a new release at http://www.pycrypto.org/.
$>$
>That's great!
$>$
>> I understand that you have made contributions to PyCrypto, under nickname
>> "z3p" and/or other names. May I, on your behalf, dedicate to the public
>> domain all your contributions to PyCrypto, with the following notice?
>>

>> The contents of this file are dedicated to the public domain. To the
>> extent that dedication to the public domain is not available, everyone
>> is granted a worldwide, perpetual, royalty-free, non-exclusive license
$\gg$ to exercise all rights associated with the contents of this file for
>> any purpose whatsoever. No rights are reserved.

$>$
>Yes, that's fine. Good luck with the new release!

Perfect! Thanks for the quick response!

Dwayne C. Litzenberger <dlitz@ dlitz.net>
Key-signing key - 19E1 1FE8 B3CF F273 ED17 4A24 928C EC13 39C2 5CF7
From dlitz@dlitz.net Mon May 4 22:49:14 2009
Date: Mon, 4 May 2009 22:49:14-0400
From: "Dwayne C. Litzenberger" [dlitz@dlitz.net](mailto:dlitz@dlitz.net)
To: Joris Bontje [joris@bontje.nl](mailto:joris@bontje.nl)
Subject: PyCrypto license clarification
Message-ID: [20090505024914.GA9219@rivest.dlitz.net](mailto:20090505024914.GA9219@rivest.dlitz.net)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Disposition: inline
User-Agent: Mutt/1.5.16 (2007-06-11)
Status: RO
Content-Length: 2553

Hi Joris,

I am the new maintainer of the Python Cryptography Toolkit, and I am
working on a new release at http://www.pycrypto.org/.

People often ask me what license PyCrypto is covered by, if it's
GPL-compatible, etc. Right now, I'm not really sure what to tell them. The text in the current LICENSE file (quoted below) is not entirely clear on the point of whether distributing modified versions is allowed. (It says "distribute and use", but not "modify".)

Distribute and use freely; there are no restrictions on further dissemination and usage except those imposed by the laws of your country of residence. This software is provided "as is" without warranty of fitness for use or suitability for any purpose, express or implied. Use at your own risk or not at all.

Incorporating the code into commercial products is permitted; you do not have to make source available or contribute your changes back (though that would be nice).
--amk (www.amk.ca)

For the next PyCrypto release, I would like to take steps to move toward a clearer licensing regime. I am asking as many copyright holders as I can find if I can release PyCrypto under something clearer and more standard. Below, I have quoted a public domain dedication that was recommended in _Intellectual Property and Open Source: A Practical Guide to Protecting Code_, by Van Lindberg. I have already contacted A. M. Kuchling, Robey Pointer, Barry Warsaw, Wim Lewis, Jeethu Rao, and Mark Moraes, and they have all approved the following dedication for their contributions.

I understand that you have made contributions to PyCrypto. May I, on your behalf, dedicate to the public domain all your contributions to PyCrypto, with the following notice?

The contents of this file are dedicated to the public domain. To the extent that dedication to the public domain is not available, everyone is granted a worldwide, perpetual, royalty-free, non-exclusive license to exercise all rights associated with the contents of this file for any purpose whatsoever. No rights are reserved.

Regards,

- Dwayne


## --

Dwayne C. Litzenberger [dlitz@dlitz.net](mailto:dlitz@dlitz.net)

Key-signing key - 19E1 1FE8 B3CF F273 ED17 4A24 928C EC13 39C2 5CF7

From joris@bontje.nl Tue May 5 03:08:32 2009
X-Maildir-Dup-Checked: Yes
Return-Path: [joris@bontje.nl](mailto:joris@bontje.nl)
X-Original-To: dwon@rivest.dlitz.net
Delivered-To: dwon@rivest.dlitz.net
Received: from goedel.dlitz.net (unknown [10.159.255.6])
by rivest.dlitz.net (Postfix) with ESMTP id 7AA4B9E5078
for [dwon@rivest.dlitz.net](mailto:dwon@rivest.dlitz.net); Tue, 5 May 2009 03:08:32-0400 (EDT)
Received: from localhost (localhost [127.0.0.1])
by goedel.dlitz.net (Postfix) with QMQP id 2315B40583
for [dwon@rivest.dlitz.net](mailto:dwon@rivest.dlitz.net); Tue, 5 May 2009 01:08:32-0600 (CST)
Received: (vmailmgr-postfix 16890 invoked by uid 1003); 5 May 2009 01:08:32-0600
Delivered-To: m-dlitz-dlitz@dlitz.net
Received-SPF: none (bontje.nl: No applicable sender policy available) receiver=goedel.dlitz.net; identity=mfrom;
envelope-from="joris@bontje.nl"; helo=smtp6.versatel.nl; client-ip=62.58.50.97
Received: from smtp6.versatel.nl (smtp6.versatel.nl [62.58.50.97])
by goedel.dlitz.net (Postfix) with ESMTP id 2D76A4052C
for [dlitz@dlitz.net](mailto:dlitz@dlitz.net); Tue, 5 May 2009 01:08:30 -0600 (CST)
Received: (qmail 4224 invoked by uid 0); 5 May 2009 07:08:25-0000
Received: from qmail06.zonnet.nl (HELO dell062.admin.zonnet.nl) ([10.170.1.123]) (envelope-sender [joris@bontje.nl](mailto:joris@bontje.nl)) by 10.170.1.96 (qmail-ldap-1.03) with SMTP for < >; 5 May 2009 07:08:25-0000
Received: by dell062.admin.zonnet.nl (Postfix, from userid 33)
id 9BE9B15759B; Tue, 5 May 2009 09:08:25 +0200 (CEST)
Received: from firewall66.interaccess.nl (firewall66.interaccess.nl
[193.173.35.66]) by www.webmail.vuurwerk.nl (Horde MIME library) with HTTP;
Tue, 05 May 2009 09:08:25 +0200
Message-ID: [20090505090825.gsq1ps7hg08wwwok@www.webmail.vuurwerk.nl](mailto:20090505090825.gsq1ps7hg08wwwok@www.webmail.vuurwerk.nl)
Date: Tue, 05 May 2009 09:08:25 +0200
From: joris@bontje.nl
To: "Dwayne C. Litzenberger" [dlitz@dlitz.net](mailto:dlitz@dlitz.net)
Subject: Re: PyCrypto license clarification
References: [20090505024914.GA9219@rivest.dlitz.net](mailto:20090505024914.GA9219@rivest.dlitz.net)
In-Reply-To: [20090505024914.GA9219@rivest.dlitz.net](mailto:20090505024914.GA9219@rivest.dlitz.net)
MIME-Version: 1.0
Content-Type: text/plain;
charset=ISO-8859-1;
format="flowed"
Content-Disposition: inline
Content-Transfer-Encoding: 7bit
User-Agent: Internet Messaging Program (IMP) H3 (4.1.3)
Status: RO
X-Status: A
Content-Length: 3488

Hi Dwayne,

Thanks for taking over the PyCrypto library and putting in the required effort to keep this going.

I was very excited to read that it is now one of the installed
libraries for Google AppsEngine!

You have my full permission to dedicate all my contributions to PyCrypto to the public domain with your suggested notice:

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Regards,
Joris

Citeren "Dwayne C. Litzenberger" [dlitz@dlitz.net](mailto:dlitz@dlitz.net):

```
> Hi Joris,
>
> I am the new maintainer of the Python Cryptography Toolkit, and I am
> working on a new release at http://www.pycrypto.org/.
>
>People often ask me what license PyCrypto is covered by, if it's
> GPL-compatible, etc. Right now, I'm not really sure what to tell them.
> The text in the current LICENSE file (quoted below) is not entirely clear
 on the point of whether distributing modified versions is allowed. (It
> says "distribute and use", but not "modify".)
>
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> or implied. Use at your own risk or not at all.
>
> Incorporating the code into commercial products is permitted; you do
> not have to make source available or contribute your changes back
> (though that would be nice).
>
> --amk (www.amk.ca)
>
```

```
> For the next PyCrypto release, I would like to take steps to move toward a
> clearer licensing regime. I am asking as many copyright holders as I can
> find if I can release PyCrypto under something clearer and more standard.
> Below, I have quoted a public domain dedication that was recommended in
> _Intellectual Property and Open Source: A Practical Guide to Protecting
> Code_, by Van Lindberg. I have already contacted A. M. Kuchling, Robey
> Pointer, Barry Warsaw, Wim Lewis, Jeethu Rao, and Mark Moraes, and they
> have all approved the following dedication for their contributions.
>
> I understand that you have made contributions to PyCrypto. May I, on your
> behalf, dedicate to the public domain all your contributions to PyCrypto,
> with the following notice?
>
> ===============================================================================
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> is granted a worldwide, perpetual, royalty-free, non-exclusive license
> to exercise all rights associated with the contents of this file for
> any purpose whatsoever. No rights are reserved.
>
>
> Regards,
> - Dwayne
>
>-
> Dwayne C. Litzenberger <dlitz@ dlitz.net>
> Key-signing key - 19E1 1FE8 B3CF F273 ED17 4A24 928C EC13 39C2 5CF7
```

From dlitz@dlitz.net Tue May 5 17:53:47 2009
Date: Tue, 5 May 2009 17:53:47-0400
From: "Dwayne C. Litzenberger" [dlitz@dlitz.net](mailto:dlitz@dlitz.net)
To: joris@bontje.nl
Subject: Re: PyCrypto license clarification
Message-ID: [20090505215347.GB9933@rivest.dlitz.net](mailto:20090505215347.GB9933@rivest.dlitz.net)
References: [20090505024914.GA9219@rivest.dlitz.net](mailto:20090505024914.GA9219@rivest.dlitz.net)
[20090505090825.gsq1ps7hg08wwwok@www.webmail.vuurwerk.nl](mailto:20090505090825.gsq1ps7hg08wwwok@www.webmail.vuurwerk.nl)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Disposition: inline
In-Reply-To: [20090505090825.gsq1ps7hg08wwwok@www.webmail.vuurwerk.nl](mailto:20090505090825.gsq1ps7hg08wwwok@www.webmail.vuurwerk.nl)
X-Primary-Address: dlitz@dlitz.net
X-Homepage: http://www.dlitz.net/
X-OpenPGP: url=http://www.dlitz.net/go/gpgkey/;
id=19E11FE8B3CFF273ED174A24928CEC1339C25CF7 (only for key signing);
preference=unprotected
X-OpenPGP: url=http://www.dlitz.net/go/gpgkey/;

```
id=4B2AFD82FC7D9E3838D9179F1C11B877E7804B45 (2008);
preference=signencrypt
User-Agent: Mutt/1.5.16 (2007-06-11)
Status: RO
Content-Length: }386
```

Excellent! Thank you!

On Tue, May 05, 2009 at 09:08:25AM +0200, joris@ bontje.nl wrote:
> Hi Dwayne,
$>$
> Thanks for taking over the PyCrypto library and putting in the required
> effort to keep this going.
> I was very excited to read that it is now one of the installed libraries
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>
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$>$ to exercise all rights associated with the contents of this file for
$>$ any purpose whatsoever. No rights are reserved.

## >

$>$
$>$
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> Joris
>
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$>$
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>>
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>> warranty of fitness for use or suitability for any purpose, express
$\gg$ or implied. Use at your own risk or not at all.

```
>> ====================================================================
>>
>> Incorporating the code into commercial products is permitted; you do
>> not have to make source available or contribute your changes back
>> (though that would be nice)
>>
>> --amk (www.amk.ca)
>>
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>> to exercise all rights associated with the contents of this file for
>> any purpose whatsoever. No rights are reserved.
>> ============================================================================
>>
>> Regards,
>> - Dwayne
>>
>> --
>> Dwayne C. Litzenberger <dlitz@ dlitz.net>
>> Key-signing key - 19E1 1FE8 B3CF F273 ED17 4A24 928C EC13 39C2 5CF7
>
>
Dwayne C. Litzenberger <dlitz@dlitz.net>
Key-signing key - 19E1 1FE8 B3CF F273 ED17 4A24 928C EC13 39C2 5CF7
Annual key (2008) - 4B2A FD82 FC7D 9E38 38D9 179F 1C11 B877 E780 4B45
```


## A. HISTORY OF THE SOFTWARE

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

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

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

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

| Release from | Derived | compatible? (1) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 0.9.0 thr |  | 1991-1 | 995 CW |  | es |
| 1.3 thru | 5.21 .2 | 1995-1 | 1999 CN | I | yes |
| 1.6 | 1.5.2 2 | 2000 | CNRI | no |  |
| 2.0 | 1.620 | 2000 | BeOpen. | com no |  |
| 1.6.1 | 1.6 | 2001 | CNRI | no |  |
| 2.1 | 2.0+1.6.1 | 12001 | PSF | no |  |
| 2.0.1 | 2.0+1.6.1 | 12001 | PSF | yes |  |
| 2.1.1 | 2.1+2.0.1 | 12001 | PSF | yes |  |
| 2.2 | 2.1.1 200 | 2001 | PSF | yes |  |
| 2.1.2 | 2.1.1 | 2002 | PSF | yes |  |
| 2.1.3 | 2.1.2 | 2002 | PSF | yes |  |
| 2.2.1 | 2.2 200 | 2002 | PSF | yes |  |
| 2.2.2 | 2.2.1 | 2002 | PSF | yes |  |
| 2.2.3 | 2.2.2 | 2003 | PSF | yes |  |

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Thanks to the many outside volunteers who have worked under Guido's direction to make these releases possible.

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LICENSE.orig Original (deprecated) license for the Python Cryptography Toolkit
LICENSE.libtom LICENSE file from LibTomCrypt
stmts/ Statements by contributors
From dlitz@dlitz.net Wed Aug 27 20:54:38 EDT 2008
X-Maildir-Dup-Checked: Yes
Return-Path: [dlitz@dlitz.net](mailto:dlitz@dlitz.net)
X-Original-To: dwon@rivest.dlitz.net
Delivered-To: dwon@rivest.dlitz.net
Received: from goedel.dlitz.net (unknown [10.159.255.6])
by rivest.dlitz.net (Postfix) with ESMTP id ECFDFC6641D
for [dwon@rivest.dlitz.net](mailto:dwon@rivest.dlitz.net); Wed, 27 Aug 2008 20:45:06 -0400 (EDT)
Received: from localhost (localhost [127.0.0.1])
by goedel.dlitz.net (Postfix) with QMQP id 99A9D100AA
for [dwon@rivest.dlitz.net](mailto:dwon@rivest.dlitz.net); Wed, 27 Aug 2008 18:45:05-0600 (CST)
Received: (vmailmgr-postfix 3270 invoked by uid 1003); 27 Aug 2008 18:45:05-0600
Delivered-To: m-dlitz-dlitz@dlitz.net
Received-SPF: pass (goedel.dlitz.net: domain of dlitz@dlitz.net designates 193.201.42.13 as permitted sender)
Received: from m14.itconsult.net (m14.itconsult.net [193.201.42.13])
by goedel.dlitz.net (Postfix) with ESMTP id 1D3B510088
for [dlitz@dlitz.net](mailto:dlitz@dlitz.net); Wed, 27 Aug 2008 18:45:04-0600 (CST)
Received: from stamper.itconsult.co.uk (stamper.itconsult.co.uk
[193.201.42.31]) by m14.stamper.itconsult.co.uk (GMS
15.01.3664/NT8923.00.54dca388) with SMTP id jfxsjqaa for dlitz@ dlitz.net;

Thu, 28 Aug 2008 01:45:02 +0100
To: crypt@bis.doc.gov,
enc@nsa.gov,
web_site@bis.doc.gov,
pycrypto@lists.dlitz.net,
PYTHON-CRYPTO@NIC.SURFNET.NL,
dlitz@dlitz.net
Received-SPF: Pass (m14.stamper.itconsult.co.uk: domain of dlitz@dlitz.net designates 64.5.53.201 as permitted sender) identity=mailfrom;
client-ip=64.5.53.201; receiver=m14.stamper.itconsult.co.uk;
helo=goedel.dlitz.net; mechanism=-all; envelope-from=dlitz@dlitz.net;
Received: from goedel.dlitz.net (goedel.dlitz.net [64.5.53.201]) by
m14.stamper.itconsult.co.uk (GMS 15.01.3664/NT8923.00.54dca388) with ESMTP id
taxsjqaa for post@stamper.itconsult.co.uk; Thu, 28 Aug 2008 01:42:58 +0100
Received: from rivest.dlitz.net (rivest.dlitz.net [IPv6:2002:4c0a:9133:1104::1])
by goedel.dlitz.net (Postfix) with ESMTP id 667C7100B1
for <post @ stamper.itconsult.co.uk>; Wed, 27 Aug 2008 18:42:56 -0600 (CST)
Received: by rivest.dlitz.net (Postfix, from userid 1000)
id B92F8C66420; Wed, 27 Aug 2008 20:42:55-0400 (EDT)
Received: by rivest.dlitz.net (tmda-sendmail, from uid 1000);
Wed, 27 Aug 2008 20:42:54-0400
Date: Wed, 27 Aug 2008 20:42:54-0400
Cc: post@stamper.itconsult.co.uk
Subject: PyCrypto TSU NOTIFICATION
Message-ID: [20080828004254.GA31214@rivest.dlitz.net](mailto:20080828004254.GA31214@rivest.dlitz.net)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Disposition: inline
X-Primary-Address: dlitz@dlitz.net
X-Homepage: http://www.dlitz.net/
X-OpenPGP: url=http://www.dlitz.net/go/gpgkey/;
id=19E11FE8B3CFF273ED174A24928CEC1339C25CF7 (only for key signing);
preference=unprotected
X-OpenPGP: url=http://www.dlitz.net/go/gpgkey/;
id=4B2AFD82FC7D9E3838D9179F1C11B877E7804B45 (2008);
preference=signencrypt
User-Agent: Mutt/1.5.16 (2007-06-11)
X-Delivery-Agent: TMDA/1.1.9 (Jura)
From: "Dwayne C. Litzenberger" [dlitz@dlitz.net](mailto:dlitz@dlitz.net)
X-DNSBL: 0
Status: O
Content-Length: 2182
Lines: 65

## ------BEGIN PGP SIGNED MESSAGE-----

\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#
\#
\# This is a proof of posting certificate from
\# stamper.itconsult.co.uk certifying that a user
\# claiming to be:-
\# dlitz@dlitz.net
\# requested that this message be sent to:-
\# crypt@bis.doc.gov
\# enc@nsa.gov
\# web_site@bis.doc.gov
\# pycrypto@lists.dlitz.net
\# PYTHON-CRYPTO@NIC.SURFNET.NL
\# dlitz@dlitz.net
\#
\# This certificate was issued at 00:45 (GMT)
\# on Thursday 28 August 2008 with reference 0520978
\#
\# CAUTION: while the message may well be from the sender
\# For information about the Stamper service see
\# http://www.itconsult.co.uk/stamper.htm
\#
\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#\#

## SUBMISSION TYPE: TSU

SUBMITTED BY: Dwayne C. Litzenberger
SUBMITTED FOR: Dwayne C. Litzenberger
POINT OF CONTACT: Dwayne C. Litzenberger
PHONE and/or FAX: +1-613-693-1296
MANUFACTURER: n/a
PRODUCT NAME/MODEL \#: The Python Cryptography Toolkit ("PyCrypto")
ECCN: 5D002

NOTIFICATION: http://www.pycrypto.org/

Note: I am a Canadian citizen posting software to my website located in Canada. I am not certain whether PyCrypto contains enough US-origin cryptography to be covered by U.S. export controls, but I am submitting this anyway.
(Sorry for spamming the lists, but I want there to be a record of this.)

Dwayne C. Litzenberger [dlitz@dlitz.net](mailto:dlitz@dlitz.net)
Key-signing key - 19E1 1FE8 B3CF F273 ED17 4A24 928C EC13 39C2 5CF7
Annual key (2008) - 4B2A FD82 FC7D 9E38 38D9 179F 1C11 B877 E780 4B45
------BEGIN PGP SIGNATURE-----
Version: 2.6.3i
Charset: noconv
Comment: Stamper Reference Id: 0520978
iQEVAgUBSLX1DYGVnbVwth+BAQEcuwf9EWnXLqSO5bPzR9K9QnTPcsKbTljKjPxr d+q0E7eE8VtnvvijUcTAR9o27yvzOPxdFT864MQA7OTSbPK39aGAgA4fgAgvYH9t UNjJ/kv8QLz/aq2fi/HNjyrwnqFnUl0uqwpOrQGbz8Y+SGpVh1gKqy1Ju45L+doq sxbzCOpjgRv2zDdNR/2SnFmDWQXv8dSeonwIHpQDft8/LVA/gHiTDmteQIOhJQ6o XYhY+HbRjsD741/GSpOt9IIN5ln0UgshFoLIndnNSAvWf4aPyh5KCN7ho+/BC0v/ W/pqSSIPkwmbhlPHoOltTkNc0qKLAHXqMGJNhO8AkrYZOyJksb0HsA== =30IX
-----END PGP SIGNATURE-----

### 1.245 python-cryptography 1.7.2 :2.el7

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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 | YearOwner <br> from |  |
| :--- | :--- | :--- | :--- |
| compatible? (1) |  |  |  |


| 0.9.0 thru 1.2 | 1991-1995 CWI |  | yes |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 1.3 thru 1.5 .2 | 1.2 | 1995-1999 |  | CNRI | yes |
| 1.6 | 1.5 .2 | 2000 | CNRI | no |  |
| 2.0 | 1.6 | 2000 | BeOpen.com no |  |  |
| 1.6 .1 | 1.6 | 2001 | CNRI | yes (2) |  |
| 2.1 | $2.0+1.6 .1$ | 2001 | PSF | no |  |
| 2.0 .1 | $2.0+1.6 .1$ | 2001 | PSF | yes |  |
| 2.1 .1 | $2.1+2.0 .1$ | 2001 | PSF | yes |  |
| 2.2 | 2.1 .1 | 2001 | PSF | yes |  |
| 2.1 .2 | 2.1 .1 | 2002 | PSF | yes |  |
| 2.1 .3 | 2.1 .2 | 2002 | PSF | yes |  |
| 2.2 .1 | 2.2 | 2002 | PSF | yes |  |
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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.

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### 1.261 python-Ixml_PSFv2.x 3.2.1 :4.el7 <br> 1.261.1 Available under license : <br> This is the official license for the Python 2.2.1 release:

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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 (see http://www.digicool.com). In 2001, the Python Software Foundation
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---
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 <br> <br> Preamble}

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### 1.280 python-urlgrabber 3.10 :8.el7

### 1.280.1 Available under license :

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### 1.281.1 Available under license : <br> \# Contributions to the urllib3 project

\#\# Creator \& Maintainer

* Andrey Petrov [andrey.petrov@shazow.net](mailto:andrey.petrov@shazow.net)
\#\# Contributors

In chronological order:

* victor.vde [http://code.google.com/u/victor.vde/](http://code.google.com/u/victor.vde/)
* HTTPS patch (which inspired HTTPSConnectionPool)
* erikcederstrand [http://code.google.com/u/erikcederstrand/](http://code.google.com/u/erikcederstrand/)
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* Bugfixes, Improvements and Test coverage
* Thomas Kluyver [thomas@kluyver.me.uk](mailto:thomas@kluyver.me.uk)
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* Fixed a race condition
* Stanislav Vitkovskiy [stas.vitkovsky@gmail.com](mailto:stas.vitkovsky@gmail.com)
* Added HTTPS (CONNECT) proxy support
* Stephen Holsapple [sholsapp@gmail.com](mailto:sholsapp@gmail.com)
* Added abstraction for granular control of request fields
* Martin von Gagern [Martin.vGagern@gmx.net](mailto:Martin.vGagern@gmx.net)
* Support for non-ASCII header parameters
* Kevin Burke [kev@inburke.com](mailto:kev@inburke.com) and Pavel Kirichenko [juanych@yandex-team.ru](mailto:juanych@yandex-team.ru)
* Support for separate connect and request timeouts
* Peter Waller [p@pwaller.net](mailto:p@pwaller.net)
* HTTPResponse.tell() for determining amount received over the wire
* Nipunn Koorapati [nipunn1313@gmail.com](mailto:nipunn1313@gmail.com)
* Ignore default ports when comparing hosts for equality
* Danilo @dbrgn [http://dbrgn.ch/](http://dbrgn.ch/)
* Disabled TLS compression by default on Python 3.2+
* Disabled TLS compression in pyopenssl contrib module
* Configurable cipher suites in pyopenssl contrib module
* Roman Bogorodskiy [roman.bogorodskiy@ericsson.com](mailto:roman.bogorodskiy@ericsson.com)
* Account retries on proxy errors
* Nicolas Delaby [nicolas.delaby@ezeep.com](mailto:nicolas.delaby@ezeep.com)
* Use the platform-specific CA certificate locations
* Josh Schneier [https://github.com/jschneier](https://github.com/jschneier)
* HTTPHeaderDict and associated tests and docs
* Bugfixes, docs, test coverage
* Tahia Khan [http://tahia.tk/](http://tahia.tk/)
* Added Timeout examples in docs
* Arthur Grunseid [http://grunseid.com](http://grunseid.com)
* source_address support and tests (with https://github.com/bui)
* Ian Cordasco <graffatcolmingov @ gmail.com>
* PEP8 Compliance and Linting
* Add ability to pass socket options to an HTTP Connection
* Erik Tollerud [erik.tollerud@gmail.com](mailto:erik.tollerud@gmail.com)
* Support for standard library io module.
* Krishna Prasad [kprasad.iitd@gmail.com](mailto:kprasad.iitd@gmail.com)
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* Security Warning Documentation update for proper capture
* Shivan Sornarajah [github@sornars.com](mailto:github@sornars.com)
* Support for using ConnectionPool and PoolManager as context managers.
* Alex Gaynor [alex.gaynor@gmail.com](mailto:alex.gaynor@gmail.com)
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### 1.283 PyYAML 3.10 :11.el7

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## ifndef TOP

TOP $=\$$ (shell while ! test -e make.rules; do cd .. ; done; pwd)
export TOP
endif
include \$(TOP)/make.rules

## SUBDIRS=

ifeq (\$(SNK_BIOSEMU_APPS), 1)

```
SUBDIRS += x86emu
endif
CLEANSUBDIRS = $(SUBDIRS)
all :
for subdir in $(SUBDIRS) ; do $(MAKE) -C $${subdir} || exit 1 ; done
# Common targets for all subdirectories:
clean distclean depend:
for subdir in $(CLEANSUBDIRS) ; do $(MAKE) -C $${ subdir} $@ ; done
# *****************************************************************************
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#****************************************************************************/
ifndef TOP
TOP = $(shell while ! test -e make.rules; do cd .. ; done; pwd)
export TOP
endif
include $(TOP)/make.rules
ROOTDIR ?= ../..
LDFLAGS=
ASFLAGS= -I./include -Wa,-mregnames
#NOTE: -DDEBUG only needed for debugging/tracing...
CFLAGS= -UDEBUG -m64 -I. -I./include -I./include/x86emu \
    -I$(TOP)/clients/net-snk/include -I$(ROOTDIR)/include \
    -I$(ROOTDIR)/lib/libc/include -O3 -nostdinc -fno-builtin \
    -ffreestanding -Wall -Wno-unused
X86EMU_OBJS= debug.o decode.o fpu.o ops2.o ops.o prim_ops.o sys.o
%.o: %.S
$(CC) $(ASFLAGS) -c -o $@ $^
%.o: %.c
$(CC) $(CFLAGS) -c -o $@ $^
```

all: libx86emu.a
libx86emu.a: \$(X86EMU_OBJS)
\$(AR) -rc \$@ \$^
\$(RANLIB) \$@
clean:
\$(RM) *. 0 *. i *.s libx86emu.a
distclean: clean
Index: debug.c

```
RCS file: /cvs/osdf/cvs/host/other-licence/x86emu/debug.c,v
retrieving revision 1.1
retrieving revision 1.3
diff -u -u -r1.1 -r1.3
--- debug.c7 Sep 2007 10:01:21 -00001.1
+++ debug.c15 Jan 2008 13:49:25 -00001.3
@@ -52,7 +52,11 @ @
void X86EMU_trace_regs (void)
{
    if (DEBUG_TRACE()) {
        x86emu_dump_regs();
+if (M.x86.mode & (SYSMODE_PREFIX_DATA | SYSMODE_PREFIX_ADDR)) {
+ x86emu_dump_xregs();
+} else {
+ x86emu_dump_regs();
+}
    }
    if (DEBUG_DECODE() &&! DEBUG_DECODE_NOPRINT()) {
        printk("%04x:%04x ",M.x86.saved_cs, M.x86.saved_ip);
@ @ -185,7 +189,7 @ @
    for (i=0; i< M.x86.enc_pos; i++) {
        sprintf(buf1+2*i,"%02x", fetch_data_byte_abs(s,o+i));
    }
- printk("%-20s",buf1);
+ printk("%-20s ",buf1);
}
static void print_decoded_instruction (void)
Index: ops2.c
```

RCS file: /cvs/osdf/cvs/host/other-licence/x86emu/ops2.c,v
retrieving revision 1.1
retrieving revision 1.3
diff -u -u -r1.1-r1.3
--- ops2.c7 Sep 2007 10:01:21-00001.1
+++ ops2.c20 Mar 2008 15:48:34-00001.3

```
@@ -149,8 +149,69 @ @
    target += (s16) M.x86.R_IP;
    DECODE_PRINTF2("%04x\n", target);
    TRACE_AND_STEP();
- if (cond)
+ if (cond) {
        M.x86.R_IP = (u16)target;
+JMP_TRACE(M.x86.saved_cs, M.x86.saved_ip, M.x86.R_CS, M.x86.R_IP, " LONG COND ");
+ }
+ DECODE_CLEAR_SEGOVR();
+ END_OF_INSTR();
+}
+
+/*********************************************************************************
+REMARKS:
+Handles opcode 0x0f,0xC8-0xCF
+****************************************************************************/
+s32 x86emu_bswap(s32 reg)
+{
+ // perform the byte swap
+ s32 temp = reg;
+ reg = (temp & 0xFF000000) >> 24;
+ reg |= (temp & 0xFF0000) >> 8;
+ reg |= (temp & 0xFF00) << 8;
+ reg|= (temp & 0xFF) << 24;
+ return reg;
+}
+
+void x86emuOp2_bswap(u8 op2)
+{
+ /* byte swap 32 bit register */
+ START_OF_INSTR();
+ DECODE_PRINTF("BSWAP\t");
+ switch (op2) {
+ case 0xc8:
+ DECODE_PRINTF("EAX\n");
+ M.x86.R_EAX = x86emu_bswap(M.x86.R_EAX);
+ break;
+ case 0xc9:
+ DECODE_PRINTF("ECX\n");
+ M.x86.R_ECX = x86emu_bswap(M.x86.R_ECX);
+ break;
+ case 0xca:
+ DECODE_PRINTF("EDX\n");
+ M.x86.R_EDX = x86emu_bswap(M.x86.R_EDX);
+ break;
+ case 0xcb:
+ DECODE_PRINTF("EBX\n");
```

```
+ M.x86.R_EBX = x86emu_bswap(M.x86.R_EBX);
+ break;
+ case 0xcc
+ DECODE_PRINTF("ESP\n");
+ M.x86.R_ESP = x86emu_bswap(M.x86.R_ESP);
+ break;
+ case 0xcd:
+ DECODE_PRINTF("EBP\n");
+ M.x86.R_EBP = x86emu_bswap(M.x86.R_EBP);
+ break;
+ case 0xce:
+ DECODE_PRINTF("ESI\n");
+ M.x86.R_ESI = x86emu_bswap(M.x86.R_ESI);
+ break;
+ case 0xcf:
+ DECODE_PRINTF("EDI\n");
+ M.x86.R_EDI = x86emu_bswap(M.x86.R_EDI);
+ break;
+ }
+ TRACE_AND_STEP();
    DECODE_CLEAR_SEGOVR();
    END_OF_INSTR();
}
@ @ -1702,14 +1763,14 @ @
/* 0xc5 */ x86emuOp2_illegal_op,
/* 0xc6 */ x86emuOp2_illegal_op,
/* 0xc7 */ x86emuOp2_illegal_op,
-/* 0xc8 */ x86emuOp2_illegal_op, /* TODO: bswap */
-/* 0xc9 */ x86emuOp2_illegal_op, /* TODO: bswap */
-/* 0xca */ x86emuOp2_illegal_op, /* TODO: bswap */
-/* 0xcb */ x86emuOp2_illegal_op, /* TODO: bswap */
-/* 0xcc */ x86emuOp2_illegal_op, /* TODO: bswap */
-/* 0xcd */ x86emuOp2_illegal_op, /* TODO: bswap */
-/* 0xce */ x86emuOp2_illegal_op, /* TODO: bswap */
-/* 0xcf */ x86emuOp2_illegal_op, /* TODO: bswap */
+/* 0xc8 */ x86emuOp2_bswap,
+/* 0xc9 */ x86emuOp2_bswap,
+/* 0xca */ x86emuOp2_bswap,
+/* 0xcb */ x86emuOp2_bswap,
+/* 0xcc */ x86emuOp2_bswap,
+/* 0xcd */ x86emuOp2_bswap,
+/* 0xce */ x86emuOp2_bswap,
+/* 0xcf */ x86emuOp2_bswap,
/* 0xd0 */ x86emuOp2_illegal_op,
/* 0xd1 */ x86emuOp2_illegal_op,
Index: ops.c
```

```
RCS file: /cvs/osdf/cvs/host/other-licence/x86emu/ops.c,v
retrieving revision 1.1
diff -u -u -r1.1 ops.c
--- ops.c7 Sep 2007 10:01:21 -00001.1
+++ ops.c20 Mar 2008 16:52:00 -0000
@ @ -1061,7 +1061,11 @ @
    imm = (s8)fetch_byte_imm();
    DECODE_PRINTF2("PUSH\t%d\n", imm);
    TRACE_AND_STEP();
- push_word(imm);
+ if (M.x86.mode & SYSMODE_PREFIX_DATA) {
+ push_long(imm);
+ } else {
+ push_word(imm);
+ }
    DECODE_CLEAR_SEGOVR();
    END_OF_INSTR();
}
@ @ -1256,8 +1260,10 @ @
    target = (u16)(M.x86.R_IP + (s16)offset);
    DECODE_PRINTF2("%x\n", target);
    TRACE_AND_STEP();
- if (cond)
+ if (cond) {
        M.x86.R_IP = target;
+JMP_TRACE(M.x86.saved_cs, M.x86.saved_ip, M.x86.R_CS, M.x86.R_IP, " NEAR COND ");
+ }
    DECODE_CLEAR_SEGOVR();
    END_OF_INSTR();
}
@ @ -2516,9 +2522,11 @ @
    count = 1;
    if (M.x86.mode & (SYSMODE_PREFIX_REPE | SYSMODE_PREFIX_REPNE)) {
        /* dont care whether REPE or REPNE */
- /* move them until CX is ZERO. */
- count = M.x86.R_CX;
+ /* move them until (E)CX is ZERO. */
+ count = (M.x86.mode & SYSMODE_32BIT_REP) ? M.x86.R_ECX : M.x86.R_CX;
        M.x86.R_CX = 0;
+if (M.x86.mode & SYSMODE_32BIT_REP)
+ M.x86.R_ECX = 0;
        M.x86.mode &= ~(SYSMODE_PREFIX_REPE | SYSMODE_PREFIX_REPNE);
    }
    while (count--) {
@ @ -2526,6+2534,8 @ @
    store_data_byte_abs(M.x86.R_ES, M.x86.R_DI, val);
    M.x86.R_SI += inc;
    M.x86.R_DI += inc;
```

```
+ if (M.x86.intr & INTR_HALTED)
+ break;
    }
    DECODE_CLEAR_SEGOVR();
    END_OF_INSTR();
@ @ -2559,9 +2569,11 @ @
    count = 1;
    if (M.x86.mode & (SYSMODE_PREFIX_REPE | SYSMODE_PREFIX_REPNE)) {
        /* dont care whether REPE or REPNE */
- /* move them until CX is ZERO. */
- count = M.x86.R_CX;
+ /* move them until (E)CX is ZERO. */
+ count = (M.x86.mode & SYSMODE_32BIT_REP) ? M.x86.R_ECX : M.x86.R_CX;
        M.x86.R_CX = 0;
+if (M.x86.mode & SYSMODE_32BIT_REP)
+ M.x86.R_ECX = 0;
        M.x86.mode &= ~(SYSMODE_PREFIX_REPE | SYSMODE_PREFIX_REPNE);
    }
    while (count--) {
@ @ -2574,6 +2586,8 @ @
        }
        M.x86.R_SI += inc;
        M.x86.R_DI += inc;
+ if (M.x86.intr & INTR_HALTED)
+ break;
    }
    DECODE_CLEAR_SEGOVR();
    END_OF_INSTR();
@@ -2598,16+2612,21@@
    if (M.x86.mode & (SYSMODE_PREFIX_REPE | SYSMODE_PREFIX_REPNE)) {
        /* REPE */
- /* move them until CX is ZERO. */
- while (M.x86.R_CX != 0) {
+ /* move them until (E)CX is ZERO. */
+ while (((M.x86.mode & SYSMODE_32BIT_REP) ? M.x86.R_ECX : M.x86.R_CX) != 0) {
        val1 = fetch_data_byte(M.x86.R_SI);
        val2 = fetch_data_byte_abs(M.x86.R_ES, M.x86.R_DI);
                    cmp_byte(val1, val2);
- M.x86.R_CX -= 1;
+ if (M.x86.mode & SYSMODE_32BIT_REP)
+ M.x86.R_ECX -= 1;
+ else
+ M.x86.R_CX -= 1;
        M.x86.R_SI += inc;
        M.x86.R_DI += inc;
        if ((M.x86.mode & SYSMODE_PREFIX_REPE) && (ACCESS_FLAG(F_ZF) == 0) ) break;
        if ( (M.x86.mode & SYSMODE_PREFIX_REPNE) && ACCESS_FLAG(F_ZF) ) break;
```

```
+ if (M.x86.intr & INTR_HALTED)
+ break;
    }
    M.x86.mode &= ~(SYSMODE_PREFIX_REPE | SYSMODE_PREFIX_REPNE);
    } else {
@ @ -2644,8 +2663,8 @ @
    TRACE_AND_STEP();
    if (M.x86.mode & (SYSMODE_PREFIX_REPE | SYSMODE_PREFIX_REPNE)) {
        /* REPE */
- /* move them until CX is ZERO. */
- while (M.x86.R_CX != 0) {
+ /* move them until (E)CX is ZERO. */
+ while (((M.x86.mode & SYSMODE_32BIT_REP) ? M.x86.R_ECX : M.x86.R_CX) != 0) {
        if (M.x86.mode & SYSMODE_PREFIX_DATA) {
                val1 = fetch_data_long(M.x86.R_SI);
                val2 = fetch_data_long_abs(M.x86.R_ES, M.x86.R_DI);
@ @ -2655,11 +2674,16 @ @
                val2 = fetch_data_word_abs(M.x86.R_ES, M.x86.R_DI);
                cmp_word((u16)val1, (u16)val2);
        }
- M.x86.R_CX -= 1;
+ if (M.x86.mode & SYSMODE_32BIT_REP)
+ M.x86.R_ECX -= 1;
+ else
+ M.x86.R_CX -= 1;
        M.x86.R_SI += inc;
        M.x86.R_DI += inc;
        if ( (M.x86.mode & SYSMODE_PREFIX_REPE) && ACCESS_FLAG(F_ZF) == 0 ) break;
        if ( (M.x86.mode & SYSMODE_PREFIX_REPNE) && ACCESS_FLAG(F_ZF) ) break;
+ if (M.x86.intr & INTR_HALTED)
+ break;
    }
    M.x86.mode &= ~(SYSMODE_PREFIX_REPE | SYSMODE_PREFIX_REPNE);
    } else {
@ @ -2741,11+2765,16 @ @
    TRACE_AND_STEP();
    if (M.x86.mode & (SYSMODE_PREFIX_REPE | SYSMODE_PREFIX_REPNE)) {
    /* dont care whether REPE or REPNE */
- /* move them until CX is ZERO. */
- while (M.x86.R_CX != 0) {
+ /* move them until (E)CX is ZERO. */
+ while (((M.x86.mode & SYSMODE_32BIT_REP) ? M.x86.R_ECX : M.x86.R_CX) != 0) {
        store_data_byte_abs(M.x86.R_ES, M.x86.R_DI, M.x86.R_AL);
- M.x86.R_CX -= 1;
+ if (M.x86.mode & SYSMODE_32BIT_REP)
+ M.x86.R_ECX -= 1;
+ else
+ M.x86.R_CX -= 1;
```

```
    M.x86.R_DI += inc;
+ if (M.x86.intr & INTR_HALTED)
+ break;
        }
        M.x86.mode &= ~(SYSMODE_PREFIX_REPE | SYSMODE_PREFIX_REPNE);
    } else {
@ @ -2783,9 +2812,11 @ @
    count = 1;
    if (M.x86.mode & (SYSMODE_PREFIX_REPE | SYSMODE_PREFIX_REPNE)) {
        /* dont care whether REPE or REPNE */
- /* move them until CX is ZERO. */
- count = M.x86.R_CX;
+ /* move them until (E)CX is ZERO. */
+ count = (M.x86.mode & SYSMODE_32BIT_REP) ? M.x86.R_ECX : M.x86.R_CX;
        M.x86.R_CX = 0;
+if (M.x86.mode & SYSMODE_32BIT_REP)
+ M.x86.R_ECX = 0;
            M.x86.mode &= ~(SYSMODE_PREFIX_REPE | SYSMODE_PREFIX_REPNE);
    }
    while (count--) {
@ @ -2795,6+2826,8 @ @
            store_data_word_abs(M.x86.R_ES, M.x86.R_DI, M.x86.R_AX);
        }
        M.x86.R_DI += inc;
+ if (M.x86.intr & INTR_HALTED)
+ break;
    }
    DECODE_CLEAR_SEGOVR();
    END_OF_INSTR();
@@ -2817,11+2850,16@@
        inc = 1;
    if (M.x86.mode & (SYSMODE_PREFIX_REPE | SYSMODE_PREFIX_REPNE)) {
        /* dont care whether REPE or REPNE */
    /* move them until CX is ZERO. */
- while (M.x86.R_CX != 0) {
+ /* move them until (E)CX is ZERO. */
+ while (((M.x86.mode & SYSMODE_32BIT_REP) ? M.x86.R_ECX : M.x86.R_CX) != 0) {
                M.x86.R_AL = fetch_data_byte(M.x86.R_SI);
- M.x86.R_CX -= 1;
+ if (M.x86.mode & SYSMODE_32BIT_REP)
+ M.x86.R_ECX -= 1;
+ else
+ M.x86.R_CX -= 1;
        M.x86.R_SI += inc;
+ if (M.x86.intr & INTR_HALTED)
+ break;
    }
    M.x86.mode & = ~(SYSMODE_PREFIX_REPE | SYSMODE_PREFIX_REPNE);
```

\} else \{
@ @ -2859,9 +2897,11 @ @

$$
\text { count }=1
$$

if (M.x86.mode \& (SYSMODE_PREFIX_REPE | SYSMODE_PREFIX_REPNE)) \{
/* dont care whether REPE or REPNE */

- /* move them until CX is ZERO. */
- $\quad$ count $=$ M.x86.R_CX;
$+\quad / *$ move them until (E)CX is ZERO. */
$+\quad$ count $=($ M.x86.mode \& SYSMODE_32BIT_REP) ? M.x86.R_ECX : M.x86.R_CX;
M.x86.R_CX = 0;
+if (M.x86.mode \& SYSMODE_32BIT_REP)
$+\quad$ M.x86.R_ECX = 0;
M.x86.mode $\&=\sim\left(S Y S M O D E \_P R E F I X \_R E P E ~ \mid ~ S Y S M O D E \_P R E F I X \_R E P N E\right) ; ~ ; ~$
\}
while (count--) \{
@ @ -2871,6+2911,8 @ @
M.x86.R_AX = fetch_data_word(M.x86.R_SI);
\}
M.x86.R_SI += inc;
$+\quad$ if (M.x86.intr \& INTR_HALTED)
$+\quad$ break;
\}
DECODE_CLEAR_SEGOVR();
END_OF_INSTR();
@ @ -2894,26+2936,36 @ @
inc $=1$;
if (M.x86.mode \& SYSMODE_PREFIX_REPE) \{
/* REPE */
- /* move them until CX is ZERO. */
- while (M.x86.R_CX !=0) \{
$+\quad$ /* move them until (E)CX is ZERO. */
$+\quad$ while (((M.x86.mode \& SYSMODE_32BIT_REP) ? M.x86.R_ECX : M.x86.R_CX) != 0) \{
val2 $=$ fetch_data_byte_abs(M.x86.R_ES, M.x86.R_DI);
cmp_byte(M.x86.R_AL, val2);
- M.x86.R_CX - $=1$;
$+\quad$ if (M.x86.mode \& SYSMODE_32BIT_REP)
+ M.x86.R_ECX -= 1;
$+\quad$ else
$+\quad$ M.x86.R_CX -= 1;
M.x86.R_DI += inc;
if $($ ACCESS_FLAG $($ F_ZF $)==0)$
break;
$+\quad$ if (M.x86.intr \& INTR_HALTED)
$+\quad$ break;
\}
M.x86.mode $\&=\sim$ SYSMODE_PREFIX_REPE;
\} else if (M.x86.mode \& SYSMODE_PREFIX_REPNE) \{
/* REPNE */

```
- /* move them until CX is ZERO. */
- while (M.x86.R_CX != 0) {
+ /* move them until (E)CX is ZERO. */
+ while (((M.x86.mode & SYSMODE_32BIT_REP) ? M.x86.R_ECX : M.x86.R_CX) != 0) {
        val2 = fetch_data_byte_abs(M.x86.R_ES, M.x86.R_DI);
        cmp_byte(M.x86.R_AL, val2);
- M.x86.R_CX -= 1;
+ if (M.x86.mode & SYSMODE_32BIT_REP)
+ M.x86.R_ECX -= 1;
+ else
+ M.x86.R_CX -= 1;
        M.x86.R_DI += inc;
        if (ACCESS_FLAG(F_ZF))
            break; /* zero flag set means equal */
+ if (M.x86.intr & INTR_HALTED)
+ break;
    }
    M.x86.mode &= ~SYSMODE_PREFIX_REPNE;
    } else {
@ @ -2951,8 +3003,8 @ @
    TRACE_AND_STEP();
    if (M.x86.mode & SYSMODE_PREFIX_REPE) {
        /* REPE */
- /* move them until CX is ZERO. */
- while (M.x86.R_CX != 0) {
+ /* move them until (E)CX is ZERO. */
+ while (((M.x86.mode & SYSMODE_32BIT_REP) ? M.x86.R_ECX : M.x86.R_CX) != 0) {
        if (M.x86.mode & SYSMODE_PREFIX_DATA) {
            val = fetch_data_long_abs(M.x86.R_ES, M.x86.R_DI);
            cmp_long(M.x86.R_EAX, val);
@@ -2960,16+3012,21 @ @ 
                val = fetch_data_word_abs(M.x86.R_ES, M.x86.R_DI);
                cmp_word(M.x86.R_AX, (u16)val);
        }
- M.x86.R_CX -= 1;
+ if (M.x86.mode & SYSMODE_32BIT_REP)
+ M.x86.R_ECX -= 1;
+ else
+ M.x86.R_CX -= 1;
        M.x86.R_DI += inc;
        if (ACCESS_FLAG(F_ZF) == 0)
                break;
+ if (M.x86.intr & INTR_HALTED)
+ break;
    }
    M.x86.mode &= ~SYSMODE_PREFIX_REPE;
    } else if (M.x86.mode & SYSMODE_PREFIX_REPNE) {
        /* REPNE */
```

```
- /* move them until CX is ZERO. */
- while (M.x86.R_CX != 0) {
+ /* move them until (E)CX is ZERO. */
+ while (((M.x86.mode & SYSMODE_32BIT_REP) ? M.x86.R_ECX : M.x86.R_CX) != 0) {
        if (M.x86.mode & SYSMODE_PREFIX_DATA) {
        val = fetch_data_long_abs(M.x86.R_ES, M.x86.R_DI);
        cmp_long(M.x86.R_EAX, val);
@ @ -2977,10+3034,15 @ @
        val = fetch_data_word_abs(M.x86.R_ES, M.x86.R_DI);
        cmp_word(M.x86.R_AX, (u16)val);
        }
- M.x86.R_CX -= 1;
+ if (M.x86.mode & SYSMODE_32BIT_REP)
+ M.x86.R_ECX -= 1;
+ else
+ M.x86.R_CX -= 1;
        M.x86.R_DI += inc;
        if (ACCESS_FLAG(F_ZF))
            break; /* zero flag set means equal */
+ if (M.x86.intr & INTR_HALTED)
+ break;
    }
    M.x86.mode &= ~SYSMODE_PREFIX_REPNE;
    } else {
@ @ -3238,9 +3300,9 @ @
    DECODE_PRINTF("RET\t");
    imm = fetch_word_imm();
    DECODE_PRINTF2("%x\n", imm);
-RETURN_TRACE("RET",M.x86.saved_cs,M.x86.saved_ip);
TRACE_AND_STEP();
    M.x86.R_IP = pop_word();
+RETURN_TRACE(M.x86.saved_cs,M.x86.saved_ip, M.x86.R_CS, M.x86.R_IP, "NEAR");
    M.x86.R_SP += imm;
    DECODE_CLEAR_SEGOVR();
    END_OF_INSTR();
@@ -3254,9+3316,9 @ @
{
    START_OF_INSTR();
    DECODE_PRINTF("RET\n");
-RETURN_TRACE("RET",M.x86.saved_cs,M.x86.saved_ip);
TRACE_AND_STEP();
    M.x86.R_IP = pop_word();
+RETURN_TRACE(M.x86.saved_cs,M.x86.saved_ip, M.x86.R_CS, M.x86.R_IP, "NEAR");
    DECODE_CLEAR_SEGOVR();
    END_OF_INSTR();
}
@ @ -3471,10 +3533,10 @ @
    DECODE_PRINTF("RETF\t");
```

```
    imm = fetch_word_imm();
    DECODE_PRINTF2("%x\n", imm);
-RETURN_TRACE("RETF",M.x86.saved_cs,M.x86.saved_ip);
TRACE_AND_STEP();
    M.x86.R_IP = pop_word();
    M.x86.R_CS = pop_word();
+RETURN_TRACE(M.x86.saved_cs,M.x86.saved_ip, M.x86.R_CS, M.x86.R_IP, "FAR");
    M.x86.R_SP += imm;
    DECODE_CLEAR_SEGOVR();
    END_OF_INSTR();
@ @ -3488,10+3550,10 @ @
{
    START_OF_INSTR();
    DECODE_PRINTF("RETF\n");
-RETURN_TRACE("RETF",M.x86.saved_cs,M.x86.saved_ip);
TRACE_AND_STEP();
    M.x86.R_IP = pop_word();
    M.x86.R_CS = pop_word();
+RETURN_TRACE(M.x86.saved_cs,M.x86.saved_ip, M.x86.R_CS, M.x86.R_IP, "FAR");
    DECODE_CLEAR_SEGOVR();
    END_OF_INSTR();
}
@ @ -4020,8 +4082,11 @ @
    ip += (s16) M.x86.R_IP;
    DECODE_PRINTF2("%04x\n", ip);
    TRACE_AND_STEP();
- M.x86.R_CX -= 1;
- if (M.x86.R_CX != 0 && !ACCESS_FLAG(F_ZF)) /* CX != 0 and !ZF */
+ if (M.x86.mode & SYSMODE_PREFIX_ADDR)
+ M.x86.R_ECX -= 1;
+ else
+ M.x86.R_CX -= 1;
+ if (((M.x86.mode & SYSMODE_PREFIX_ADDR)? M.x86.R_ECX : M.x86.R_CX) != 0 &&
!ACCESS_FLAG(F_ZF)) /* (E)CX != 0 and !ZF */
        M.x86.R_IP = ip;
    DECODE_CLEAR_SEGOVR();
    END_OF_INSTR();
@ @ -4041,8+4106,11 @ @
    ip += (s16) M.x86.R_IP;
    DECODE_PRINTF2("%04x\n", ip);
    TRACE_AND_STEP();
- M.x86.R_CX -= 1;
- if (M.x86.R_CX != 0 && ACCESS_FLAG(F_ZF)) /* CX != 0 and ZF */
+ if (M.x86.mode & SYSMODE_PREFIX_ADDR)
+ M.x86.R_ECX -= 1;
+ else
+ M.x86.R_CX -= 1;
+ if (((M.x86.mode & SYSMODE_PREFIX_ADDR) ? M.x86.R_ECX : M.x86.R_CX) != 0 &&
```

```
ACCESS_FLAG(F_ZF)) /* (E)CX != 0 and ZF */
            M.x86.R_IP = ip;
    DECODE_CLEAR_SEGOVR();
    END_OF_INSTR();
@ @ -4062,8 +4130,11 @ @
    ip += (s16) M.x86.R_IP;
    DECODE_PRINTF2("\%04x\n", ip);
    TRACE_AND_STEP();
- M.x86.R_CX -= 1;
- if (M.x86.R_CX != 0)
+ if (M.x86.mode \& SYSMODE_PREFIX_ADDR)
\(+\quad\) M.x86.R ECX -= 1;
+ else
\(+\quad\) M.x86.R_CX -= 1;
\(+\quad\) if (((M.x86.mode \& SYSMODE_PREFIX_ADDR) ? M.x86.R_ECX : M.x86.R_CX) != 0) /* (E)CX != 0 */
        M.x86.R_IP = ip;
    DECODE_CLEAR_SEGOVR();
    END_OF_INSTR();
@ @ -4085,8 +4156,10 @ @
    target \(=(u 16)\left(M . x 86 . R \_I P+\right.\) offset \() ;\)
    DECODE_PRINTF2("\%x\n", target);
    TRACE_AND_STEP();
- if (M.x86.R_CX == 0)
\(+\quad\) if (M.x86.R_CX == 0) \{
        M.x86.R_IP = target;
+JMP_TRACE(M.x86.saved_cs, M.x86.saved_ip, M.x86.R_CS, M.x86.R_IP, " CXZ ");
+ \}
    DECODE_CLEAR_SEGOVR();
    END_OF_INSTR();
\}
@ @ -4213,6+4286,7 @ @
    ip = (s16)fetch_word_imm();
    ip += (s16)M.x86.R_IP;
    DECODE_PRINTF2("\%04x\n", ip);
+ JMP_TRACE(M.x86.saved_cs, M.x86.saved_ip, M.x86.R_CS, ip, " NEAR ");
    TRACE_AND_STEP();
    M.x86.R_IP = (u16)ip;
    DECODE_CLEAR_SEGOVR();
@ @ -4233,6+4307,7 @ @
    cs = fetch_word_imm();
    DECODE_PRINTF2("\%04x:", cs);
    DECODE_PRINTF2("\%04x\n", ip);
+ JMP_TRACE(M.x86.saved_cs, M.x86.saved_ip, cs, ip, " FAR ");
    TRACE_AND_STEP();
    M.x86.R_IP = ip;
    M.x86.R_CS = cs;
@ @ -4254,6+4329,7 @ @
    offset \(=\) (s8)fetch_byte_imm();
```

```
    target = (u16)(M.x86.R_IP + offset);
    DECODE_PRINTF2("%x\n", target);
+ JMP_TRACE(M.x86.saved_cs, M.x86.saved_ip, M.x86.R_CS, target, " BYTE ");
    TRACE_AND_STEP();
    M.x86.R_IP = target;
    DECODE_CLEAR_SEGOVR();
@ @ -4357,6 +4433,8 @ @
    DECODE_PRINTF("REPNE\n");
    TRACE_AND_STEP();
    M.x86.mode |= SYSMODE_PREFIX_REPNE;
+ if (M.x86.mode & SYSMODE_PREFIX_ADDR)
+ M.x86.mode |= SYSMODE_32BIT_REP;
    DECODE_CLEAR_SEGOVR();
    END_OF_INSTR();
}
@ @ -4371,6+4449,8 @ @
    DECODE_PRINTF("REPE\n");
    TRACE_AND_STEP();
    M.x86.mode = SYSMODE_PREFIX_REPE;
+ if (M.x86.mode & SYSMODE_PREFIX_ADDR)
+ M.x86.mode |= SYSMODE_32BIT_REP;
    DECODE_CLEAR_SEGOVR();
    END_OF_INSTR();
}
@@ -5013,12+5093,14@@
        break;
        case 4: /* jmp word ptr ... */
            destval = fetch_data_word(destoffset);
+ JMP_TRACE(M.x86.saved_cs, M.x86.saved_ip, M.x86.R_CS, destval, " WORD ");
        TRACE_AND_STEP();
        M.x86.R_IP = destval;
        break;
        case 5: /* jmp far ptr ... */
        destval = fetch_data_word(destoffset);
        destval2 = fetch_data_word(destoffset + 2);
+ JMP_TRACE(M.x86.saved_cs, M.x86.saved_ip, destval2, destval, " FAR ");
    TRACE_AND_STEP();
    M.x86.R_IP = destval;
    M.x86.R_CS = destval2;
Index: prim_ops.c
```

RCS file: /cvs/osdf/cvs/host/other-licence/x86emu/prim_ops.c,v
retrieving revision 1.1
retrieving revision 1.3
diff -u -u -r1.1-r1.3
--- prim_ops.c7 Sep 2007 10:01:21-00001.1
+++ prim_ops.c16 Jan 2008 14:18:15-00001.3
@ @ -1921,7+1921,7 @ @

```
void imul_long_direct(u32 *res_lo, u32* res_hi,u32 d, u32 s)
{
#ifdef __HAS_LONG_LONG_
- s64 res = (s64)d * (s64)s;
+ s64 res = (s64)(s32)d * (s64)(s32)s;
    *res_lo = (u32)res;
    *res_hi = (u32)(res >> 32);
@ @ -2013,7 +2013,7 @ @
void mul_long(u32 s)
{
#ifdef __HAS_LONG_LONG_
- u64 res = (u32)M.x86.R_EAX * (u32)s;
+ u64 res = (u64)M.x86.R_EAX * s;
    M.x86.R_EAX = (u32)res;
    M.x86.R_EDX = (u32)(res >> 32);
@@ -2312,16+2312,15 @ @
    }
    if (M.x86.mode & (SYSMODE_PREFIX_REPE | SYSMODE_PREFIX_REPNE)) {
        /* dont care whether REPE or REPNE */
- /* in until CX is ZERO. */
- u32 count = ((M.x86.mode & SYSMODE_PREFIX_DATA) ?
+ /* in until (E)CX is ZERO. */
+ u32 count = ((M.x86.mode & SYSMODE_32BIT_REP)?
                M.x86.R_ECX : M.x86.R_CX);
        while (count--) {
        single_in(size);
        M.x86.R_DI += inc;
        }
        M.x86.R_CX = 0;
- if (M.x86.mode & SYSMODE_PREFIX_DATA) {
+ if (M.x86.mode & SYSMODE_32BIT_REP) {
        M.x86.R_ECX = 0;
    }
    M.x86.mode &= ~(SYSMODE_PREFIX_REPE | SYSMODE_PREFIX_REPNE);
@@ -2355,15+2354,15 @ @
    }
    if (M.x86.mode & (SYSMODE_PREFIX_REPE | SYSMODE_PREFIX_REPNE)) {
        /* dont care whether REPE or REPNE */
- /* out until CX is ZERO. */
- u32 count = ((M.x86.mode & SYSMODE_PREFIX_DATA) ?
+ /* out until (E)CX is ZERO. */
+ u32 count = ((M.x86.mode & SYSMODE_32BIT_REP)?
                M.x86.R_ECX : M.x86.R_CX);
    while (count--) {
        single_out(size);
```

```
        M.x86.R_SI += inc;
        \}
        M.x86.R_CX = 0;
- if (M.x86.mode \& SYSMODE_PREFIX_DATA) \{
\(+\quad\) if (M.x86.mode \& SYSMODE_32BIT_REP) \{
        M.x86.R_ECX = 0;
    \}
    M.x86.mode \(\&=\sim\left(S Y S M O D E \_P R E F I X \_R E P E ~ \mid ~ S Y S M O D E \_P R E F I X \_R E P N E\right) ; ~ ;\)
Index: sys.c
```

RCS file: /cvs/osdf/cvs/host/other-licence/x86emu/sys.c,v
retrieving revision 1.1
retrieving revision 1.2
diff -u -u -r1.1-r1.2
--- sys.c7 Sep 2007 10:01:21-00001.1
+++ sys.c7 Sep 2007 10:03:13-00001.2
@ @ -45,11 +45,6 @ @
\#include <x86emu/regs.h>
\#include "debug.h"
\#include "prim_ops.h"
-\#ifdef LINUXBIOS_VERSION
-\#include "io.h"
-\#else
-\#include <sys/io.h>
-\#endif
\#ifdef IN_MODULE
\#include "xf86_ansic.h"
@ @ -220,7+215,7 @ @
\{
DB(if (DEBUG_IO_TRACE())
printk("inb \%\#04x \n", addr);)
-return inb(addr);
+return 0;
\}
$/ * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *$
@ @ -235,7+230,7 @ @
\{
DB(if (DEBUG_IO_TRACE())
printk("inw \%\#04x \n", addr);)
-return inw(addr);
+return 0;
\}
$/ * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *$
@ @ -250,7+245,7 @ @
\{

```
DB(if (DEBUG_IO_TRACE())
printk("inl %#04x \n", addr);)
-return inl(addr);
+return 0;
}
/****************************************************************************
@ @ -264,7 +259,6 @ @
{
DB(if (DEBUG_IO_TRACE())
printk("outb %#02x -> %#04x \n", val, addr);)
-outb(val, addr);
return;
}
@ @ -279,7 +273,6 @ @
{
DB(if (DEBUG_IO_TRACE())
printk("outw %#04x -> %#04x \n", val, addr);)
-outw(val, addr);
return;
}
@ @ -295,7 +288,6 @ @
DB(if (DEBUG_IO_TRACE())
        printk("outl %#08x -> %#04x \n", val, addr);)
-outl(val, addr);
return;
}
@ @ -405,6 +397,6 @ @
void X86EMU_setMemBase(void *base, size_t size)
{
-M.mem_base = (int) base;
+M.mem_base = (unsigned long) base;
M.mem_size = size;
}
Index: include/x86emu/debug.h
```

RCS file: /cvs/osdf/cvs/host/other-licence/x86emu/include/x86emu/debug.h,v
retrieving revision 1.1
retrieving revision 1.4
diff -u -u -r1.1-r1.4
--- include/x86emu/debug.h7 Sep 2007 10:01:21-00001.1
+++ include/x86emu/debug.h20 Mar 2008 15:25:27-00001.4
@ @ -40,8 +40,6 @ @
\#ifndef X86EMU_DEBUG_H
\#define _X86EMU_DEBUG_H
-//\#define DEBUG 0
-\#undef DEBUG
/*---------------------- Macros and type definitions */

```
/* checks to be enabled for "runtime" */
@ @ -78,6 +76,8 @ @
# define DEBUG_SYSINT() (M.x86.debug & DEBUG_SYSINT_F)
# define DEBUG_TRACECALL() (M.x86.debug & DEBUG_TRACECALL_F)
# define DEBUG_TRACECALLREGS() (M.x86.debug & DEBUG_TRACECALL_REGS_F)
+# define DEBUG_TRACEJMP() (M.x86.debug & DEBUG_TRACEJMP_F)
+# define DEBUG_TRACEJMPREGS() (M.x86.debug & DEBUG_TRACEJMP_REGS_F)
# define DEBUG_SYS() (M.x86.debug & DEBUG_SYS_F)
# define DEBUG_MEM_TRACE() (M.x86.debug & DEBUG_MEM_TRACE_F)
# define DEBUG_IO_TRACE() (M.x86.debug & DEBUG_IO_TRACE_F)
@ @ -96,6 +96,8 @ @
# define DEBUG_SYSINT() 0
# define DEBUG_TRACECALL() 0
# define DEBUG_TRACECALLREGS() 0
+# define DEBUG_TRACEJMP() 0
+# define DEBUG_TRACEJMPREGS() 0
# define DEBUG_SYS() 0
# define DEBUG_MEM_TRACE() 0
# define DEBUG_IO_TRACE() 0
@ @ -169,14 +171,20 @ @
x86emu_dump_regs(); \
if (DEBUG_TRACECALL()) \
printk("%04x:%04x: CALL %s%04x:%04x\n", u , v, s, w, x);
-# define RETURN_TRACE(n,u,v) \
+# define RETURN_TRACE(u,v,w,x,s) \
if (DEBUG_TRACECALLREGS())\
x86emu_dump_regs(); \
if (DEBUG_TRACECALL()) \
-printk("%04x:%04x: %s\n",u,v,n);
+printk("%04x:%04x: RET %s %04x:%04x\n",u,v,s,w,x);
+# define JMP_TRACE(u,v,w,x,s)
+ if (DEBUG_TRACEJMPREGS())\
+ x86emu_dump_regs();\
+ if (DEBUG_TRACEJMP())\
+ printk("%04x:%04x: JMP %s%04x:%04x\n", u , v, s, w, x);
#else
# define CALL_TRACE(u,v,w,x,s)
-# define RETURN_TRACE(n,u,v)
+# define RETURN_TRACE(u,v,w,x,s)
+# define JMP_TRACE(u,v,w,x,s)
#endif
```


## \#ifdef DEBUG

Index: include/x86emu/regs.h

RCS file: /cvs/osdf/cvs/host/other-licence/x86emu/include/x86emu/regs.h,v
retrieving revision 1.1
retrieving revision 1.4
diff -u -u -r1.1-r1.4
--- include/x86emu/regs.h7 Sep 2007 10:01:21-00001.1
+++ include/x86emu/regs.h15 Jan 2008 13:46:40-00001.4
@ @ -231,6+231,9 @ @
\#define SYSMODE_PREFIX_REPNE 0x00000100
\#define SYSMODE_PREFIX_DATA 0x00000200
\#define SYSMODE_PREFIX_ADDR 0x00000400
+//phueper: for REP(E|NE) Instructions, we need to decide wether it should be using
+//the 32bit ECX register as or the 16bit CX register as count register
+\#define SYSMODE_32BIT_REP 0x00000800
\#define SYSMODE_INTR_PENDING 0x10000000
\#define SYSMODE_EXTRN_INTR 0x20000000
\#define SYSMODE_HALTED 0x400000000
@ @ -250,7+253,8 @ @
SYSMODE_SEGOVR_GS |\
SYSMODE_SEGOVR_SS |\
SYSMODE_PREFIX_DATA |\}

- SYSMODE_PREFIX_ADDR)
+ SYSMODE_PREFIX_ADDR |\
+ SYSMODE_32BIT_REP)

```
#define INTR_SYNCH 0x1
#define INTR_ASYNCH 0x2
@ @ -274,9+278,9 @ @
    */
    u32 mode;
    volatile int intr; /* mask of pending interrupts */
-int debug;
+ volatile int debug;
#ifdef DEBUG
-int
        check;
+ int check;
    u16 saved_ip;
    u16 saved_cs;
    int enc_pos;
Index: include/x86emu/x86emu.h
```

RCS file: /cvs/osdf/cvs/host/other-licence/x86emu/include/x86emu/x86emu.h,v
retrieving revision 1.1
retrieving revision 1.3
diff -u -u -r1.1-r1.3
--- include/x86emu/x86emu.h7 Sep 2007 10:01:21-00001.1
+++ include/x86emu/x86emu.h19 Oct 2007 08:42:15-00001.3
@ @ -47,6+47,7 @ @
\#include <console.h>
\#define printk(x...) printk(BIOS_DEBUG, x)
\#else
+\#include <stdio.h>
\#define printk printf
\#endif
@ @ -189,6+181,8 @ @
\#define DEBUG TRACECALL REGS F 0x004000
\#define DEBUG_DECODE_NOPRINT_F 0x008000
\#define DEBUG_SAVE_IP_CS_F 0x010000
+\#define DEBUG_TRACEJMP_F 0x020000
+\#define DEBUG_TRACEJMP_REGS_F 0x040000
\#define DEBUG_SYS_F (DEBUG_SVC_F|DEBUG_FS_F|DEBUG_PROC_F)
void X86EMU_trace_regs(void);
@ @ -200,5 +194,4 @ @
\#ifdef __cplusplus
\} /* End of "C" linkage for C++ */
\#endif
-
\#endif /* __X86EMU_X86EMU_H */
\# $* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *$
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\# *
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$\# * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * /$
\#!/bin/bash
\#set -x
\#set -e

SVN=` which svn`
PATCH=`which patch
DIFF_FILE=./x86emu_changes.diff
\# check wether svn, patch, ... is available...
if [ ! -x \$SVN ]; then

```
echo "subversion executable not found!"
exit -1
fi
if [ ! -x $PATCH ]; then
echo "patch executable not found!"
exit -1
fi
if [! -r $DIFF_FILE ]; then
echo "diff file $DIFF_FILE not found!"
exit -1
fi
# download the x86emu sources from LinuxBIOS subversion
#revision known to work...
REV=496
echo "Checking out x86emu from coreboot-v3 repository revision $REV"
$SVN co svn://coreboot.org/repository/coreboot-v3/util/x86emu -r $REV
echo "Copying files..."
mkdir -p include/x86emu
cp -v x86emu/x86emu/*.c.
cp -v x86emu/x86emu/*.h include/x86emu
cp -v x86emu/include/x86emu/*.h include/x86emu
echo "Removing checkedout subversion director..."
rm -rf x86emu
echo "Patching files..."
$PATCH -p0 < x86emu_changes.diff
```

echo "done"
exit 0
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Version 2, June 1991

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David Gibson [david@gibson.dropbear.id.au](mailto:david@gibson.dropbear.id.au) (principal original author of dtc and libfdt) 2 November 2007

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*/
/* $OpenBSD: syscall.h,v 1.101 2008/03/16 19:43:41 otto Exp $ */
/*
* System call numbers.
*
* created from; OpenBSD: syscalls.master,v 1.90 2008/03/16 19:42:57 otto Exp
*/
#define TARGET_OPENBSD_NR_syscall 0
#define TARGET_OPENBSD_NR_exit 1
#define TARGET_OPENBSD_NR_fork 2
#define TARGET_OPENBSD_NR_read 3
#define TARGET_OPENBSD_NR_write 4
#define TARGET_OPENBSD_NR_open 5
#define TARGET_OPENBSD_NR_close 6
#define TARGET_OPENBSD_NR_wait4 7
#define TARGET_OPENBSD_NR_link 9
#define TARGET_OPENBSD_NR_unlink 10
#define TARGET_OPENBSD_NR_chdir 12
#define TARGET_OPENBSD_NR_fchdir 13
#define TARGET_OPENBSD_NR_mknod 14
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/* syscall flags from machine/trap.h */
/* \$OpenBSD: trap.h,v 1.4 2008/07/04 22:04:37 kettenis Exp \$ ..... */
/* \$NetBSD: trap.h,v 1.4 1999/06/07 05:28:04 eeh Exp \$ */
/*

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*
*/
```

\#define TARGET_OPENBSD_SYSCALL_G2RFLAG 0x400 /* on success, return to \%g2 rather than npc */ \#define TARGET_OPENBSD_SYSCALL_G7RFLAG 0x800 /* use $\% \mathrm{~g} 7$ as above (deprecated) */ /* \$NetBSD: syscall.h,v 1.215 2008/06/17 16:07:57 tsutsui Exp \$ */

```
/*
* System call numbers.
*
* created fromNetBSD: syscalls.master,v 1.204 2008/06/17 16:05:23 tsutsui Exp
*/
#define TARGET_NETBSD_NR_syscall 0
#define TARGET_NETBSD_NR_exit 1
#define TARGET_NETBSD_NR_fork 2
#define TARGET_NETBSD_NR_read 3
#define TARGET_NETBSD_NR_write 4
#define TARGET_NETBSD_NR_open 5
#define TARGET_NETBSD_NR_close 6
#define TARGET_NETBSD_NR_wait4 7
#define TARGET_NETBSD_NR_compat_43_ocreat 8
#define TARGET_NETBSD_NR_link 9
#define TARGET_NETBSD_NR_unlink 10
#define TARGET_NETBSD_NR_chdir 12
#define TARGET_NETBSD_NR_fchdir 13
#define TARGET_NETBSD_NR_mknod 14
#define TARGET_NETBSD_NR_chmod 15
#define TARGET_NETBSD_NR_chown 16
#define TARGET_NETBSD_NR_break 17
#define TARGET_NETBSD_NR_compat_20_getfsstat 18
#define TARGET_NETBSD_NR_compat_43_olseek 19
#define TARGET_NETBSD_NR_getpid 20
#define TARGET_NETBSD_NR_getpid 20
#define TARGET_NETBSD_NR_compat_40_mount 21
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#define TARGET_NETBSD_NR_setuid 23
#define TARGET_NETBSD_NR_getuid 24
#define TARGET_NETBSD_NR_getuid 24
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#define TARGET_NETBSD_NR_sendmsg 28
#define TARGET_NETBSD_NR_recvfrom 29
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\#define TARGET_NETBSD_NR_symlink ..... 57
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/* $OpenBSD: errno.h,v 1.20 2007/09/03 14:37:52 millert Exp $ */
/* $NetBSD: errno.h,v 1.10 1996/01/20 01:33:53 jtc Exp $ */
/*
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```

[^35]| \#define TARGET_EXDEV | 18 | /* Cross-device link */ |
| :--- | :---: | :---: |
| \#define TARGET_ENODEV | 19 | /* Operation not supported by device */ |
| \#define TARGET_ENOTDIR | 20 | /* Not a directory */ |
| \#define TARGET_EISDIR | 21 | /* Is a directory */ |
| \#define TARGET_EINVAL | 22 | /* Invalid argument */ |
| \#define TARGET_ENFILE | 23 | /* Too many open files in system */ |
| \#define TARGET_EMFILE | 24 | /* Too many open files */ |
| \#define TARGET_ENOTTY | 25 | /* Inappropriate ioctl for device */ |
| \#define TARGET_ETXTBSY | 26 | /* Text file busy */ |
| \#define TARGET_EFBIG | 27 | /* File too large */ |
| \#define TARGET_ENOSPC | 28 | /* No space left on device */ |
| \#define TARGET_ESPIPE | 29 | /* Illegal seek */ |
| \#define TARGET_EROFS | 30 | /* Read-only file system */ |
| \#define TARGET_EMLINK | 31 | /* Too many links */ |
| \#define TARGET_EPIPE | 32 | /* Broken pipe */ |


| /* math software */ |  |
| :---: | :---: |
| \#define TARGET_EDOM 33 | /* Numerical argument out of domain */ |
| \#define TARGET_ERANGE 34 | /* Result too large */ |
| /* non-blocking and interrupt i/o */ |  |
| \#define TARGET_EAGAIN 35 | /* Resource temporarily unavailable */ |
| \#define TARGET_EWOULDBLOCK | EAGAIN /* Operation would block */ |
| \#define TARGET_EINPROGRESS | 36 /* Operation now in progress */ |
| \#define TARGET_EALREADY 37 | /* Operation already in progress */ |

/* ipc/network software -- argument errors */
\#define TARGET_ENOTSOCK 38 /* Socket operation on non-socket */
\#define TARGET_EDESTADDRREQ 39 /* Destination address required */
\#define TARGET_EMSGSIZE 40 /* Message too long */
\#define TARGET_EPROTOTYPE $41 \quad / *$ Protocol wrong type for socket */
\#define TARGET_ENOPROTOOPT 42 /* Protocol not available */
\#define TARGET_EPROTONOSUPPORT $43 \quad / *$ Protocol not supported */
\#define TARGET_ESOCKTNOSUPPORT $44 \quad / *$ Socket type not supported */
\#define TARGET_EOPNOTSUPP 45 /* Operation not supported */
\#define TARGET_EPFNOSUPPORT $46 \quad / *$ Protocol family not supported */
\#define TARGET_EAFNOSUPPORT $47 \quad / *$ Address family not supported by protocol family */
\#define TARGET_EADDRINUSE 48 /* Address already in use */
\#define TARGET_EADDRNOTAVAIL 49 /* Can't assign requested address */

| /* ipc/network software -- operational errors */ |  |  |
| :---: | :---: | :---: |
| \#define TARGET_ENETDOWN 50 |  | Network is down */ |
| \#define TARGET_ENETUNREACH | 51 | /* Network is unreachable */ |
| \#define TARGET_ENETRESET | 52 | /* Network dropped connection on reset */ |
| \#define TARGET_ECONNABORTED |  | /* Software caused connection abort */ |
| \#define TARGET_ECONNRESET | 54 | /* Connection reset by peer */ |
| \#define TARGET_ENOBUFS 55 |  | /* No buffer space available */ |
| \#define TARGET_EISCONN 56 |  | /* Socket is already connected */ |



| /* quotas \& mush */ |  |  |
| :--- | :---: | :---: |
| \#define TARGET_EPROCLIM 67 | /* Too many processes */ |  |
| \#define TARGET_EUSERS | 68 | /* Too many users */ |
| \#define TARGET_EDQUOT | 69 | /* Disk quota exceeded */ |


| /* Network File System */ |  |  |
| :--- | :---: | :---: |
| \#define TARGET_ESTALE | 70 |  |
| /* Stale NFS file handle */ |  |  |
| \#define TARGET_EREMOTE | 71 |  |
| /* Too many levels of remote in path */ |  |  |
| \#define TARGET_EBADRPC | 72 |  |
| /* RPC struct is bad */ |  |  |
| \#define TARGET_ERPCMISMATCH | 73 | /* RPC version wrong */ |
| \#define TARGET_EPROGUNAVAIL | 74 | /* RPC prog. not avail */ |
| \#define TARGET_EPROGMISMATCH 75 | /* Program version wrong */ |  |
| \#define TARGET_EPROCUNAVAIL 76 | /* Bad procedure for program */ |  |



```
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*/
```

```
{ TARGET_FREEBSD_NR___acl_aclcheck_fd, "__acl_aclcheck_fd", "%s(%d, %d, %#x)", NULL, NULL },
{ TARGET_FREEBSD_NR___acl_aclcheck_file, "__acl_aclcheck_file", "%s(\"%s\", %d, %#x)", NULL, NULL },
{ TARGET_FREEBSD_NR___acl_aclcheck_link, "__acl_aclcheck_link", "%s(\"%s\", %d, %#x)", NULL, NULL
},
{ TARGET_FREEBSD_NR___acl_delete_fd, "__acl_delete_fd", "%s(%d, %d)", NULL, NULL },
{ TARGET_FREEBSD_NR___acl_delete_file, "__acl_delete_file", "%s(\"%s\", %d)", NULL, NULL },
{ TARGET_FREEBSD_NR___acl_delete_link, "__acl_delete_link", "%s(\"%s\", %d)", NULL, NULL },
{ TARGET_FREEBSD_NR___acl_get_fd, "__acl_get_fd", "%s(%d, %d, %#x)", NULL, NULL },
{ TARGET_FREEBSD_NR___acl_get_file, "__acl_get_file", "%s(\"%s\", %d, %#x)", NULL, NULL },
{ TARGET_FREEBSD_NR___acl_get_link, "__acl_get_link", "%s(\"%s\", %d, %#x)", NULL, NULL },
{ TARGET_FREEBSD_NR___acl_set_fd, "__acl_set_fd", "%s(%d, %d, %#x)", NULL, NULL },
{ TARGET_FREEBSD_NR___acl_set_file, "__acl_set_file", "%s(\"%s\", %d, %#x)", NULL, NULL },
{ TARGET_FREEBSD_NR___acl_set_link, "__acl_set_link", "%s(\"%s\", %d, %#x)", NULL, NULL },
{ TARGET_FREEBSD_NR___semctl, "__semctl", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR___syscall, "__syscall", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR___sysctl, "__sysctl", NULL, print_sysctl, NULL },
{ TARGET_FREEBSD_NR__umtx_op, "_umtx_op", "%s(%#x, %d, %d, %#x, %#x)", NULL, NULL },
{ TARGET_FREEBSD_NR_accept, "accept", "%s(%d,%#x,%#x)", NULL, NULL },
{ TARGET_FREEBSD_NR_access, "access", "%s(\"%s\",%#o)", NULL, NULL },
{ TARGET_FREEBSD_NR_acct, "acct", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_adjtime, "adjtime", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_bind, "bind", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_break, "break", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_chdir, "chdir", "%s(\"%s\")", NULL, NULL },
{ TARGET_FREEBSD_NR_chflags, "chflags", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_chmod, "chmod", "%s(\"%s\",%#o)", NULL, NULL },
{ TARGET_FREEBSD_NR_chown, "chown", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_chroot, "chroot", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_clock_getres, "clock_getres", NULL, NULL, NULL },
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{ TARGET_FREEBSD_NR_close, "close", "%s(%d)", NULL, NULL },
{ TARGET_FREEBSD_NR_connect, "connect", "%s(%d,%#x,%d)", NULL, NULL },
{ TARGET_FREEBSD_NR_dup, "dup", NULL, NULL, NULL },
```

```
{ TARGET_FREEBSD_NR_dup2, "dup2", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_eaccess, "eaccess", "%s(\"%s\",%#x)", NULL, NULL },
{ TARGET_FREEBSD_NR_execve, "execve", NULL, print_execve, NULL },
{ TARGET_FREEBSD_NR_exit, "exit", "%s(%d)\n", NULL, NULL },
{ TARGET_FREEBSD_NR_extattrctl, "extattrctl", "%s(\"%s\", %d, \"%s\", %d, \"%s\"", NULL, NULL },
{ TARGET_FREEBSD_NR_extattr_delete_fd, "extattr_delete_fd", "%s(%d, %d, \"%s\")", NULL, NULL },
{ TARGET_FREEBSD_NR_extattr_delete_file, "extattr_delete_file", "%s(\"%s\", %d, \"%s\")", NULL, NULL },
{ TARGET_FREEBSD_NR_extattr_delete_link, "extattr_delete_link", "%s(\"%s\", %d, \"%s\")", NULL, NULL },
{ TARGET_FREEBSD_NR_extattr_get_fd, "extattr_get_fd", "%s(%d, %d, \"%s\", %#x, %d)", NULL, NULL },
{ TARGET_FREEBSD_NR_extattr_get_file, "extattr_get_file", "%s(\"%s\", %d, \"%s\", %#x, %d)", NULL, NULL
},
{ TARGET_FREEBSD_NR_extattr_get_file, "extattr_get_link", "%s(\"%s\", %d, \"%s\", %#x, %d)", NULL,
NULL },
{ TARGET_FREEBSD_NR_extattr_list_fd, "extattr_list_fd", "%s(%d, %d, %#x, %d)", NULL, NULL },
{ TARGET_FREEBSD_NR_extattr_list_file, "extattr_list_file", "%s(\"%s\", %d, %#x, %d)", NULL, NULL },
{ TARGET_FREEBSD_NR_extattr_list_link, "extattr_list_link", "%s(\"%s\", %d, %#x, %d)", NULL, NULL },
{ TARGET_FREEBSD_NR_extattr_set_fd, "extattr_set_fd", "%s(%d, %d, \"%s\", %#x, %d)", NULL, NULL },
{ TARGET_FREEBSD_NR_extattr_set_file, "extattr_set_file", "%s(\"%s\", %d, \"%s\", %#x, %d)", NULL, NULL
},
{ TARGET_FREEBSD_NR_extattr_set_link, "extattr_set_link", "%s(\"%s\", %d, \"%s\", %#x, %d)", NULL,
NULL },
{ TARGET_FREEBSD_NR_fchdir, "fchdir", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_fchflags, "fchflags", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_fchmod, "fchmod", "%s(%d,%#o)", NULL, NULL },
{ TARGET_FREEBSD_NR_fchown, "fchown", "%s(%d,%d,%d)", NULL, NULL },
{ TARGET_FREEBSD_NR_fcntl, "fcntl", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_fexecve, "fexecve", NULL, print_execve, NULL },
{ TARGET_FREEBSD_NR_fhopen, "fhopen", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_fhstat, "fhstat", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_fhstatfs, "fhstatfs", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_flock, "flock", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_fork, "fork", "%s()", NULL, NULL },
{ TARGET_FREEBSD_NR_fpathconf, "fpathconf", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_fstat, "fstat", "%s(%d,%#x)", NULL, NULL },
{ TARGET_FREEBSD_NR_fstatat, "fstatat", "%s(%d,\"%s\", %#x, %d)", NULL, NULL },
{ TARGET_FREEBSD_NR_fstatfs, "fstatfs", "%s(%d,%#x)", NULL, NULL },
{ TARGET_FREEBSD_NR_fsync, "fsync", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_ftruncate, "ftruncate", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_futimes, "futimes", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_getcontext, "getcontext", "%s(%#x)", NULL, NULL },
{ TARGET_FREEBSD_NR_getdirentries, "getdirentries", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_freebsd6_mmap, "freebsd6_mmap", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_getegid, "getegid", "%s()", NULL, NULL },
{ TARGET_FREEBSD_NR_geteuid, "geteuid", "%s()", NULL, NULL },
{ TARGET_FREEBSD_NR_getfh, "getfh", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_getfsstat, "getfsstat", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_getgid, "getgid", "%s()", NULL, NULL },
{ TARGET_FREEBSD_NR_getgroups, "getgroups", NULL, NULL, NULL },
```

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{ TARGET_FREEBSD_NR_getitimer, "getitimer", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_getlogin, "getlogin", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_getpeername, "getpeername", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_getpgid, "getpgid", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_getpgrp, "getpgrp", "%s()", NULL, NULL },
{ TARGET_FREEBSD_NR_getpid, "getpid", "%s()", NULL, NULL },
{ TARGET_FREEBSD_NR_getppid, "getppid", "%s()", NULL, NULL },
{ TARGET_FREEBSD_NR_getpriority, "getpriority", "%s(%#x,%#x)", NULL, NULL },
{ TARGET_FREEBSD_NR_getresgid, "getresgid", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_getresuid, "getresuid", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_getrlimit, "getrlimit", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_getrusage, "getrusage", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_getsid, "getsid", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_getsockname, "getsockname", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_getsockopt, "getsockopt", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_gettimeofday, "gettimeofday", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_getuid, "getuid", "%s()", NULL, NULL },
{ TARGET_FREEBSD_NR_ioctl, "ioctl", NULL, print_ioctl, NULL },
{ TARGET_FREEBSD_NR_issetugid, "issetugid", "%s()", NULL, NULL },
{ TARGET_FREEBSD_NR_kevent, "kevent", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_kill, "kill", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_kqueue, "kqueue", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_ktrace, "ktrace", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_lchown, "lchown", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_link, "link", "%s(\"%s\",\"%s\")", NULL, NULL },
{ TARGET_FREEBSD_NR_listen, "listen", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_lpathconf, "lpathconf", "%s(\"%s\", %d)", NULL, NULL },
{ TARGET_FREEBSD_NR_lseek, "lseek", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_lstat, "lstat", "%s(\"%s\",%p)", NULL, NULL },
{ TARGET_FREEBSD_NR_madvise, "madvise", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_mincore, "mincore", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_minherit, "minherit", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_mkdir, "mkdir", "%s(\"%s\",%#o)", NULL, NULL },
{ TARGET_FREEBSD_NR_mkfifo, "mkfifo", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_mknod, "mknod", "%s(\"%s\",%#o,%#x)", NULL, NULL },
{ TARGET_FREEBSD_NR_mlock, "mlock", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_mlockall, "mlockall", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_mmap, "mmap", NULL, NULL, print_syscall_ret_addr },
{ TARGET_FREEBSD_NR_mount, "mount", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_mprotect, "mprotect", "%s(%#x,%#x,%d)", NULL, NULL },
{ TARGET_FREEBSD_NR_msgctl, "msgctl", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_msgget, "msgget", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_msgrcv, "msgrcv", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_msgsnd, "msgsnd", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_msync, "msync", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_munlock, "munlock", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_munlockall, "munlockall", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_munmap, "munmap", "%s(%p,%d)", NULL, NULL },
```

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{ TARGET_FREEBSD_NR_nanosleep, "nanosleep", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_nfssvc, "nfssvc", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_open, "open", "%s(\"%s\",%#x,%#o)", NULL, NULL },
{ TARGET_FREEBSD_NR_openat, "openat", "%s(%d, \"%s\",%#x,%#o)", NULL, NULL },
{ TARGET_FREEBSD_NR_pathconf, "pathconf", "%s(\"%s\", %d)", NULL, NULL },
{ TARGET_FREEBSD_NR_pipe, "pipe", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_poll, "poll", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_pread, "pread", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_preadv, "preadv", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_profil, "profil", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_ptrace, "ptrace", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_pwrite, "pwrite", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_pwritev, "pwritev", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_quotactl, "quotactl", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_read, "read", "%s(%d,%#x,%d)", NULL, NULL },
{ TARGET_FREEBSD_NR_readlink, "readlink", "%s(\"%s\",%p,%d)", NULL, NULL },
{ TARGET_FREEBSD_NR_readv, "readv", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_reboot, "reboot", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_recvfrom, "recvfrom", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_recvmsg, "recvmsg", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_rename, "rename", "%s(\"%s\",\"%s\")", NULL, NULL },
{ TARGET_FREEBSD_NR_revoke, "revoke", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_rfork, "rfork", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_rmdir, "rmdir", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_rtprio_thread, "rtprio_thread", "%s(%d, %d, %p)", NULL, NULL },
{ TARGET_FREEBSD_NR_sbrk, "sbrk", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_sched_yield, "sched_yield", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_select, "select", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_semget, "semget", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_semop, "semop", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_sendmsg, "sendmsg", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_sendto, "sendto", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_setcontext, "setcontext", "%s(%#x)", NULL, NULL },
{ TARGET_FREEBSD_NR_setegid, "setegid", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_seteuid, "seteuid", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_setgid, "setgid", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_setgroups, "setgroups", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_setitimer, "setitimer", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_setlogin, "setlogin", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_setpgid, "setpgid", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_setpriority, "setpriority", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_setregid, "setregid", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_setresgid, "setresgid", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_setresuid, "setresuid", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_setreuid, "setreuid", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_setrlimit, "setrlimit", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_setsid, "setsid", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_setsockopt, "setsockopt", NULL, NULL, NULL },
```

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{ TARGET_FREEBSD_NR_settimeofday, "settimeofday", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_setuid, "setuid", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_shmat, "shmat", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_shmctl, "shmctl", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_shmdt, "shmdt", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_shmget, "shmget", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_shutdown, "shutdown", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_sigaction, "sigaction", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_sigaltstack, "sigaltstack", "%s(%p,%p)", NULL, NULL },
{ TARGET_FREEBSD_NR_sigpending, "sigpending", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_sigprocmask, "sigprocmask", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_sigreturn, "sigreturn", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_sigsuspend, "sigsuspend", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_socket, "socket", "%s(%d,%d,%d)", NULL, NULL },
{ TARGET_FREEBSD_NR_socketpair, "socketpair", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_sstk, "sstk", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_stat, "stat", "%s(\"%s\",%p)", NULL, NULL },
{ TARGET_FREEBSD_NR_statfs, "statfs", "%s(\"%s\",%p)", NULL, NULL },
{ TARGET_FREEBSD_NR_symlink, "symlink", "%s(\"%s\",\"%s\")", NULL, NULL },
{ TARGET_FREEBSD_NR_sync, "sync", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_sysarch, "sysarch", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_syscall, "syscall", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_thr_create, "thr_create", "%s(%#x, %#x, %d)", NULL, NULL },
{ TARGET_FREEBSD_NR_thr_exit, "thr_exit", "%s(%#x)", NULL, NULL },
{ TARGET_FREEBSD_NR_thr_kill, "thr_kill", "%s(%d, %#x)", NULL, NULL },
{ TARGET_FREEBSD_NR_thr_kill2, "thr_kill2", "%s(%d, %d, %d)", NULL, NULL },
{ TARGET_FREEBSD_NR_thr_new, "thr_new", "%s(%#x, %d)", NULL, NULL },
{ TARGET_FREEBSD_NR_thr_self, "thr_self", "%s(%#x)", NULL, NULL },
{ TARGET_FREEBSD_NR_thr_set_name, "thr_set_name", "%s(%d, \"%s\")", NULL, NULL },
{ TARGET_FREEBSD_NR_thr_suspend, "thr_suspend", "%s(%d, %#x)", NULL, NULL },
{ TARGET_FREEBSD_NR_thr_wake, "thr_wake", "%s(%d)", NULL, NULL },
{ TARGET_FREEBSD_NR_truncate, "truncate", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_umask, "umask", "%s(%#o)", NULL, NULL },
{ TARGET_FREEBSD_NR_unlink, "unlink", "%s(\"%s\")", NULL, NULL },
{ TARGET_FREEBSD_NR_unmount, "unmount", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_utimes, "utimes", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_vfork, "vfork", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_wait4, "wait4", NULL, NULL, NULL },
{ TARGET_FREEBSD_NR_write, "write", "%s(%d,%#x,%d)", NULL, NULL },
{ TARGET_FREEBSD_NR_writev, "writev", "%s(%d,%p,%#x)", NULL, NULL },
/*
* System call numbers.
*
* created from FreeBSD: releng/9.1/sys/kern/syscalls.master 229723
* 2012-01-06 19:29:16Z jhb
*/
```

\#define TARGET_FREEBSD_NR_syscall 0

```
#define TARGET_FREEBSD_NR_exit 1
#define TARGET_FREEBSD_NR_fork 2
#define TARGET_FREEBSD_NR_read 3
#define TARGET_FREEBSD_NR_write 4
#define TARGET_FREEBSD_NR_open 5
#define TARGET_FREEBSD_NR_close 6
#define TARGET_FREEBSD_NR_wait4 7
    /* 8 is old creat */
#define TARGET_FREEBSD_NR_link 9
#define TARGET_FREEBSD_NR_unlink 10
    /* 11 is obsolete execv */
#define TARGET_FREEBSD_NR_chdir 12
#define TARGET_FREEBSD_NR_fchdir 13
#define TARGET_FREEBSD_NR_mknod 14
#define TARGET_FREEBSD_NR_chmod 15
#define TARGET_FREEBSD_NR_chown 16
#define TARGET_FREEBSD_NR_break 17
#define TARGET_FREEBSD_NR_freebsd4_getfsstat 18
    /* 19 is old lseek */
#define TARGET_FREEBSD_NR_getpid 20
#define TARGET_FREEBSD_NR_mount 21
#define TARGET_FREEBSD_NR_unmount 22
#define TARGET_FREEBSD_NR_setuid 23
#define TARGET_FREEBSD_NR_getuid 24
#define TARGET_FREEBSD_NR_geteuid 25
#define TARGET_FREEBSD_NR_ptrace 26
#define TARGET_FREEBSD_NR_recvmsg 27
#define TARGET_FREEBSD_NR_sendmsg 28
#define TARGET_FREEBSD_NR_recvfrom 29
#define TARGET_FREEBSD_NR_accept 30
#define TARGET_FREEBSD_NR_getpeername 31
#define TARGET_FREEBSD_NR_getsockname 32
#define TARGET_FREEBSD_NR_access 33
#define TARGET_FREEBSD_NR_chflags 34
#define TARGET_FREEBSD_NR_fchflags 35
#define TARGET_FREEBSD_NR_sync 36
#define TARGET_FREEBSD_NR_kill 37
    /* 38 is old stat */
#define TARGET_FREEBSD_NR_getppid 39
    /* 40 is old lstat */
#define TARGET_FREEBSD_NR_dup 41
#define TARGET_FREEBSD_NR_pipe 42
#define TARGET_FREEBSD_NR_getegid 43
#define TARGET_FREEBSD_NR_profil 44
#define TARGET_FREEBSD_NR_ktrace 45
    /* 46 is old sigaction */
#define TARGET_FREEBSD_NR_getgid 47
    /* 48 is old sigprocmask */
```

\#define TARGET_FREEBSD_NR_getlogin 49
\#define TARGET_FREEBSD_NR_setlogin 50
\#define TARGET_FREEBSD_NR_acct 51
/*52 is old sigpending */
\#define TARGET_FREEBSD_NR_sigaltstack 53
\#define TARGET_FREEBSD_NR_ioctl 54
\#define TARGET_FREEBSD_NR_reboot 55
\#define TARGET_FREEBSD_NR_revoke 56
\#define TARGET_FREEBSD_NR_symlink 57
\#define TARGET_FREEBSD_NR_readlink 58
\#define TARGET_FREEBSD_NR_execve 59
\#define TARGET_FREEBSD_NR_umask 60
\#define TARGET_FREEBSD_NR_chroot 61
/* 62 is old fstat */
/* 63 is old getkerninfo */
/* 64 is old getpagesize */
\#define TARGET_FREEBSD_NR_msync 65
\#define TARGET_FREEBSD_NR_vfork 66
/* 67 is obsolete vread */
/* 68 is obsolete vwrite */
\#define TARGET_FREEBSD_NR_sbrk 69
\#define TARGET_FREEBSD_NR_sstk 70 /* 71 is old mmap */
\#define TARGET_FREEBSD_NR_vadvise 72
\#define TARGET_FREEBSD_NR_munmap 73
\#define TARGET_FREEBSD_NR_mprotect 74
\#define TARGET_FREEBSD_NR_madvise 75
/* 76 is obsolete vhangup */
/*77 is obsolete vlimit */
\#define TARGET_FREEBSD_NR_mincore 78
\#define TARGET_FREEBSD_NR_getgroups 79
\#define TARGET_FREEBSD_NR_setgroups 80
\#define TARGET_FREEBSD_NR_getpgrp 81
\#define TARGET_FREEBSD_NR_setpgid 82
\#define TARGET_FREEBSD_NR_setitimer 83 /* 84 is old wait */
\#define TARGET_FREEBSD_NR_swapon 85
\#define TARGET_FREEBSD_NR_getitimer 86 /* 87 is old gethostname */ /* 88 is old sethostname */
\#define TARGET_FREEBSD_NR_getdtablesize 89
\#define TARGET_FREEBSD_NR_dup2 90
\#define TARGET_FREEBSD_NR_fcntl 92
\#define TARGET_FREEBSD_NR_select 93
\#define TARGET_FREEBSD_NR_fsync 95
\#define TARGET_FREEBSD_NR_setpriority 96
\#define TARGET_FREEBSD_NR_socket 97
\#define TARGET_FREEBSD_NR_connect 98

```
    /* 99 is old accept */
#define TARGET_FREEBSD_NR_getpriority 100
    /* 101 is old send */
    /* 102 is old recv */
    /* 103 is old sigreturn */
#define TARGET_FREEBSD_NR_bind 104
#define TARGET_FREEBSD_NR_setsockopt 105
#define TARGET_FREEBSD_NR_listen 106
    /* 107 is obsolete vtimes */
    /* 108 is old sigvec */
    /* 109 is old sigblock */
    /* 110 is old sigsetmask */
    /* 111 is old sigsuspend */
    /* 112 is old sigstack */
    /* 113 is old recvmsg */
    /* 114 is old sendmsg */
    /* 115 is obsolete vtrace */
#define TARGET_FREEBSD_NR_gettimeofday 116
#define TARGET_FREEBSD_NR_getrusage 117
#define TARGET_FREEBSD_NR_getsockopt 118
#define TARGET_FREEBSD_NR_readv 120
#define TARGET_FREEBSD_NR_writev 121
#define TARGET_FREEBSD_NR_settimeofday 122
#define TARGET_FREEBSD_NR_fchown 123
#define TARGET_FREEBSD_NR_fchmod 124
    /* 125 is old recvfrom */
#define TARGET_FREEBSD_NR_setreuid 126
#define TARGET_FREEBSD_NR_setregid 127
#define TARGET_FREEBSD_NR_rename 128
    /* 129 is old truncate */
    /* 130 is old ftruncate */
#define TARGET_FREEBSD_NR_flock 131
#define TARGET_FREEBSD_NR_mkfifo 132
#define TARGET_FREEBSD_NR_sendto 133
#define TARGET_FREEBSD_NR_shutdown 134
#define TARGET_FREEBSD_NR_socketpair 135
#define TARGET_FREEBSD_NR_mkdir 136
#define TARGET_FREEBSD_NR_rmdir 137
#define TARGET_FREEBSD_NR_utimes 138
    /* 139 is obsolete 4.2 sigreturn */
#define TARGET_FREEBSD_NR_adjtime 140
    /* 141 is old getpeername */
    /* 142 is old gethostid */
    /* 143 is old sethostid */
    /* 144 is old getrlimit */
    /* 145 is old setrlimit */
    /* 146 is old killpg */
#define TARGET_FREEBSD_NR_killpg 146/* COMPAT */
```

\#define TARGET_FREEBSD_NR_setsid ..... 147
\#define TARGET_FREEBSD_NR_quotactl 148
/* 149 is old quota *//* 150 is old getsockname */
\#define TARGET_FREEBSD_NR_nlm_syscall ..... 154
\#define TARGET_FREEBSD_NR_nfssvc ..... 155
/* 156 is old getdirentries */
\#define TARGET_FREEBSD_NR_freebsd4_statfs ..... 157
\#define TARGET_FREEBSD_NR_freebsd4_fstatfs ..... 158
\#define TARGET_FREEBSD_NR_lgetfh ..... 160
\#define TARGET_FREEBSD_NR_getfh 161
\#define TARGET_FREEBSD_NR_freebsd4_getdomainname ..... 162
\#define TARGET_FREEBSD_NR_freebsd4_setdomainname ..... 163
\#define TARGET_FREEBSD_NR_freebsd4_uname ..... 164
\#define TARGET_FREEBSD_NR_sysarch ..... 165
\#define TARGET_FREEBSD_NR_rtprio ..... 166
\#define TARGET_FREEBSD_NR_semsys ..... 169
\#define TARGET_FREEBSD_NR_msgsys ..... 170
\#define TARGET_FREEBSD_NR_shmsys ..... 171
\#define TARGET_FREEBSD_NR_freebsd6_pread ..... 173
\#define TARGET_FREEBSD_NR_freebsd6_pwrite ..... 174
\#define TARGET_FREEBSD_NR_setfib ..... 175
\#define TARGET_FREEBSD_NR_ntp_adjtime ..... 176
\#define TARGET_FREEBSD_NR_setgid ..... 181
\#define TARGET_FREEBSD_NR_setegid ..... 182
\#define TARGET_FREEBSD_NR_seteuid ..... 183
\#define TARGET_FREEBSD_NR_stat 188
\#define TARGET_FREEBSD_NR_fstat 189
\#define TARGET_FREEBSD_NR_1stat 190
\#define TARGET_FREEBSD_NR_pathconf 191
\#define TARGET_FREEBSD_NR_fpathconf 192
\#define TARGET_FREEBSD_NR_getrlimit 194
\#define TARGET_FREEBSD_NR_setrlimit 195
\#define TARGET_FREEBSD_NR_getdirentries 196
\#define TARGET_FREEBSD_NR_freebsd6_mmap 197
\#define TARGET_FREEBSD_NR
$\qquad$ syscall 198
\#define TARGET_FREEBSD_NR_freebsd6_Iseek ..... 199
\#define TARGET_FREEBSD_NR_freebsd6_truncate 200
\#define TARGET_FREEBSD_NR_freebsd6_ftruncate ..... 201
\#define TARGET_FREEBSD_NR

$\qquad$
sysctl 202
\#define TARGET_FREEBSD_NR_mlock 203
\#define TARGET_FREEBSD_NR_munlock ..... 204
\#define TARGET_FREEBSD_NR_undelete ..... 205
\#define TARGET_FREEBSD_NR_futimes ..... 206
\#define TARGET_FREEBSD_NR_getpgid ..... 207
\#define TARGET_FREEBSD_NR_poll 209
\#define TARGET_FREEBSD_NR_freebsd7semctl 220
\#define TARGET_FREEBSD_NR_semget ..... 221
\#define TARGET_FREEBSD_NR_semop 222
\#define TARGET_FREEBSD_NR_freebsd7_msgctl ..... 224
\#define TARGET_FREEBSD_NR_msgget ..... 225
\#define TARGET_FREEBSD_NR_msgsnd ..... 226
\#define TARGET_FREEBSD_NR_msgrcv ..... 227
\#define TARGET_FREEBSD_NR_shmat 228
\#define TARGET_FREEBSD_NR_freebsd7_shmctl ..... 229
\#define TARGET_FREEBSD_NR_shmdt 230
\#define TARGET_FREEBSD_NR_shmget ..... 231
\#define TARGET_FREEBSD_NR_clock_gettime 232
\#define TARGET_FREEBSD_NR_clock_settime 233
\#define TARGET_FREEBSD_NR_clock_getres ..... 234
\#define TARGET_FREEBSD_NR_ktimer_create 235
\#define TARGET_FREEBSD_NR_ktimer_delete 236
\#define TARGET_FREEBSD_NR_ktimer_settime ..... 237
\#define TARGET_FREEBSD_NR_ktimer_gettime ..... 238
\#define TARGET_FREEBSD_NR_ktimer_getoverrun 239
\#define TARGET_FREEBSD_NR_nanosleep 240
\#define TARGET_FREEBSD_NR_ntp_gettime ..... 248
\#define TARGET_FREEBSD_NR_minherit 250
\#define TARGET_FREEBSD_NR_rfork 251
\#define TARGET_FREEBSD_NR_openbsd_poll ..... 252
\#define TARGET_FREEBSD_NR_issetugid 25
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\#define TARGET_FREEBSD_NR_aio_read 255
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* @(#)mman.h 8.2 (Berkeley) 1/9/95
* $FreeBSD: src/sys/sys/mman.h,v 1.42 2008/03/28 04:29:27 ps Exp $
*/
```

\#define TARGET_FREEBSD_MAP_RESERVED0080 0x0080 /* previously misimplemented MAP_INHERIT */ \#define TARGET_FREEBSD_MAP_RESERVED0100 0x0100 /* previously unimplemented MAP_NOEXTEND */
\#define TARGET_FREEBSD_MAP_STACK 0x0400 /* region grows down, like a stack */ \#define TARGET_FREEBSD_MAP_NOSYNC 0x0800 /* page to but do not sync underlying file */

```
#define TARGET_FREEBSD_MAP_FLAGMASK 0x1ff7
/* $NetBSD: mman.h,v 1.42 2008/11/18 22:13:49 ad Exp $ */
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*
* @(#)mman.h 8.2 (Berkeley) 1/9/95
*/
#define TARGET_NETBSD_MAP_INHERIT 0x0080 /* region is retained after exec */
#define TARGET_NETBSD_MAP_TRYFIXED 0x0400 /* attempt hint address, even within break */
#define TARGET_NETBSD_MAP_WIRED 0x0800 /* mlock() mapping when it is established */
#define TARGET_NETBSD_MAP_STACK 0x2000 /* allocated from memory, swap space (stack) */
#define TARGET_NETBSD_MAP_FLAGMASK 0x3ff7
/* $OpenBSD: mman.h,v 1.18 2003/07/21 22:52:19 tedu Exp $ */
/* $NetBSD: mman.h,v 1.11 1995/03/26 20:24:23 jtc Exp $ */
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```

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*
* @(#)mman.h 8.1 (Berkeley) 6/2/93
*/
#define TARGET_OPENBSD_MAP_INHERIT 0x0080 /* region is retained after exec */
#define TARGET_OPENBSD_MAP_NOEXTEND 0x0100 /* for MAP_FILE, don't change file size */
#define TARGET_OPENBSD_MAP_TRYFIXED 0x0400 /* attempt hint address, even within heap */
#define TARGET_OPENBSD_MAP_FLAGMASK 0x17f7
// XXX
#define TARGET_BSD_MAP_FLAGMASK 0x3ff7
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### 1.285 qemu-kvm 1.5.3:156.el7_5.5

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From 4a988f436f785fa9349baf66a0d44e26b94f75af Mon Sep 17 00:00:00 2001
Message-Id: [4a988f436f785fa9349baf66a0d44e26b94f75af.1389014116.git.minovotn@redhat.com](mailto:4a988f436f785fa9349baf66a0d44e26b94f75af.1389014116.git.minovotn@redhat.com) In-Reply-To: [c8cc35838d42aa286242772d97e3a9be7bb786ba.1389014116.git.minovotn@redhat.com](mailto:c8cc35838d42aa286242772d97e3a9be7bb786ba.1389014116.git.minovotn@redhat.com) References: [c8cc35838d42aa286242772d97e3a9be7bb786ba.1389014116.git.minovotn@redhat.com](mailto:c8cc35838d42aa286242772d97e3a9be7bb786ba.1389014116.git.minovotn@redhat.com) From: Paolo Bonzini [pbonzini@redhat.com](mailto:pbonzini@redhat.com) Date: Mon, 9 Dec 2013 14:09:21 +0100

Subject: [PATCH 33/50] block/iscsi: updated copyright

RH-Author: Paolo Bonzini [pbonzini@redhat.com](mailto:pbonzini@redhat.com) Message-id: [1386598178-11845-36-git-send-email-pbonzini@redhat.com](mailto:1386598178-11845-36-git-send-email-pbonzini@redhat.com) Patchwork-id: 56072 O-Subject: [RHEL 7.0 qemu-kvm PATCH 35/52] block/iscsi: updated copyright Bugzilla: 1007815
RH-Acked-by: Jeffrey Cody [jcody@redhat.com](mailto:jcody@redhat.com)
RH-Acked-by: Fam Zheng [famz@redhat.com](mailto:famz@redhat.com)
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From: Peter Lieven [pl@kamp.de](mailto:pl@kamp.de)
added myself to reflect recent work on the iscsi block driver.

Signed-off-by: Peter Lieven [pl@kamp.de](mailto:pl@kamp.de)
Signed-off-by: Paolo Bonzini [pbonzini@redhat.com](mailto:pbonzini@redhat.com)
Signed-off-by: Stefan Hajnoczi [stefanha@redhat.com](mailto:stefanha@redhat.com)
(cherry picked from commit 2af8a1a704a352bab2e9eaf803db0b3552e826d0)
--
block/iscsi.c | $1+$
1 file changed, 1 insertion(+)

Signed-off-by: Michal Novotny [minovotn@redhat.com](mailto:minovotn@redhat.com)
block/iscsi.c $\mid 1+$
1 file changed, 1 insertion(+)
diff --git a/block/iscsi.c b/block/iscsi.c
index c5cd86d..7ae61f9 100644
--- a/block/iscsi.c
+++ b/block/iscsi.c
@ @ -2,6 +2,7 @ @

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Version 2.1, February 1999

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```

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ifndef TOP
TOP $=\$$ (shell while ! test -e make.rules; do cd .. ; done; pwd)
export TOP
endif
include \$(TOP)/make.rules

## SUBDIRS=

ifeq (\$(SNK_BIOSEMU_APPS), 1)
SUBDIRS += x86emu
endif
CLEANSUBDIRS $=\$($ SUBDIRS $)$

```
all :
for subdir in $(SUBDIRS) ; do $(MAKE) -C $${subdir} || exit 1 ; done
# Common targets for all subdirectories:
clean distclean depend:
for subdir in $(CLEANSUBDIRS) ; do $(MAKE) -C $${subdir} $@ ; done
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# ****************************************************************************/
ifndef TOP
TOP = $(shell while ! test -e make.rules; do cd .. ; done; pwd)
export TOP
endif
include $(TOP)/make.rules
ROOTDIR ?= ../..
LDFLAGS=
ASFLAGS= -I./include -Wa,-mregnames
#NOTE: -DDEBUG only needed for debugging/tracing...
CFLAGS= -UDEBUG -m64 -I. -I./include -I./include/x86emu \
    -I$(TOP)/clients/net-snk/include -I$(ROOTDIR)/include \
    -I$(ROOTDIR)/lib/libc/include -O3 -nostdinc -fno-builtin \
    -ffreestanding -Wall -Wno-unused
X86EMU_OBJS= debug.o decode.o fpu.o ops2.o ops.o prim_ops.o sys.o
%.o: %.S
$(CC) $(ASFLAGS) -c -o $@ $^
%.o: %.c
$(CC) $(CFLAGS) -c -o $@ $^
all: libx86emu.a
libx86emu.a: $(X86EMU_OBJS)
$(AR) -rc $@ $^
```

```
$(RANLIB) $@
clean:
$(RM) *.o *.i *.s libx86emu.a
distclean: clean
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#****************************************************************************/
#!/bin/bash
#set -x
#set -e
SVN=` which svn`
PATCH=`which patch`
DIFF_FILE=./x86emu_changes.diff
# check wether svn, patch, ... is available...
if [ ! -x $SVN ]; then
echo "subversion executable not found!"
exit -1
fi
if [!-x $PATCH ]; then
echo "patch executable not found!"
exit -1
fi
if [ ! -r $DIFF_FILE ]; then
echo "diff file $DIFF_FILE not found!"
exit-1
fi
# download the x86emu sources from LinuxBIOS subversion
#revision known to work..
REV=496
echo "Checking out x86emu from coreboot-v3 repository revision $REV"
$SVN co svn://coreboot.org/repository/coreboot-v3/util/x86emu -r $REV
```

echo "Copying files..."
mkdir -p include/x86emu
cp -v x86emu/x86emu/*.c .
cp -v x86emu/x86emu/*.h include/x86emu
cp -v x86emu/include/x86emu/*.h include/x86emu
echo "Removing checkedout subversion director..."
rm -rf x86emu
echo "Patching files..."
\$PATCH -p0 < x86emu_changes.diff
echo "done"
exit 0
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David Gibson [david@gibson.dropbear.id.au](mailto:david@gibson.dropbear.id.au)
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/* \$OpenBSD: syscall.h,v 1.101 2008/03/16 19:43:41 otto Exp \$ */

## /*

* System call numbers.

```
*
* created from; OpenBSD: syscalls.master,v 1.90 2008/03/16 19:42:57 otto Exp
*/
#define TARGET_OPENBSD_NR_syscall 0
#define TARGET_OPENBSD_NR_exit 1
#define TARGET_OPENBSD_NR_fork 2
#define TARGET_OPENBSD_NR_read 3
#define TARGET_OPENBSD_NR_write 4
#define TARGET_OPENBSD_NR_open 5
#define TARGET_OPENBSD_NR_close 6
#define TARGET_OPENBSD_NR_wait4 7
#define TARGET_OPENBSD_NR_link 9
#define TARGET_OPENBSD_NR_unlink 10
#define TARGET_OPENBSD_NR_chdir 12
#define TARGET_OPENBSD_NR_fchdir 13
#define TARGET_OPENBSD_NR_mknod 14
#define TARGET_OPENBSD_NR_chmod 15
#define TARGET_OPENBSD_NR_chown 16
#define TARGET_OPENBSD_NR_break 17
#define TARGET_OPENBSD_NR_getpid 20
#define TARGET_OPENBSD_NR_mount 21
#define TARGET_OPENBSD_NR_unmount 22
#define TARGET_OPENBSD_NR_setuid 23
#define TARGET_OPENBSD_NR_getuid 24
#define TARGET_OPENBSD_NR_geteuid 25
#define TARGET_OPENBSD_NR_ptrace 26
#define TARGET_OPENBSD_NR_recvmsg 27
#define TARGET_OPENBSD_NR_sendmsg 28
#define TARGET_OPENBSD_NR_recvfrom 29
#define TARGET_OPENBSD_NR_accept 30
#define TARGET_OPENBSD_NR_getpeername 31
#define TARGET_OPENBSD_NR_getsockname 32
#define TARGET_OPENBSD_NR_access 33
#define TARGET_OPENBSD_NR_chflags 34
#define TARGET_OPENBSD_NR_fchflags 35
#define TARGET_OPENBSD_NR_sync 36
#define TARGET_OPENBSD_NR_kill 37
#define TARGET_OPENBSD_NR_getppid 39
#define TARGET_OPENBSD_NR_dup 41
#define TARGET_OPENBSD_NR_opipe 42
#define TARGET_OPENBSD_NR_getegid 43
#define TARGET_OPENBSD_NR_profil 44
#define TARGET_OPENBSD_NR_ktrace 45
#define TARGET_OPENBSD_NR_sigaction 46
#define TARGET_OPENBSD_NR_getgid 47
#define TARGET_OPENBSD_NR_sigprocmask 48
#define TARGET_OPENBSD_NR_getlogin 49
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\#define TARGET_OPENBSD_NR_setgroups ..... 80
\#define TARGET_OPENBSD_NR_getpgrp ..... 81
\#define TARGET_OPENBSD_NR_setpgid ..... 82
\#define TARGET_OPENBSD_NR_setitimer ..... 83
\#define TARGET_OPENBSD_NR_getitimer ..... 86
\#define TARGET_OPENBSD_NR_dup2 ..... 90
\#define TARGET_OPENBSD_NR_fcntl ..... 92
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\#define TARGET_OPENBSD_NR_statfs ..... 307
\#define TARGET_OPENBSD_NR_fstatfs ..... 308
\#define TARGET_OPENBSD_NR_fhstatfs ..... 309

```
/* syscall flags from machine/trap.h */
/* $OpenBSD: trap.h,v 1.4 2008/07/04 22:04:37 kettenis Exp $ */
/* $NetBSD: trap.h,v 1.4 1999/06/07 05:28:04 eeh Exp $ */
/*
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*
*/
#define TARGET_OPENBSD_SYSCALL_G2RFLAG 0x400 /* on success, return to %g2 rather than npc */
#define TARGET_OPENBSD_SYSCALL_G7RFLAG 0x800 /* use %g7 as above (deprecated) */
/* $NetBSD: syscall.h,v 1.215 2008/06/17 16:07:57 tsutsui Exp $ */
/*
* System call numbers.
*
* created fromNetBSD: syscalls.master,v 1.204 2008/06/17 16:05:23 tsutsui Exp
*/
#define TARGET_NETBSD_NR_syscall 0
#define TARGET_NETBSD_NR_exit 1
#define TARGET_NETBSD_NR_fork 2
#define TARGET_NETBSD_NR_read 3
#define TARGET_NETBSD_NR_write 4
#define TARGET_NETBSD_NR_open 5
#define TARGET_NETBSD_NR_close 6
#define TARGET_NETBSD_NR_wait4 7
#define TARGET_NETBSD_NR_compat_43_ocreat 8
#define TARGET_NETBSD_NR_link 9
#define TARGET_NETBSD_NR_unlink 10
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\#define TARGET NETBSD NR chdir ..... 12
\#define TARGET_NETBSD_NR_fchdir ..... 13
\#define TARGET_NETBSD_NR_mknod ..... 14
\#define TARGET_NETBSD_NR_chmod ..... 15
\#define TARGET_NETBSD_NR_chown ..... 16
\#define TARGET_NETBSD_NR_break ..... 17
\#define TARGET_NETBSD_NR_compat_20_getfsstat 18
\#define TARGET_NETBSD_NR_compat_43_olseek ..... 19
\#define TARGET_NETBSD_NR_getpid ..... 20
\#define TARGET_NETBSD_NR_getpid ..... 20
\#define TARGET_NETBSD_NR_compat_40_mount ..... 21
\#define TARGET_NETBSD_NR_unmount ..... 22
\#define TARGET_NETBSD_NR_setuid ..... 23
\#define TARGET_NETBSD_NR_getuid ..... 24
\#define TARGET_NETBSD_NR_getuid ..... 24
\#define TARGET_NETBSD_NR_geteuid ..... 25
\#define TARGET_NETBSD_NR_ptrace ..... 26
\#define TARGET_NETBSD_NR_recvmsg ..... 27
\#define TARGET_NETBSD_NR_sendmsg ..... 28
\#define TARGET_NETBSD_NR_recvfrom ..... 29
\#define TARGET_NETBSD_NR_accept ..... 30
\#define TARGET_NETBSD_NR_getpeername 31
\#define TARGET_NETBSD_NR_getsockname 32
\#define TARGET_NETBSD_NR_access ..... 33
\#define TARGET_NETBSD_NR_chflags ..... 34
\#define TARGET_NETBSD_NR_fchflags ..... 35
\#define TARGET_NETBSD_NR_sync ..... 36
\#define TARGET_NETBSD_NR_kill ..... 37
\#define TARGET_NETBSD_NR_compat_43_stat43 ..... 38
\#define TARGET_NETBSD_NR_getppid ..... 39
\#define TARGET_NETBSD_NR_compat_43_1stat43 40
\#define TARGET_NETBSD_NR_dup 41
\#define TARGET_NETBSD_NR_pipe ..... 42
\#define TARGET_NETBSD_NR_getegid ..... 43
\#define TARGET_NETBSD_NR_profil ..... 44
\#define TARGET_NETBSD_NR_ktrace ..... 45
\#define TARGET_NETBSD_NR_compat_13_sigaction13 ..... 46
\#define TARGET_NETBSD_NR_getgid ..... 47
\#define TARGET_NETBSD_NR_getgid ..... 47
\#define TARGET_NETBSD_NR_compat_13_sigprocmask13 ..... 48
\#define TARGET_NETBSD_NR ..... getlogin 49
\#define TARGET_NETBSD_NR_ ..... _setlogin 50
\#define TARGET_NETBSD_NR_acct ..... 51
\#define TARGET_NETBSD_NR_compat_13_sigpending13 ..... 52
\#define TARGET_NETBSD_NR_compat_13_sigaltstack13 ..... 53
\#define TARGET_NETBSD_NR_ioctl ..... 54
\#define TARGET_NETBSD_NR_compat_12_oreboot ..... 55
\#define TARGET_NETBSD_NR_revoke ..... 56
\#define TARGET_NETBSD_NR_symlink ..... 57
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\#define TARGET_NETBSD_NR_compat_43_ogetdtablesize ..... 89
\#define TARGET_NETBSD_NR_dup2 ..... 90
\#define TARGET_NETBSD_NR_fcntl ..... 92
\#define TARGET_NETBSD_NR_select ..... 93
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\#define TARGET_NETBSD_NR_setpriority 96
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/* \$OpenBSD: errno.h,v 1.20 2007/09/03 14:37:52 millert Exp \$ */
/* \$NetBSD: errno.h,v 1.10 1996/01/20 01:33:53 jtc Exp \$ */
/*

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*
* @ (#)errno.h 8.5 (Berkeley) 1/21/94
*/
```

| \#define TARGET_EPERM | 1 | /* Operation not permitted */ |
| :--- | :---: | :---: |
| \#define TARGET_ENOENT | 2 | /* No such file or directory */ |
| \#define TARGET_ESRCH | 3 | /* No such process */ |
| \#define TARGET_EINTR | 4 | /* Interrupted system call */ |
| \#define TARGET_EIO | 5 | /* Input/output error */ |
| \#define TARGET_ENXIO | 6 | /* Device not configured */ |
| \#define TARGET_E2BIG | 7 | /* Argument list too long */ |
| \#define TARGET_ENOEXEC | 8 | /* Exec format error */ |
| \#define TARGET_EBADF | 9 | /* Bad file descriptor */ |
| \#define TARGET_ECHILD | 10 | /* No child processes */ |
| \#define TARGET_EDEADLK | 11 | /* Resource deadlock avoided */ |
| /* 11 was EAGAIN */ |  |  |


| \#define TARGET_ENOMEM | 12 | /* Cannot allocate memory */ |
| :--- | :---: | :---: |
| \#define TARGET_EACCES | 13 | /* Permission denied */ |

\#define TARGET_EFAULT 14 /* Bad address */
\#define TARGET_ENOTBLK 15 /* Block device required */
\#define TARGET_EBUSY 16 /* Device busy */
\#define TARGET_EEXIST 17 /* File exists */
\#define TARGET_EXDEV 18 /* Cross-device link */
\#define TARGET_ENODEV 19 /* Operation not supported by device */
\#define TARGET_ENOTDIR 20 /* Not a directory */
\#define TARGET_EISDIR 21 /* Is a directory */
\#define TARGET_EINVAL 22 /* Invalid argument */
\#define TARGET_ENFILE 23 /* Too many open files in system */
\#define TARGET_EMFILE 24 /* Too many open files */
\#define TARGET_ENOTTY 25 /* Inappropriate ioctl for device */
\#define TARGET_ETXTBSY 26 /* Text file busy */
\#define TARGET_EFBIG 27 /* File too large */
\#define TARGET_ENOSPC 28 /* No space left on device */
\#define TARGET_ESPIPE 29 /* Illegal seek */
\#define TARGET_EROFS $30 \quad / *$ Read-only file system */
\#define TARGET_EMLINK 31 /* Too many links */
\#define TARGET_EPIPE 32 /* Broken pipe */
/* math software */
\#define TARGET_EDOM 33 /* Numerical argument out of domain */
\#define TARGET_ERANGE 34 /* Result too large */
/* non-blocking and interrupt i/o */


```
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* @(#)mman.h 8.2 (Berkeley) 1/9/95
* $FreeBSD: src/sys/sys/mman.h,v 1.42 2008/03/28 04:29:27 ps Exp $
*/
```

\#define TARGET_FREEBSD_MAP_RESERVED0080 0x0080 /* previously misimplemented MAP_INHERIT */
\#define TARGET_FREEBSD_MAP_RESERVED0100 0x0100 /* previously unimplemented MAP_NOEXTEND
*/
\#define TARGET_FREEBSD_MAP_STACK 0x0400 /* region grows down, like a stack */

```
#define TARGET_FREEBSD_MAP_NOSYNC
                                    0x0800 /* page to but do not sync underlying file */
#define TARGET_FREEBSD_MAP_FLAGMASK 0x1ff7
/* $NetBSD: mman.h,v 1.42 2008/11/18 22:13:49 ad Exp $ */
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* @(#)mman.h 8.2 (Berkeley) 1/9/95
*/
#define TARGET_NETBSD_MAP_INHERIT 0x0080 /* region is retained after exec */
#define TARGET_NETBSD_MAP_TRYFIXED 0x0400 /* attempt hint address, even within break */
#define TARGET_NETBSD_MAP_WIRED 0x0800 /* mlock() mapping when it is established */
#define TARGET_NETBSD_MAP_STACK 0x2000 /* allocated from memory, swap space (stack) */
#define TARGET_NETBSD_MAP_FLAGMASK 0x3ff7
/* $OpenBSD: mman.h,v 1.18 2003/07/21 22:52:19 tedu Exp $ */
/* $NetBSD: mman.h,v 1.11 1995/03/26 20:24:23 jtc Exp $ */
/*-
```

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* @(#)mman.h 8.1 (Berkeley) 6/2/93
*/
```

\#define TARGET_OPENBSD_MAP_INHERIT 0x0080 /* region is retained after exec */
\#define TARGET_OPENBSD_MAP_NOEXTEND 0x0100 /* for MAP_FILE, don't change file size */
\#define TARGET_OPENBSD_MAP_TRYFIXED 0x0400 /* attempt hint address, even within heap */
\#define TARGET_OPENBSD_MAP_FLAGMASK 0x17f7
// XXX
\#define TARGET_BSD_MAP_FLAGMASK 0x3ff7
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<signature of Ty Coon>, 1 April 1990
Ty Coon, President of Vice

That's all there is to it!
From 04a8a3d76b171deb5eaf8318591e5cfaea3cc843 Mon Sep 17 00:00:00 2001
From: Eduardo Habkost [ehabkost@redhat.com](mailto:ehabkost@redhat.com)
Date: Thu, 23 Feb 2017 14:29:44 +0100
Subject: [PATCH 14/17] target-i386: Loop-based copying and setting/unsetting
of feature words
MIME-Version: 1.0
Content-Type: text/plain; charset=UTF-8

RH-Author: Eduardo Habkost [ehabkost@redhat.com](mailto:ehabkost@redhat.com)
Message-id: [20170223142945.17790-14-ehabkost@redhat.com](mailto:20170223142945.17790-14-ehabkost@redhat.com)
Patchwork-id: 74045
O-Subject: [RHEL-7.4 qemu-kvm PATCH v2 13/14] target-i386: Loop-based copying and setting/unsetting of feature words
Bugzilla: 1382122
RH-Acked-by: Paolo Bonzini <pbonzini@ redhat.com>
RH-Acked-by: Igor Mammedov [imammedo@redhat.com](mailto:imammedo@redhat.com)
RH-Acked-by: Miroslav Rezanina [mrezanin@redhat.com](mailto:mrezanin@redhat.com)

Now that we have the feature word arrays, we don't need to manually copy
each array item, we can simply iterate through each feature word.

Signed-off-by: Eduardo Habkost [ehabkost@redhat.com](mailto:ehabkost@redhat.com)
Signed-off-by: Andreas Frber [afaerber@suse.de](mailto:afaerber@suse.de)
(cherry picked from commit e1c224b4eb3b8693c230bb2762a959ae1f531f76)
Signed-off-by: Eduardo Habkost [ehabkost@redhat.com](mailto:ehabkost@redhat.com)
Signed-off-by: Miroslav Rezanina [mrezanin@redhat.com](mailto:mrezanin@redhat.com)
---
target-i386/cpu.c | 44 ++++++++++
1 file changed, 10 insertions(+), 34 deletions(-)
diff --git a/target-i386/cpu.c b/target-i386/cpu.c
index d611062..010b95f 100644
--- a/target-i386/cpu.c
+++ b/target-i386/cpu.c
@ @ -1755,6+1755,7 @ @ static inline void feat2prop(char *s)
static void cpu_x86_parse_featurestr(X86CPU *cpu, char *features, Error **errp)
\{
char *featurestr; /* Single 'key=value" string being parsed */

+ FeatureWord w;
/* Features to be added */
FeatureWordArray plus_features $=\{0\}$;
/* Features to be removed */
@ @ $-1844,28+1845,11$ @ @ static void cpu_x86_parse_featurestr(X86CPU *cpu, char *features, Error **errp) \}
featurestr = strtok(NULL, ",");
\}
- env->features[FEAT_1_EDX] |= plus_features[FEAT_1_EDX];
- env->features[FEAT_1_ECX]|= plus_features[FEAT_1_ECX];
- env->features[FEAT_8000_0001_EDX] |= plus_features[FEAT_8000_0001_EDX];
- env->features[FEAT_8000_0001_ECX] |= plus_features[FEAT_8000_0001_ECX];
- env->features[FEAT_C000_0001_EDX] |= plus_features[FEAT_C000_0001_EDX];
- env->features[FEAT_KVM] |= plus_features[FEAT_KVM];
- env->features[FEAT_SVM] $\mid=$ plus_features[FEAT_SVM];
- env->features[FEAT_7_0_EBX] |= plus_features[FEAT_7_0_EBX];
- env->features[FEAT_7_0_ECX] |= plus_features[FEAT_7_0_ECX];
- env->features[FEAT_7_0_EDX]|= plus_features[FEAT_7_0_EDX];
- env->features[FEAT_XSAVE] |= plus_features[FEAT_XSAVE];
- env->features[FEAT_1_EDX] \&= ~minus_features[FEAT_1_EDX];
- env->features[FEAT_1_ECX] \&= ~minus_features[FEAT_1_ECX];
- env->features[FEAT_8000_0001_EDX] \& = ~minus_features[FEAT_8000_0001_EDX];
- env->features[FEAT_8000_0001_ECX] \&= ~minus_features[FEAT_8000_0001_ECX];
- env->features[FEAT_C000_0001_EDX] \& = ~minus_features[FEAT_C000_0001_EDX];
- env->features[FEAT_KVM] \& = ~minus_features[FEAT_KVM];
- env->features[FEAT_SVM] \&= ~minus_features[FEAT_SVM];
- env->features[FEAT_7_0_EBX] \&= ~minus_features[FEAT_7_0_EBX];
- env->features[FEAT_7_0_ECX] \&= ~minus_features[FEAT_7_0_ECX];
- env->features[FEAT_7_0_EDX] \&= ~minus_features[FEAT_7_0_EDX];
- env->features[FEAT_XSAVE] \&= ~minus_features[FEAT_XSAVE];
$+$
+ for $(\mathrm{w}=0$; $\mathrm{w}<$ FEATURE_WORDS; $\mathrm{w}++)$ \{
$+\quad$ env->features[w] $=$ plus_features[w];
$+\quad$ env->features[w] \& $=\sim$ minus_features[w];
+ \}
out:
return;
@ @ -1974,6+1958,7 @ @ static void cpu_x86_register(X86CPU *cpu, const char *name, Error **errp)
\{
CPUX86State $*$ env $=\& c p u->$ env;
x86_def_t def1, *def = \& def1;
+ FeatureWord w;
memset(def, 0, sizeof(*def));
@ @ -1992,21+1977,12 @ @ static void cpu_x86_register(X86CPU *cpu, const char *name, Error **errp) object_property_set_int(OBJECT(cpu), def->family, "family", errp); object_property_set_int(OBJECT(cpu), def-> model, "model", errp);
object_property_set_int(OBJECT(cpu), def->stepping, "stepping", errp);
- env->features[FEAT_1_EDX] = def->features[FEAT_1_EDX];
- env->features[FEAT_1_ECX] = def->features[FEAT_1_ECX];
- env->features[FEAT_8000_0001_EDX] = def->features[FEAT_8000_0001_EDX];
- env->features[FEAT_8000_0001_ECX] = def->features[FEAT_8000_0001_ECX];
object_property_set_int(OBJECT(cpu), def->xlevel, "xlevel", errp);
- env->features[FEAT_KVM] = def->features[FEAT_KVM];
- env->features[FEAT_SVM] = def->features[FEAT_SVM];
- env->features[FEAT_C000_0001_EDX] = def->features[FEAT_C000_0001_EDX];
- env->features[FEAT_7_0_EBX] = def->features[FEAT_7_0_EBX];
- env->features[FEAT_7_0_ECX] = def->features[FEAT_7_0_ECX];
- env->features[FEAT_7_0_EDX] = def->features[FEAT_7_0_EDX];
- env->features[FEAT_XSAVE] = def->features[FEAT_XSAVE];
env->cpuid_xlevel2 $=$ def->xlevel2;

```
object_property_set_str(OBJECT(cpu), def->model_id, "model-id", errp);
+ for (w = 0; w < FEATURE_WORDS; w++) {
+ env->features[w] = def->features[w];
+ }
}
```

X86CPU *cpu_x86_create(const char *cpu_model, DeviceState *icc_bridge, 1.8.3.1

### 1.286 qrencode 3.4.1 :3.el7

### 1.286.1 Available under license :

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Version 2.1, February 1999

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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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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.
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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.

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### 1.290 rsync 3.1.2 :4.el7

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Version 3, 29 June 2007

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### 1.292 screen 4.1.0

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### 1.293 sed 4.2.2 :5.el7

### 1.293.1 Available under license :

$========$
Test 1.1:101

## ============

Testing argument parsing
First type
e1_11_1
e1_11_1
e1_11_2
e1_11_2
e1_11_3
e1_11_3
e1_11_4
e1_11_4
e1_11_5
e1_11_5
e1_11_6
e1_11_6
e1_11_7
e1_11_7
e1_11_8
e1_11_8
e1_11_9
e1_11_9
e1_11_10
e1_11_10
e1_11_11
e1_11_11
e1_11_12
e1_11_12
e1_11_13
e1_11_13
e1_11_14
e1_11_14

Test 1.2:102
============
e1_11_1
e1_11_2
e1_11_3
e1_11_4
e1_11_5
e1_11_6
e1_11_7
e1_11_8
e1_11_9
e1_11_10
e1_11_11
e1_11_12
e1_11_13
e1_11_14

Test 1.3:103
============
e1_11_1
e1_11_1
e1_11_2
e1_11_2
e1_11_3
e1_11_3
e1_11_4
e1_11_4
e1_11_5
e1_11_5
e1_11_6
e1_11_6
e1_11_7
e1_11_7
e1_11_8
e1_11_8
e1_11_9
e1_11_9
e1_11_10
e1_11_10
e1_11_11
e1_11_11
e1_11_12
e1_11_12
e1_11_13
e1_11_13
e1_11_14
e1_11_14
===========
Test 1.4:104
===========
e1_11_1
e1_11_2
e1_11_3
e1_11_4
e1_11_5
e1_11_6
e1_11_7
e1_11_8
e1_11_9
e1_11_10
e1_11_11
e1_11_12
e1_11_13
e1_11_14
Second type

Test 1.4.1:105
============
11_1
11_2
11_3
11_4
11_5
11_6
11_7
11_8
11_9
11_10
11_11
11_12
11_13
11_14

Test 1.5:106
===========
s1_11_1
s1_11_1
s1_11_2
s1_11_2
s1_11_3

```
s1_11_3
s1_11_4
s1_11_4
s1_11_5
s1_11_5
s1_11_6
s1_11_6
s1_11_7
s1_11_7
s1_11_8
s1_11_8
s1_11_9
s1_11_9
s1_11_10
s1_11_10
s1_11_11
s1_11_11
s1_11_12
s1_11_12
s1_11_13
s1_11_13
s1_11_14
s1_11_14
```

Test 1.6:107
============
s1_11_1
s1_11_1
s1_11_2
s1_11_2
s1_11_3
s1_11_3
s1_11_4
s1_11_4
s1_11_5
s1_11_5
s1_11_6
s1_11_6
s1_11_7
s1_11_7
s1_11_8
s1_11_8
s1_11_9
s1_11_9
s1_11_10
s1_11_10
s1_11_11
s1_11_11
s1_11_12
s1_11_12
s1_11_13
s1_11_13
s1_11_14
s1_11_14

Test 1.7:108
============
e1_11_1
e1_11_1
e1_11_2
e1_11_2
e1_11_3
e1_11_3
e1_11_4
e1_11_4
e1_11_5
e1_11_5
e1_11_6
e1_11_6
e1_11_7
e1_11_7
e1_11_8
e1_11_8
e1_11_9
e1_11_9
e1_11_10
e1_11_10
e1_11_11
e1_11_11
e1_11_12
e1_11_12
e1_11_13
e1_11_13
e1_11_14
e1_11_14

Test 1.8:109
===========
e1_11_1
e1_11_1
e1_11_2
e1_11_2
e1_11_3
e1_11_3
e1_11_4
e1_11_4
e1_11_5
e1_11_5
e1_11_6
e1_11_6
e1_11_7
e1_11_7
e1_11_8
e1_11_8
e1_11_9
e1_11_9
e1_11_10
e1_11_10
e1_11_11
e1_11_11
e1_11_12
e1_11_12
e1_11_13
e1_11_13
e1_11_14
e1_11_14
===========
Test 1.9:110
============
s1_11_1
s1_11_2
s1_11_3
s1_11_4
s1_11_5
s1_11_6
s1_11_7
s1_11_8
s1_11_9
s1_11_10
s1_11_11
s1_11_12
s1_11_13
s1_11_14
============
Test 1.10:111
============
s1_11_1
s1_11_2
s1_11_3
s1_11_4
s1_11_5
s1_11_6
s1_11_7
s1_11_8
s1_11_9
s1_11_10
s1_11_11
s1_11_12
s1_11_13
s1_11_14

Test 1.11:112
=============
e1_11_1
e1_11_2
e1_11_3
e1_11_4
e1_11_5
e1_11_6
e1_11_7
e1_11_8
e1_11_9
e1_11_10
e1_11_11
e1_11_12
e1_11_13
e1_11_14

Test 1.12:113
=============
e1_11_1
e1_11_2
e1_11_3
e1_11_4
e1_11_5
e1_11_6
e1_11_7
e1_11_8
e1_11_9
e1_11_10
e1_11_11
e1_11_12
e1_11_13
e1_11_14

Test 1.13:114
=============
e1_11_1
e2_e1_11_1
e2_e1_11_1
e1_11_2
e2_e1_11_2
e2_e1_11_2
e1_11_3
e2_e1_11_3
e2_e1_11_3
e1_11_4
e2_e1_11_4
e2_e1_11_4
e1_11_5
e2_e1_11_5
e2_e1_11_5
e1_11_6
e2_e1_11_6
e2_e1_11_6
e1_11_7
e2_e1_11_7
e2_e1_11_7
e1_11_8
e2_e1_11_8
e2_e1_11_8
e1_11_9
e2_e1_11_9
e2_e1_11_9
e1_11_10
e2_e1_11_10
e2_e1_11_10
e1_11_11
e2_e1_11_11
e2_e1_11_11
e1_11_12
e2_e1_11_12
e2_e1_11_12
e1_11_13
e2_e1_11_13
e2_e1_11_13
e1_11_14
e2_e1_11_14
e2_e1_11_14

Test 1.14:115

```
s1_11_1
s2_s1_11_1
s2_s1_11_1
s1_11_2
s2_s1_11_2
s2_s1_11_2
s1_11_3
s2_s1_11_3
s2_s1_11_3
s1_11_4
s2_s1_11_4
s2_s1_11_4
s1_11_5
s2_s1_11_5
s2_s1_11_5
s1_11_6
s2_s1_11_6
s2_s1_11_6
s1_11_7
s2_s1_11_7
s2_s1_11_7
s1_11_8
s2_s1_11_8
s2_s1_11_8
s1_11_9
s2_s1_11_9
s2_s1_11_9
s1_11_10
s2_s1_11_10
s2_s1_11_10
s1_11_11
s2_s1_11_11
s2_s1_11_11
s1_11_12
s2_s1_11_12
s2_s1_l1_12
s1_11_13
s2_s1_11_13
s2_s1_11_13
s1_11_14
s2_s1_11_14
s2_s1_11_14
Test 1.15:116
e1_11_1
```

```
s1_e1_11_1
s1_e1_11_1
e1_11_2
s1_e1_11_2
s1_e1_11_2
e1_11_3
s1_e1_11_3
s1_e1_11_3
e1_11_4
s1_e1_11_4
s1_e1_11_4
e1_11_5
s1_e1_11_5
s1_e1_11_5
e1_11_6
s1_e1_11_6
s1_e1_11_6
e1_11_7
s1_e1_11_7
s1_e1_11_7
e1_11_8
s1_e1_11_8
s1_e1_11_8
e1_11_9
s1_e1_11_9
s1_e1_11_9
e1_11_10
s1_e1_11_10
s1_e1_11_10
e1_11_11
s1_e1_11_11
s1_e1_11_11
e1_11_12
s1_e1_11_12
s1_e1_11_12
e1_11_13
s1_e1_11_13
s1_e1_11_13
e1_11_14
s1_e1_11_14
s1_e1_11_14
```

============

Test 1.16:117
============
e1_11_1
e1_11_1
e1_11_2
e1_11_2
e1_11_3
e1_11_3
e1_11_4
e1_11_4
e1_11_5
e1_11_5
e1_11_6
e1_11_6
e1_11_7
e1_11_7
e1_11_8
e1_11_8
e1_11_9
e1_11_9
e1_11_10
e1_11_10
e1_11_11
e1_11_11
e1_11_12
e1_11_12
e1_11_13
e1_11_13
e1_11_14
e1_11_14
e1_11_1
e1_11_1
e1_11_2
e1_11_2
e1_11_3
e1_11_3
e1_11_4
e1_11_4
e1_11_5
e1_11_5
e1_11_6
e1_11_6
e1_11_7
e1_11_7
e1_11_8
e1_11_8
e1_11_9
e1_11_9
e1_11_10
e1_11_10
e1_11_11
e1_11_11
e1_11_12
e1_11_12
e1_11_13
e1_11_13
e1_11_14
e1_11_14

Test 1.17:118
=============
11_1
11_1
11_2
11_2
11_3
11_3
11_4
11_4
11_5
11_5
11_6
11_6
11_7
11_7
11_8
11_8
11_9
11_9
11_10
11_10
11_11
11_11
11_12
11_12
11_13
11_13
11_14
11_14

Test 1.18:119
=============
11_1
11_2
11_3
11_4
11_5
11_6
11_7

11＿8
11＿9
11＿10
11＿11
11＿12
11＿13
11＿14
Testing address ranges
＝＝＝＝＝＝＝＝＝＝＝
Test 2．1：120
$=========$
11＿4
＝ニニニニニニニニニニー
Test 2．2：121
＝ニニニニニニニ＝ニ＝
12＿6
＝ニニニニニニニニニニニ
Test 2．3：122
＝ニニニニニニニニニ＝
11＿14

Test 2．4：123
$=========$
12＿9
＝ニニニニニニニニニニニ
Test 2．5：124
＝ニニニニ＝ニニ＝＝ニ＝
＝ニニニニニニニニ＝ニ＝
Test 2．6：125
＝ニニニニニニニニ＝ニ
12＿9
＝ニニニニ＝ニニニ＝ニ＝
Test 2．7：126
＝ニニニニニニニニニニ
＝ニニニニニニニニニニ＝
Test 2．9：127
＝ニニニニニニニニ＝ニ
11＿7
＝ニニニニニニニニニニニニ

Test 2．10：128
＝＝＝＝＝＝＝＝＝＝＝＝＝
11＿7
＝ニニニニニニニ＝ニ＝ニ＝
Test 2．11：129
＝ニニニニニニニニニニニ
11＿7

Test 2．12：130

11＿1
11＿2
11＿3
11＿4
$==========$
Test 2．13：131
＝＝＝＝＝＝＝＝＝＝＝＝＝
11＿1
11＿2
11＿3
11＿4
11＿5
11＿6
11＿7
11＿8
11＿9
11＿10
11＿11
11＿12
11＿13
11＿14
12＿1
12＿2
12＿3
12＿4
12＿5
12＿6
12＿7
12＿8
12＿9

Test 2．14：132

11＿1

11_2
11_3
11_4
11_5
11_6
11_7
11_8
11_9
11_10
11_11
11_12
11_13
11_14
12_1
12_2
12_3
12_4
12_5
12_6
12_7
12_8
12_9

Test 2.15:133
=============
11_4
11_5
11_6
11_7
11_8
11_9
11_10
11_11
11_12
11_13
11_14
12_1
12_2
12_3
12_4
12_5
12_6
12_7
12_8
12_9

Test 2．16：134
＝＝＝＝＝＝＝＝＝＝＝＝
11＿4
11＿5
11＿6
11＿7
11＿8
11＿9
11＿10
11＿11
11＿12
11＿13
11＿14
12＿1
12＿2
12＿3
12＿4
12＿5
12＿6

Test 2．17：135
＝ニニニニニニニニ＝ニ＝
11＿4
11＿5
11＿6
11＿7
11＿8
11＿9
11＿10
11＿14
12＿1
12＿2
12＿3
12＿4
12＿5
12＿6
12＿7
12＿8
12＿9
$==========$
Test 2．18：136
＝＝＝＝＝＝＝＝＝＝＝＝
12＿3
12＿4
12＿5
12＿6

12＿7
12＿8
12＿9
＝ニニニニニニニニニニニ＝
Test 2．19：137
＝＝＝＝＝＝＝＝＝＝＝＝＝
11＿12
＝ニニニニニニニニニニ＝
Test 2．20：138
＝二ニニニニニニニニニ＝
11＿7
Brace and other grouping
＝ニ＝ニ＝ニニ＝ニ＝＝
Test 3．1：139
＝＝＝＝＝＝＝＝＝＝＝＝
11＿1
11＿2
11＿3
＾11T4\＄
${ }^{\wedge} 11 \mathrm{~T} 5 \$$
＾11T6\＄
${ }^{\wedge} 11 \mathrm{~T} 7 \$$
${ }^{\wedge} 1178 \$$
＾11T9\＄
${ }^{\wedge} 11 \mathrm{~T} 10 \$$
${ }^{\wedge} 11 \mathrm{~T} 11 \$$
${ }^{\wedge} 11 \mathrm{~T} 12 \$$
11＿13
11＿14

ニ＝ニニニニニニニ＝ニ＝
Test 3．2：140
＝＝＝＝＝＝＝＝＝＝＝＝
11＿1
11＿2
11＿3
${ }^{\wedge} 11 \_4$
${ }^{\wedge} 11 \_5$
＾11＿6\＄
${ }^{\wedge} 11$＿7
${ }^{\wedge} 11 \mathrm{~T} 8 \$$
＾11＿9\＄
${ }^{\wedge} 11 \_10 \$$
＾11＿11
${ }^{\wedge} 11 \_12$

11＿13
11＿14
＝＝＝＝＝＝＝＝＝＝＝
Test 3．3：141
＝＝＝＝＝＝＝＝＝＝＝＝
${ }^{\wedge} 11$ T1 \＄
＾11T2\＄
＾11T3\＄
11＿4
11＿5
11＿6
11＿7
11＿8
11＿9
11＿10
11＿11
11＿12
${ }^{\wedge} 11 \mathrm{~T} 13 \$$
${ }^{\wedge} 11 \mathrm{~T} 14 \$$
＝ニニニニ＝ニニ＝ニ＝
Test 3．4：142
＝＝＝＝＝＝＝＝＝＝＝＝
＾11＿1
${ }^{\wedge} 11 \_2$
＾11＿3
11＿4
11＿5
11＿6
11＿7
11＿8
11＿9
11＿10
11＿11
11＿12
＾11＿13
＾11＿14
Testing a c d and i commands
＝ニニニニニニニ＝ニ＝
Test 4．1：143
＝＝＝＝＝＝＝＝＝＝
before＿il1＿1
after＿ibefore＿ill＿1
before＿il1＿2
after＿ibefore＿il1＿2
before＿il1＿3
after_ibefore_ill_3
before_il1_4
after_ibefore_il1_4
before_il1_5
after_ibefore_il1_5
before_il1_6
after_ibefore_il1_6
before_il1_7
after_ibefore_il1_7
before_il1_8
after_ibefore_il1_8
before_il1_9
after_ibefore_ill_9
before_il1_10
after_ibefore_il1_10
before_il1_11
after_ibefore_il1_11
before_il1_12
after_ibefore_il1_12
before_il1_13
after_ibefore_il1_13
before_il1_14
after_ibefore_il1_14
before_il2_1
after_ibefore_il2_1
before_i12_2
after_ibefore_il2_2
before_il2_3
after_ibefore_il2_3
before_il2_4
after_ibefore_il2_4
before_il2_5
after_ibefore_il2_5
before_il2_6
inserted
after_ibefore_il2_6
before_il2_7
after_ibefore_il2_7
before_il2_8
after_ibefore_il2_8
before_il2_9
after_ibefore_il2_9

Test 4.2:144
============
before_al1_1
after_abefore_al1_1
before_al1_2
after_abefore_al1_2
before_al1_3
after_abefore_al1_3
before_al1_4
after_abefore_al1_4
before_a5-1211_5
after_abefore_a5-1211_5
appended
before_a5-12l1_6
after_abefore_a5-1211_6
appended
before_a5-1211_7
after_abefore_a5-1211_7
appended
before_a5-1211_8
after_abefore_a5-1211_8
appended
before_a5-1211_9
after_abefore_a5-1211_9
appended
before_a5-1211_10
after_abefore_a5-1211_10
appended
before_a5-1211_11
after_abefore_a5-1211_11
appended
before_a5-1211_12
after_abefore_a5-1211_12
appended
before_al1_13
after_abefore_al1_13
before_al1_14
after_abefore_al1_14
before_al2_1
after_abefore_al2_1
before_al2_2
after_abefore_al2_2
before_al2_3
after_abefore_al2_3
before_al2_4
after_abefore_al2_4
before_al2_5
after_abefore_al2_5
before_al2_6
after_abefore_al2_6
before_al2_7
after_abefore_al2_7
before＿al2＿8
after＿abefore＿al2＿8
before＿al2＿9
after＿abefore＿al2＿9

ニ＝ニニニニニニ＝ニニー
Test 4．3：145
${ }^{\wedge} 11 \_1$
＾11＿1\＄
appended
＾11＿2
＾11＿2\＄
appended
＾11＿3
＾11＿3\＄
appended
${ }^{\wedge} 11 \_4$
＾11 4\＄
appended
＾11＿5
＾11＿5\＄
appended
＾l1＿6
＾11＿6\＄
appended
＾11＿7
＾11＿7\＄
appended
＾l1＿8
appended
＾11＿8
11＿9\＄
＾l1＿10
appended
＾11＿10
11＿11\＄
＾l1＿12
＾11＿12\＄
appended
＾11＿13
＾11＿13\＄
appended
＾l1＿14
＾11＿14\＄
appended
＾12＿1
＾12＿1\＄
＾12＿2
＾12＿2\＄
＾12＿3
＾12＿3\＄
＾12＿4
＾12＿4\＄
＾12＿5
＾12＿5\＄
＾12＿6
＾12＿6\＄
＾12＿7
＾12＿7\＄
＾12＿8
＾12＿8\＄
＾12＿9
＾12＿9\＄
＝＝＝＝＝＝＝＝＝＝＝
Test 4．4：146
＝＝＝＝＝＝＝＝＝＝＝＝
hello
hello
hello
hello
hello
hello
hello
hello
hello
hello
hello
hello
hello
hello
＝＝＝＝＝＝＝＝＝＝＝
Test 4．5：147
＝＝＝＝＝＝＝＝＝＝＝＝
hello
＝ニニニニニニニニニニ＝
Test 4．6：148
＝ニニニニニニ＝ニ＝＝
hello
＝ニニニニニニニニ＝ニ＝
Test 4．7：149
＝ニニニニニニニニニニ＝
hello

Test 4．8：150
＝＝＝＝＝＝＝＝＝＝＝＝
Testing labels and branching

Test 5．1：151
＝＝＝＝＝＝＝＝＝＝＝＝
label2＿11＿1
label3＿label2＿11＿1
label1＿11＿2
label1＿11＿3
label1＿11＿4
label1＿11＿5
label1＿11＿6
label1＿11＿7
label1＿11＿8
label1＿11＿9
label1＿11＿10
label1＿11＿11
label1＿11＿12
label2＿11＿13
label3＿label2＿11＿13
label2＿11＿14
label3＿label2＿11＿14
＝ニニ＝ニ＝ニ＝＝＝＝
Test 5．2：152
＝＝＝＝＝＝＝＝＝＝＝＝
tested 12＿1
tested 12＿2
tested 12＿3
tested 12＿4
tested 12＿5
tested 12＿6
tested 12＿7
tested 12＿8
tested 12＿9
tested 12＿10
tested 12＿11
tested 12＿12
tested 12＿13
tested 12＿14
＝＝＝＝＝＝＝＝＝＝＝
Test 5．3：153
＾11＿1
${ }^{\wedge} 11 \_1 \$$
${ }^{\wedge} 11 \_2$
${ }^{\wedge} 11 \_2 \$$
＾11＿3
＾11＿3\＄
${ }^{\wedge} 11 \_4$
${ }^{\wedge} 11 \_4 \$$
11＿5\＄
11＿6\＄
11＿7\＄
11＿8\＄
＝＝＝＝＝＝＝＝＝＝＝＝
Test 5．4：154
＝＝＝＝＝＝＝＝＝＝＝＝
${ }^{\wedge} 11 \_1 \$$
＾11＿2\＄
＾11＿3\＄
＾11＿4\＄
${ }^{\wedge} 11 \_5 \$$
＾11＿6\＄
${ }^{\wedge} 11 \_7 \$$
＾11＿8\＄
11＿9\＄
11＿10\＄
11＿11\＄
11＿12\＄
11＿13\＄
11＿14\＄

Test 5．5：155
＝ニニニニ＝ニ＝ニ＝＝
＾11＿1
＾11＿2
${ }^{\wedge} 11 \_4$
＾11＿6
＾l1＿8
＝ニニニニニニニニ＝ニ＝
Test 5．6：156
＝＝＝＝＝＝＝＝＝＝＝
11＿1
11＿2
11＿3
11＿4

11＿5

ニニニニニニニニニニニ＝
Test 5．7：157
＝ニニニニニニニニニニ＝
11＿1
11＿2
11＿3
11＿4
hello
11＿5
＝ニニニニニニニニニニニ
Test 5．8：158
＝＝＝＝＝＝＝＝＝＝＝＝
m1＿1
m1＿2
m1＿3
m1＿4
m1＿5
m1＿6
m1＿7
m1＿8
m1＿9
m1＿10
m1＿11
m1＿12
m1＿13
m1＿14
Pattern space commands
$=========$
Test 6．1：159
$===========$
changed
changed
changed
changed
changed
changed
changed
changed
changed
changed
changed
changed
changed
changed

Test 6．2：160
＝ニニニニニニ＝$===$
11＿1
11＿2
11＿3
11＿5
11＿6
11＿7
11＿8
11＿9
11＿10
11＿11
11＿12
11＿13
11＿14

Test 6．3：161
＝＝＝＝＝＝＝＝＝＝＝＝
11＿5
11＿6
11＿7
11＿8
11＿9
11＿10
11＿11
11＿12
11＿13
11＿14

Test 6．4：162
＝＝＝＝＝＝＝＝＝＝＝＝
11＿1
11＿2
11＿3
11＿2
11＿3
11＿5
11＿2
11＿3
11＿2
11＿3
11＿6
11＿6
11＿7

11＿8
11＿9
11＿10
11＿11
11＿12
11＿13
11＿14
＝ニニニニニニニニニ二＝
Test 6．5：163
＝＝＝＝＝＝＝＝＝＝＝＝
11＿1
11＿2
11＿3
11＿4
11＿5
11＿6
11＿7
11＿8
11＿9
11＿10
11＿11
11＿12
11＿13
11＿14
$==========$
Test 6．6：164
＝＝＝＝＝＝＝＝＝＝＝＝
Testing print and file routines
＝ニニニニニニニニニ＝
Test 7．1：165
＝＝＝＝＝＝＝＝＝＝＝＝
\001\002\003\004\005\006\alb\t\＄
Iv\flr\016\017\020\021\022\023\024\025\026\027\030\031\032\033\034\}
\035\036\037！＂\＃\＄\％\＆＇（）＊＋，－．／0123456789：；＜＝＞？＠ABCDEFGHIJKLMNOPQRSTUVWX
YZ［<br>］＾＿｀abcdefghijklmnopqrstuvwxyz\｛｜\}~\177\200\201\202\203\204\205\}
\206\207\210\211\212\213\214\215\216\217\220\221\222\223\224\225\226\}
\227\230\231\232\233\234\235\236\237\240\241\242\243\244\245\246\247\}
\250\251\252\253\254\255\256\257\260\261\262\263\264\265\266\267\270\} \271\272\273\274\275\276\277\300\301\302\303\304\305\306\307\310\311\} \312\313\314\315\316\317\320\321\322\323\324\325\326\327\330\331\332\} \333\334\335\336\337\340\341\342\343\344\345\346\347\350\351\352\353\} $\backslash 354 \backslash 355 \backslash 356 \backslash 357 \backslash 360 \backslash 361 \backslash 362 \backslash 363 \backslash 364 \backslash 365 \backslash 366 \backslash 367 \backslash 370 \backslash 371 \backslash 372 \backslash 373 \backslash 374 \backslash$ 1375\3761377\＄
\＄

Test 7．2：166
＝＝＝＝＝＝＝＝＝＝＝＝
11＿1
11＿2
11＿3
11＿4
11 ＿5
11＿6
11＿7
11＿8
11＿9
11＿10
11＿11
11＿12
11＿13
11＿14
15
12＿1
16
12＿2
17
12＿3
18
12＿4
19
12＿5
20
12＿6
21
12＿7
22
12＿8
23
12＿9

ニニニニニニニニニニニー
Test 7．3：167
＝＝＝＝＝＝＝＝＝＝＝＝
11＿1
11＿2
11＿3
11＿4
11＿5
11＿6
11＿7
11＿8
11＿9

11＿10
11＿11
11＿12
11＿13
11＿14
w results
11＿3
11＿4
11＿5
11＿6
11＿7
11＿8
11＿9
11＿10
11＿11
11＿12
＝ニ＝ニニ＝ニ＝ニ＝＝
Test 7．4：168
＝＝＝＝＝＝＝＝＝＝＝＝
11＿1
11＿2
11＿3
11＿4
12＿1
12＿2
12＿3
12＿4
12＿5
12＿6
12＿7
12＿8
12＿9
11＿5
11＿6
11＿7
11＿8
11＿9
11＿10
11＿11
11＿12
11＿13
11＿14

Test 7．5：169

11＿1

11_2
11_3
11_4
11_5
11_6
11_7
11_8
11_9
11_10
11_11
11_12
11_13
11_14
============
Test 7.6:170
============
11_1
11_2
11_3
11_4
11_5
11_6
11_7
11_8
11_9
11_10
11_11
11_12
11_13
11_14

Test 7.8:171
============

Testing substitution commands
============
Test 8.1:172

XXXX
XXXX
XXXX
XXXX
XXXX
XXXX
XXXX

XXXX
XXXX
XXXXX
XXXXX
XXXXX
XXXXX
XXXXX
＝ニニニニニニニニー＝
Test 8．2：173

ニニニニニニニニニニ
XXXX
XXXX
XXXX
XXXX
XXXX
XXXX
XXXX
XXXX
XXXX
XXXXX
XXXXX
XXXXX
XXXXX
XXXXX

Test 8．3：174

ニニニニニニニニニニニー
XXXX
XXXX
XXXX
XXXX
XXXX
XXXX
XXXX
XXXX
XXXX
XXXXX
XXXXX
XXXXX
XXXXX
XXXXX

Test 8．4：175

11＿1

11_2
11_3
11_4
11_5
11_6
11_7
11_8
11_9
11_10
11_11
11_12
11_13
11_14

Test 8.5:176
=============
11X1
11X2
11X3
11X4
11X5
11X6
11X7
11X8
11X9
11X10
11X11
11X12
11X13
11X14

Test 8.6:177
============
(1)(1)(_)(1)
(1)(1)(_)(2)
(1)(1)(_)(3)
(l)(1)(_)(4)
(l)(1)(_)(5)
(1)(1)(_)(6)
(l)(1)(_)(7)
(l)(1)(_)(8)
(l)(1)(_)(9)
$(1)(1)\left(\_\right)(1)(0)$
(1)(1)(_)(1)(1)
$(1)(1)\left(\_\right)(1)(2)$
$(1)(1)\left(\_\right)(1)(3)$
$(1)(1)\left(\_\right)(1)(4)$

Test 8．7：178
＝＝＝＝＝＝＝＝＝＝＝＝
（\＆）（\＆）（\＆）（\＆）
（\＆）（\＆）（\＆）（\＆）
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$(\&)(\&)(\&)(\&)(\&)$
$(\&)(\&)(\&)(\&)(\&)$
$(\&)(\&)(\&)(\&)(\&)$
$===========$
Test 8．8：179
＝ニニニニニニニニニニ＝
x＿x1xl1
x＿x1xl2
x＿x1xl3
x＿x1xl4
x＿x $1 \times 15$
x＿x1x16
x＿x1x17
x＿x1x18
x＿x1x19
x＿x1x110
x＿x1xl11
x＿x1xl12
x＿x1xl13
x＿x1x114

Test 8．9：180

11u0
u1
u21
11u0
u1
u22
11u0
u1
u23
11u0
u1
u24
11u0
u1
u25
11u0
u1
u26
11u0
ul
u27
11u0
u1
u28
11u0
u1
u29
11u0
u1
u210
11u0
u1
u211
11u0
u1
u212
11u0
u1
u213
11u0
ul
u214

Test 8.10:181
=============
11_X
11_X
11_X
11_X
11_X
11_X
11_X
11_X
11_X

11_X0
11_X1
11_X2
11_X3
11_X4

Test 8.11:182
=============
1X_1
1X_2
1X_3
1X_4
1X_5
1X_6
1X_7
1X_8
1X_9
1X_10
1X_11
1X_12
1X_13
1X_14
s wfile results
1X_1
1X_2
1X_3
1X_4
1X_5
1X_6
1X_7
1X_8
1X_9
1X_10
1X_11
1X_12
1X_13
IX_14

Test 8.12:183
==============
IX_X
1X_X
1X_X
1X_4
1X_5
1X_6

1X＿7
1X＿8
1X＿9
1X＿X0
1X＿XX
1X＿XX
1X＿XX
1X＿X4
＝二＝ニニニニ＝ニニ＝＝
Test 8．13：184
＝ニニニニニニニ＝ニ＝ニ＝
18＿8
18＿7
18＿6
18＿5
18＿4
18＿3
18＿2
18＿1
18＿0
18＿89
18＿88
18＿87
18＿86
18＿85

Test 8．14：185
＝ニニニニニニニニニニニ
18＿8
18＿7
18＿6
18＿5
18＿4
18＿3
18＿2
18＿1
18＿0
18＿89
18＿88
18＿87
18＿86
18＿85

Test 8．15：186
ニニニニニニニニニニニニ

11_1X11_2
11_3
11_4
11_5
11_6
11_7
11_8
11_9
11_10
11_11
11_12
11_13
11_14

Test 8.16:187
$============$
eeefff
Xeefff
XYefff
XYeYff
XYeYYf
XYeYYY
XYeYYY

Test 8.17:188

## $\& \& \& \&$

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| :--- | :--- |
| jloup@gzip.org | madler@alumni.caltech.edu |

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Ackeret, Matt

Adler, Mark
Allbery, Russ
Anderson, Jamie
Andrew, Nick
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Hayman, Randy M.
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Nikitser, Peter A.
Nussel, Ludwig
Ouellet, Jean-Philippe
Paquet, Eric
Paradis, Chantal
Percival, Ted
Perera, Andres
Peron, Christian S.J.
Peschel, Aaron
Peslyak, Alexander
Peterson, Toby
Petten, Diego Elio
Pickett, Joel
Plotnick, Alex
de Raadt, Theo
Rasch, Gudleik
Reid, Steve
Richards, Matt
Rossum, Guido van
Rouillard, John P.
Rowe, William A., Jr.
Roy, Alain

Ruusame, Elan
Ryabinkin, Eygene
SATO, Yuichi
Snchez, Wilfredo
Saucier, Jean-Francois
Schoenfeld, Patrick
Schuring, Arno
Schwarze, Ingo
Scott, Dougal
Sieger, Nick
Simon, Thor Lancelot
Slemko, Marc
Smith, Andy
Sobrado, Igor
Soulen, Steven
Spangler, Aaron
Spradling, Cloyce D.
Stier, Matthew
Stoeckmann, Tobias
Street, Russell
Stritzky, Tilo
Stroucken, Michael
Tarrall, Robert
Thomas, Matthew
Todd, Giles
Toft, Martin
Torek, Chris
Tucker, Darren
Uhl, Robert
Uzel, Petr
Valery, Reznic
Van Dinter, Theo
Venckus, Martynas
de Vries, Marten
Wagner, Klaus
Walsh, Dan
Warburton, John
Webb, Kirk
Wetzel, Timm
Wieringen, Marco van
Wilk, Jakub
Winiger, Gary
Wood, David
Zacarias, Gustavo
Zolnowsky, John

The following people have worked to translate sudo into other languages:

Blttermann, Mario
Bogusz, Jakub
Casagrande, Milo
Castro, Felipe
Cho, Seong-ho
Chornoivan, Yuri
Diguez, Francisco
Ferreira, Rafael
Garca-Fontes, Walter
Gezer, Volkan
Hamasaki, Takeshi
Hamming, Peter
Hansen, Joe
Hantrais, Frdric
Hein, Jochen
Hufthammer, Karl Ove
Jerovek, Damir
Karvonen, Jorma
Kazik, Duan
Kelemen, Gbor
Koir, Klemen
Kozlov, Yuri
Kramer, Jakob
Krznar, Tomislav
Marchal, Frdric
Margeviius, Algimantas
Maryanov, Pavel
Nikoli, Miroslav
Nylander, Daniel
Psa, Petr
Qun, Trn Ngc
Regueiro, Leandro
Sarer, zgr
Sendn, Abel
Sikrom, ka
Spingos, Dimitris
Taniguchi, Yasuaki
Uranga, Mikel Olasagasti
Vorotnikov, Artem
Wang, Wylmer

### 1.307 sysfsutils 2.1.0 :16.el7

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[^42]
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### 1.318 unzip 6.0 :19.el7

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Please read LICENSE first to find out what is allowed to do with Info-ZIP's UnZip code.

There are currently two explicit copyrights on portions of UnZip code (at least, of which Info-ZIP is aware): Jim Luther's Mac OS File Manager interface code; and Christopher Evans' MacBinaryIII coding code (for the MacOS port).. These copyrights are discussed in more detail below.

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Frequently Asked Questions regarding (re)distribution of Zip and UnZip are near the end of this file.

There are no known patents on any of the code in UnZip. Unisys claims a patent on LZW encoding and on LZW decoding _in an apparatus that performs LZW encoding_, but the patent appears to exempt a standalone decoder (as in UnZip's unshrink.c). Unisys has publicly claimed otherwise, but the issue has never been tested in court. Since this point is unclear, unshrinking is not enabled by default. It is the responsibility of the user to make his or her peace with Unisys and its licensing requirements. (unshrink.c may be removed from future releases altogether.)

The original unzip source code has been extensively modified and almost entirely rewritten (changes include random zipfile access rather than sequential; replacement of unimplode() with explode(); replacement of old unshrink() with new (unrelated) unshrink(); replacement of output routines; addition of inflate(), wildcards, filename-mapping, text translation, ...; etc.). As far as we can tell, only the core code of the unreduce method remained substantially
similar to Mr. Smith's original source. As of UnZip 5.42, the complete core code is now covered by the Info-ZIP Licence. Therefore, support for the reduce method has been removed.
The drop of the reduce method should only affect some test archives, reducing was never used in any publically distributed Zip program. For pathologic cases where support for reduced archive entries is needed, the unreduce code copyrighted by Samuel H. Smith is available as a separate distribution (the restricted copyright of this code is cited below in the "historical" section).

The following copyright applies to the Mac OS File Manager interface code (macos/source/macstuff.[ch]), distributed with UnZip 5.4 and later:

* MoreFiles
* 
* A collection of File Manager and related routines
* 
* by Jim Luther (Apple Macintosh Developer Technical Support Emeritus)
* with significant code contributions by Nitin Ganatra
* (Apple Macintosh Developer Technical Support Emeritus)
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The following copyright applies to the Mac OS "macbin3" decoding code (extra field compatibility with ZipIt):

```
* MacBinaryIII.h
*
* Copyright 1997 Christopher Evans (cevans@poppybank.com)
```

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* MacBinary III spec.
* 
* This source is copyrighted by Christopher Evans (cevans@ poppybank.com)
* (available at ftp://ftp.lazerware.com/MacBinaryIII_src_C.sit
* homepage of Leonard Rosenthol leonardr@ netcom.com)

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Regarding the first stipulation, Mr. Smith was tracked down in southern California some years back [Samuel H. Smith, The Tool Shop; as of midMay 1994, (213) 851-9969 (voice), (213) 887-2127(?) (subscription BBS), 71150.2731@compuserve.com]:
"He says that he thought that whoever contacted him understood that he has no objection to the Info-ZIP group's inclusion of his code. His primary concern is that it remain freely distributable, he said."

Despite the fact that our "normal" code has been entirely rewritten and by default no longer contains any of Mr. Smith's code, Info-ZIP remains indebted and grateful to him. We hope he finds our contributions as useful as we have his.

Note that the third and fourth stipulations still apply to any company that wishes to incorporate the unreduce code into its products; if you wish to do so, you must contact Mr. Smith directly regarding licensing.

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The decompression core code for the deflate method (inflate.[ch], explode.c) was originally written by Mark Adler who submitted it as public domain code.

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### 1.319 ustr 1.0.4 :16.el7

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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.)

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b) Use a suitable shared library mechanism for linking with the

Library. A suitable mechanism is one that (1) uses at run time a
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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.

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### 1.320 util-linux 2.23.2 :52.el7_5.1

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size: 8388608, sector size: 512, PT: dos, offset: 446, id=0x8f8378c0
---
\#1: $\quad 32 \quad 7648$ 0x83
\#2: $7680 \quad 87040 x a 5$
\#5: $793648640 x 7$ (freebsd)
\#6: $1254435840 x 7$ (freebsd)
Initialize empty image
f1c9645dbc 14efddc7d8a322685f26eb bsd.img
Create new DOS partition table
57e721e38d1266c2df055067c18f2cf9 bsd.img
---layout----------
__ts_dev__: $10 \mathrm{MB}, 10485760$ bytes, 20480 sectors
Units $=$ sectors of $1 * 512=512$ bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disk label type: dos
Disk identifier: 0x00000001

Device Boot Start End Blocks Id System

Create 1st primary partition
ada64ace122978d00d1d1c0e5ee45d26 bsd.img
---layout----------
__ts_dev__: $10 \mathrm{MB}, 10485760$ bytes, 20480 sectors
Units $=$ sectors of $1 * 512=512$ bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disk label type: dos
Disk identifier: 0x000000001

| Device Boot | Start 2048 | End 4095 | Blocks Id System $\qquad$ |
| :---: | :---: | :---: | :---: |
| _ts_dev__1 |  |  |  |

Create 2st primary partition
1bebf87248e05d6e4e62b749da65d023 bsd.img
Set 2nd partition type
2d8e8dff51a88a045db233418dd73fbe bsd.img
---layout---------
__ts_dev__: $10 \mathrm{MB}, 10485760$ bytes, 20480 sectors
Units $=$ sectors of $1 * 512=512$ bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disk label type: dos
Disk identifier: 0x00000001

| Device Boot | Start | End | Blocks Id System |
| :---: | :---: | :---: | :---: | :---: |
| __ts_dev__1 | 2048 | 4095 | $1024 \quad$ 83 Linux |
| __ts_dev__2 $^{2}$ | 4096 | 20479 | 8192 a5 FreeBSD |

Create default BSD
2e1cee529cb59c9341afef0443f196a1 bsd.img
---layout----------

Changes will remain in memory only, until you decide to write them.
Be careful before using the write command.

Command (m for help):

BSD disklabel command ( m for help):
4 partitions:
\# start end size fstype [fsize bsize cpg]
c: 40962047916384 unused 00
d: $\quad 0 \quad 16064 \quad 16065$ unused $\quad 0 \quad 0$

BSD disklabel command ( m for help):
Command (m for help):
b5c121c2091b2ff26b880551feac7112 bsd.img
---layout----------

Changes will remain in memory only, until you decide to write them.
Be careful before using the write command.

Command (m for help):

BSD disklabel command ( m for help):
4 partitions:

| \# | start | end | size | fstype | [fsize bsize | cpg] |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a: | 4096 | 6144 | 2049 | 4.2 BSD | 0 | 0 | 0 |
| c: | 4096 | 20479 | 16384 | unused | 0 | 0 |  |
| d: | 0 | 16064 | 16065 | unused | 0 | 0 |  |

BSD disklabel command ( m for help):
Command ( m for help):
$\qquad$

Changes will remain in memory only, until you decide to write them. Be careful before using the write command.

Command (m for help):

BSD disklabel command ( m for help):

| 0 unused | 54.1 BSD | 9 4.4LFS | d boot |
| :---: | :---: | :---: | :---: |
| 1 swap | 6 Eighth Edition | a unknown | e ADOS |
| 2 Version 6 | 7 4.2BSD | b HPFS | f HFS |
| 3 Version 7 | 8 MS-DOS | c ISO-9660 | 10 AdvFS |
| 4 System V |  |  |  |

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### 1.321 vim 7.4.160 :4.el7

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## Arnaud LE HORS BULL Research FRANCE -- Koala Project

(XPM - X PixMap format version 2 \& 3)
Internet: lehors@sophia.inria.fr
Surface Mail: Arnaud LE HORS, INRIA - Sophia Antipolis, 2004, route des Lucioles, 06565 Valbonne Cedex -- FRANCE
Voice phone: (33) 93.65.77.71, Fax: (33) 936577 66, Telex: 970050 F
" Vim syntax file
" Language:Software Distributor product specification file
"(POSIX 1387.2-1995).
" Maintainer:Rex Barzee [rex_barzee@hp.com](mailto:rex_barzee@hp.com)
" Last change:25 Apr 2001
if version < 600
" Remove any old syntax stuff hanging around syn clear
elseif exists("b:current_syntax")
finish
endif
" Product specification files are case sensitive syn case match
syn keyword psfObject bundle category control_file depot distribution syn keyword psfObject end file fileset host installed_software media syn keyword psfObject product root subproduct vendor
syn match psfUnquotString $+\left[{ }^{\wedge} \# \#\right][\wedge \#]^{*}+$ contained
syn region psfQuotString start=+"+ skip=+<br>"+ end=+"+ contained
syn match psfObjTag " $\backslash<\left[-\_+A-Z 0-9 a-z\right] \backslash+\backslash\left(\backslash .\left[-\_+A-Z 0-9 a-z\right] \backslash+1\right) * "$ contained


$\mathrm{z}] \backslash+1$ )*()*" contained
syn match psfNumber " $|<\backslash d \backslash+\backslash\rangle$ " contained
syn match psfFloat $\quad \mid\langle\langle\backslash|+|>\backslash(\backslash .|<\backslash d \backslash+|>|) * "$ contained
syn match psfLongDate "\<\d\d\d\d\d\d\d\d\d\d\d\d\.\d\d\>" contained
syn keyword psfState available configured corrupt installed transient contained syn keyword psfPState applied committed superseded contained
syn keyword psfBoolean false true contained
"Some of the attributes covered by attUnquotString and attQuotString:
" architecture category_tag control_directory copyright
" create_date description directory file_permissions install_source
" install_type location machine_type mod_date number os_name os_release
" os_version pose_as_os_name pose_as_os_release readme revision
" share_link title vendor_tag
syn region psfAttUnquotString matchgroup=psfAttrib start=~^\s*[^\# ]\+\sl+[^\#" ]~rs=e-1
contains=psfUnquotString,psfComment end=~\$~ keepend oneline
syn region psfAttQuotString matchgroup=psfAttrib start=~^\s*[^\# ]\+\s\+"~rs=e-1
contains=psfQuotString,psfComment skip=~<br>"~ matchgroup=psfQuotString end=~" $\sim$ keepend
" These regions are defined in attempt to do syntax checking for some
" of the attributes.
syn region psfAttTag matchgroup=psfAttrib start="^\s*tag $\backslash s \backslash+$ " contains=psfObjTag,psfComment end="\$" keepend oneline
syn region psfAttSpec matchgroup=psfAttrib
start="^\s*<br>(ancestor\|applied_patches\|applied_to\|contents\|corequisites\|exrequisites $\backslash \mid$ prerequisites $\backslash$ software_spec $\$ supersedes $\backslash$ |superseded_by $) \backslash$ \s $\backslash+$ " contains=psfObjTag,psfAttAbbrev,psfComment end="\$" keepend
syn region psfAttTags matchgroup=psfAttrib start="^\s*all_filesets\sl+" contains=psfObjTags,psfComment end="\$" keepend
syn region psfAttNumber matchgroup=psfAttrib
start="^\s*<br>(compressed_size\|instance_id\|media_sequence_number\|sequence_number\|sizel)\s $\mid+"$ contains=psfNumber,psfComment end="\$" keepend oneline
syn region psfAttTime matchgroup=psfAttrib start="^\s*<br>(create_time $\backslash$ ctime $\backslash \mid$ mod_time $\backslash$ mtime $\backslash$ timestamp $) \backslash \mathrm{s} \backslash+"$ contains=psfNumber,psfComment end="\$" keepend oneline
syn region psfAttFloat matchgroup=psfAttrib start="^\s*|(data_model_revision\|layout_version $)$ ) $\mid s \backslash+$ " contains=psfFloat,psfComment end="\$" keepend oneline
syn region psfAttLongDate matchgroup=psfAttrib start="^\s*install_datels\+" contains=psfLongDate,psfComment end="\$" keepend oneline
syn region psfAttState matchgroup=psfAttrib start="^\} \backslash * \backslash ( state ) \backslash \backslash \backslash + " contains=psfState, psfComment end="\$" keepend oneline
syn region psfAttPState matchgroup=psfAttrib start="^\s*<br>(patch_statel)\s\+" contains=psfPState,psfComment end="\$" keepend oneline
syn region psfAttBoolean matchgroup=psfAttrib
start="^\s*<br>(is_kernel\|is_locatable<br>is_patch\|is_protected\|is_reboot\|is_referencel\is_securel|is_sparsel)\s\+" contains=psfBoolean,psfComment end="\$" keepend oneline
syn match psfComment "\#.*\$"
" Define the default highlighting.
" For version 5.7 and earlier: only when not done already
" For version 5.8 and later: only when an item doesn't have highlighting yet if version >= 508 || !exists("did_psf_syntax_inits")
if version < 508
let did_psf_syntax_inits = 1
command -nargs=+ HiLink hi link <args>
else
command -nargs=+ HiLink hi def link <args>
endif

HiLink psfObject Statement
HiLink psfAttrib Type
HiLink psfQuotString String
HiLink psfObjTag Identifier
HiLink psfAttAbbrev PreProc
HiLink psfObjTags Identifier

HiLink psfComment Comment
delcommand HiLink
endif
" Long descriptions and copyrights confuse the syntax highlighting, so
" force vim to backup at least 100 lines before the top visible line
" looking for a sync location.
syn sync lines=100
let b:current_syntax = "psf"
*uganda.txt* For Vim version 7.4. Last change: 2013 Jul 06

```
*uganda* *Uganda* *copying* *copyright* *license*
SUMMARY
*iccf* *ICCF*
```

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Kibaale Children's Centre*kcc* *Kibaale* *charity*

Kibaale Children's Centre (KCC) is located in Kibaale, a small town in the south of Uganda, near Tanzania, in East Africa. The area is known as Rakai District. The population is mostly farmers. Although people are poor, there is enough food. But this district is suffering from AIDS more than any other part of the world. Some say that it started there. Estimations are that 10 to 30\% of the Ugandans are infected with HIV. Because parents die, there are many orphans. In this district about 60,000 children have lost one or both parents, out of a population of 350,000 . And this is still continuing

The children need a lot of help. The KCC is working hard to provide the needy with food, medical care and education. Food and medical care to keep them healthy now, and education so that they can take care of themselves in the future. KCC works on a Christian base, but help is given to children of any religion.

The key to solving the problems in this area is education. This has been neglected in the past years with president Idi Amin and the following civil wars. Now that the government is stable again, the children and parents have to learn how to take care of themselves and how to avoid infections. There is also help for people who are ill and hungry, but the primary goal is to prevent people from getting ill and to teach them how to grow healthy food.

Most of the orphans are living in an extended family. An uncle or older sister is taking care of them. Because these families are big and the income (if any) is low, a child is lucky if it gets healthy food. Clothes, medical care and schooling is beyond its reach. To help these needy children, a sponsorship program was put into place. A child can be financially adopted. For a few dollars a month KCC sees to it that the child gets indispensable items, is healthy, goes to school and KCC takes care of anything else that needs to be done for the child and the family that supports it.

Besides helping the child directly, the environment where the child grows up needs to be improved. KCC helps schools to improve their teaching methods. There is a demonstration school at the centre and teacher trainings are given. Health workers are being trained, hygiene education is carried out and households are stimulated to build a proper latrine. I helped setting up a production site for cement slabs. These are used to build a good latrine. They are sold below cost price.

There is a small clinic at the project, which provides children and their family with medical help. When needed, transport to a hospital is offered. Immunization programs are carried out and help is provided when an epidemic is breaking out (measles and cholera have been a problem). *donate*

Summer 1994 to summer 1995 I spent a whole year at the centre, working as a volunteer. I have helped to expand the centre and worked in the area of water and sanitation. I learned that the help that the KCC provides really helps. When I came back to Holland, I wanted to continue supporting KCC. To do this I'm raising funds and organizing the sponsorship program. Please consider one of these possibilities:

1. Sponsor a child in primary school: 17 euro a month (or more).
2. Sponsor a child in secondary school: 25 euro a month (or more).
3. Sponsor the clinic: Any amount a month or quarter
4. A one-time donation

Compared with other organizations that do child sponsorship the amounts are very low. This is because the money goes directly to the centre. Less than $5 \%$ is used for administration. This is possible because this is a small organization that works with volunteers. If you would like to sponsor a child, you should have the intention to do this for at least one year.

How do you know that the money will be spent right? First of all you have my
personal guarantee as the author of Vim. I trust the people that are working at the centre, I know them personally. Further more, the centre has been co-sponsored and inspected by World Vision, Save the Children Fund and is now under the supervision of Pacific Academy Outreach Society. The centre is visited about once a year to check the progress (at our own cost). I have visited the centre myself many times, starting in 1993. The visit reports are on the ICCF web site.

If you have any further questions, send me e-mail: [Bram@vim.org](mailto:Bram@vim.org).

The address of the centre is:
Kibaale Children's Centre
p.o. box 1658

Masaka, Uganda, East Africa

Sending money:*iccf-donations*

Check the ICCF web site for the latest information! See |iccf| for the URL.

USA:The methods mentioned below can be used.
Sending a check to the Nehemiah Group Outreach Society (NGOS) is no longer possible, unfortunately. We are looking for another way to get you an IRS tax receipt.
For sponsoring a child contact KCF in Canada (see below). US checks can be sent to them to lower banking costs.

Canada:Contact Kibaale Children's Fund (KCF) in Surrey, Canada. They
take care of the Canadian sponsors for the children in
Kibaale. KCF forwards $100 \%$ of the money to the project in
Uganda. You can send them a one time donation directly.
Please send me a note so that I know what has been donated
because of Vim. Ask KCF for information about sponsorship.
Kibaale Children's Fund c/o Pacific Academy
10238-168 Street
Surrey, B.C. V4N 1Z4
Canada
Phone: 604-581-5353
If you make a donation to Kibaale Children's Fund (KCF) you will receive a tax receipt which can be submitted with your tax return.

Holland:Transfer to the account of "Stichting ICCF Holland" in Lisse. This will allow for tax deduction if you live in Holland.

Postbank, nr. 4548774
IBAN: NL95 INGB 0004548774

Germany:It is possible to make donations that allow for a tax return.

Check the ICCF web site for the latest information: http://iccf-holland.org/germany.html

World:Use a postal money order. That should be possible from any country, mostly from the post office. Use this name (which is in my passport): "Abraham Moolenaar". Use Euro for the currency if possible.

Europe:Use a bank transfer if possible. Your bank should have a form that you can use for this. See "Others" below for the swift code and IBAN number.
Any other method should work. Ask for information about sponsorship.

Credit Card:You can use PayPal to send money with a Credit card. This is the most widely used Internet based payment system. It's really simple to use. Use this link to find more info: https://www.paypal.com/en_US/mrb/pal=XAC62PML3GF8Q
The e-mail address for sending the money to is:
Bram@iccf-holland.org
For amounts above 400 Euro (\$500) sending a check is preferred.

Others:Transfer to one of these accounts if possible:
Postbank, account 4548774
Swift code: INGB NL 2A
IBAN: NL95 INGB 0004548774
under the name "stichting ICCF Holland", Lisse
If that doesn't work:
Rabobank Lisse, account 3765.05.117
Swift code: RABO NL 2U
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vim:tw=78:ts=8:ft=help:norl:

# 1.322 virt-what 1.18 :4.el7 

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### 1.325 wpa_supplicant 2.6 :9.el7

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### 1.327 xmlsec1 1.2.20 :7.el7_4

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### 1.328 xz 5.2.2 :1.el7

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<signature of Ty Coon>, 1 April 1990
Ty Coon, President of Vice

That's all there is to it!

### 1.329 yum 3.4.3 :158.el7.centos

### 1.329.1 Available under license :

diff -up yum-3.4.3/yum/update_md.py.org yum-3.4.3/yum/update_md.py --- yum-3.4.3/yum/update_md.py.org2017-01-24 18:55:03.529842775 +0100 +++ yum-3.4.3/yum/update_md.py2017-01-24 18:55:57.213511475 +0100 @ @ -58,7 +58,7 @ @ class UpdateNotice(object):
A single update notice (for instance, a security fix).
"""

- def __init__(self, elem=None):
+ def __init__(self, elem=None, repoid=None, vlogger=None):
self._md = \{
'from' : ", 'type' : ",
@ @ -83,6 +83,9 @ @ class UpdateNotice(object):
if elem: self._parse(elem)
$+\quad$ self._repoid $=$ repoid
$+\quad$ self._vlogger = vlogger
$+$ def __getitem_(self, item):
""" Allows scriptable metadata access (ie: un['update_id']). """
if type(item) is int:

```
@ @ -103,6+106,24 @ @ class UpdateNotice(object):
    # Tests to see if it's "the same data", which means that the
    # packages can be different (see add_notice).
+ def _rid(un):
+ if hasattr(un, '_repoid') and un._repoid is not None:
+ return un._repoid
+ else:
+ return '<unknown>'
+
+ def _log_failure(data):
+ """Log the mismatched data similarly to conflict markers in git."""
+ if self._vlogger is None:
+ return
+ msg = _('Duplicate of %s differs in some fields:\n')
+ msg %= other._md['update_id']
+ msg += '<<<<<<<< %s:%s\n' % (_rid(other), data)
+ msg += '%r\n========\n%r\n' % (other._md[data], self._md[data])
+ msg += '>>>>>>> %s:%s' % (_rid(self), data)
+ # --verbose mode enables this
+ self._vlogger.log(logginglevels.DEBUG_3, msg)
+
```

    if not other or not hasattr(other, '_md'):
        return False
    @ @ -113,6+134,7 @ @ class UpdateNotice(object):
if data == 'status': \# FIXME: See below...
continue
if self._md[data] != other._md[data]:

+ _log_failure(data)
return False
\# FIXME: Massive hack, Fedora is really broken and gives status=stable
\# and status=testing for updateinfo notices, just depending on which
@ @ -120,8 +142,10 @ @ class UpdateNotice(object):
data $=$ 'status'
if self._md[data] != other._md[data]:
if self._md[data] not in ('stable', 'testing'):
$+\quad$ _log_failure(data)
return False
if other._md[data] not in ('stable', 'testing'):
+ _log_failure(data)
return False
\# They are both really "stable" ...
self._md[data] = 'stable'
@ @ -574,7+598,7 @ @ class UpdateMetadata(object):
for event, elem in safe_iterparse(infile, logger=self._logger):
if elem.tag == 'update':

```
        try:
- un = UpdateNotice(elem)
+ un = UpdateNotice(elem, repoid, self._vlogger)
        except UpdateNoticeException, e:
    msg = _("An update notice%s is broken, skipping.") % _rid(repoid)
    if self._vlogger:
@ @ -587,6 +611,8 @ @ class UpdateMetadata(object):
    msg = _("Update notice %s%s is broken, or a bad duplicate, skipping.") % (un['update_id'],
_rid(repoid))
    if not have_dup:
                msg += _('\nYou should report this problem to the owner of the %srepository.') % _rid(repoid, "%s ")
+ msg +=_('\nIf you are the owner, consider re-running the same command with --verbose to see the '
+ 'exact data that caused the conflict.')
    have_dup = True
    if self._vlogger:
        self._vlogger.warn("%s", msg)
diff --git a/yum/update_md.py b/yum/update_md.py
--- a/yum/update_md.py2015-01-19 07:44:35.567107008 -0500
+++ b/yum/update_md.py2015-01-19 08:57:31.576489424-0500
@@ -398,6 +399,9 @ @ class UpdateMetadata(object):
    except Errors.RepoMDError:
        continue # No metadata found for this repo
+ self.arch_storage = ArchStorage()
+ self.archlist = self.arch_storage.archlist
+
    def get_notices(self, name=None):
        """ Return all notices. """
        if name is None:
@ @ -434,16 +438,29 @ @ class UpdateMetadata(object):
    name = oldpkgtup[0]
    arch = oldpkgtup[1]
    ret = []
+ other_arch_list = []
+ notices = set()
    for notice in self.get_notices(name):
            for upkg in notice['pkglist']:
            for pkg in upkg['packages']:
                    other_arch = False
            if pkg['name'] != name or pkg['arch'] != arch:
                    continue
+ if (notice not in notices and pkg['name'] == name and pkg['arch'] in self.archlist):
+ other_arch = True
+ else:
+ continue
            pkgtup = (pkg['name'], pkg['arch'], pkg['epoch'] or '0',
                    pkg['version'], pkg['release'])
            if _rpm_tup_vercmp(pkgtup, oldpkgtup) <= 0:
```

```
            continue
- ret.append((pkgtup, notice))
+ if other_arch:
+ other_arch_list.append((pkgtup, notice))
+ else
+ ret.append((pkgtup, notice))
+ notices.add(notice)
+ for pkgtup, notice in other_arch_list:
+ if notice not in notices:
+ ret.append((pkgtup, notice))
ret.sort(cmp=_rpm_tup_vercmp, key=lambda x: x[0], reverse=True)
return ret
diff -up yum-3.4.3/yum/update_md.py.old yum-3.4.3/yum/update_md.py
--- yum-3.4.3/yum/update_md.py.old2015-05-28 19:23:35.589691937 +0200
+++ yum-3.4.3/yum/update_md.py2015-05-28 19:24:05.971806965 +0200
@ @ -33,6+33,7 @ @ import Errors
import logginglevels
import rpmUtils.miscutils
+from rpmUtils.arch import ArchStorage
```

def safe_iterparse(filename, logger=None):
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Version 2, June 1991

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### 1.331 yum-utils 1.1.31 :46.el7_5

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    * @(\#)errno.h 8.5 (Berkeley) 1/21/94
    */

    | \#define TARGET_EPERM | 1 | /* Operation not permitted */ |
    | :--- | :---: | :---: |
    | \#define TARGET_ENOENT | 2 | /* No such file or directory */ |
    | \#define TARGET_ESRCH | 3 | /* No such process */ |
    | \#define TARGET_EINTR | 4 | /* Interrupted system call */ |
    | \#define TARGET_EIO | 5 | /* Input/output error */ |
    | \#define TARGET_ENXIO | 6 | /* Device not configured */ |
    | \#define TARGET_E2BIG | 7 | /* Argument list too long */ |
    | \#define TARGET_ENOEXEC | 8 | /* Exec format error */ |
    | \#define TARGET_EBADF | 9 | /* Bad file descriptor */ |
    | \#define TARGET_ECHILD | 10 | /* No child processes */ |
    | \#define TARGET_EDEADLK | 11 | /* Resource deadlock avoided */ |
    |  | / 11 was EAGAIN */ |  |
    | \#define TARGET_ENOMEM | 12 | /* Cannot allocate memory */ |
    | \#define TARGET_EACCES | 13 | /* Permission denied */ |
    | \#define TARGET_EFAULT | 14 | /* Bad address */ |
    | \#define TARGET_ENOTBLK | 15 | /* Block device required */ |
    | \#define TARGET_EBUSY | 16 | /* Device busy */ |
    | \#define TARGET_EEXIST | 17 | /* File exists */ |

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