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Upstream-Name: liblz4

Upstream-Contact: Yann Collet <Cyan4973@github.com>

Source: <https://github.com/lz4/lz4>

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1.4 xz 5.2.2 1.el7

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<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
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That's all there is to it!

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

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```
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```
Gnomovision version 69, Copyright (C) year name of author  
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under certain conditions; type `show c' for details.
```

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

<signature of Ty Coon>, 1 April 1989

Ty Coon, President of Vice

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Version 2.1, February 1999

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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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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.

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"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.

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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.

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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.

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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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.

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

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

must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

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

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

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

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

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

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

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

You must give prominent notice with each copy of the work that the

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

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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.

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

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

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

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

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

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=====

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1.5 libassuan 2.1.0 3.e17

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Version 3, 29 June 2007

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1.6 libsepol 2.5 10.e17

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1.8 krb5-libs 1.15.1-51.el7_9

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cmd/krb5/ipropl/ipropl_hdr.h
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cmd/krb5/kproplog/kproplog.c
cmd/krb5/slave/kpropd_rpc.c
lib/gss_mechs/mech_krb5/et/kdb5_err.c
lib/gss_mechs/mech_spnego/mech_gssapiP_spnego.h
lib/gss_mechs/mech_spnego/mech_spnego_mech.c
lib/krb5/kadm5/kadm_host_srv_names.c
lib/krb5/kdb/kdb_convert.c
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
lib/libgss/g_sign.c
lib/libgss/g_store_cred.c
lib/libgss/g_unseal.c
lib/libgss/g_userok.c
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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The implementations of GSSAPI mechglue in GSSAPI-SPNEGO in "src/lib/gssapi", including the following files:

lib/gssapi/generic/gssapi_err_generic.et
lib/gssapi/mechglue/g_accept_sec_context.c
lib/gssapi/mechglue/g_acquire_cred.c
lib/gssapi/mechglue/g_canon_name.c
lib/gssapi/mechglue/g_compare_name.c
lib/gssapi/mechglue/g_context_time.c
lib/gssapi/mechglue/g_delete_sec_context.c
lib/gssapi/mechglue/g_dsp_name.c
lib/gssapi/mechglue/g_dsp_status.c
lib/gssapi/mechglue/g_dup_name.c
lib/gssapi/mechglue/g_exp_sec_context.c
lib/gssapi/mechglue/g_export_name.c
lib/gssapi/mechglue/g_glue.c
lib/gssapi/mechglue/g_imp_name.c
lib/gssapi/mechglue/g_imp_sec_context.c
lib/gssapi/mechglue/g_init_sec_context.c
lib/gssapi/mechglue/g_initialize.c
lib/gssapi/mechglue/g_inquire_context.c
lib/gssapi/mechglue/g_inquire_cred.c

lib/gssapi/mechglue/g_inquire_names.c
lib/gssapi/mechglue/g_process_context.c
lib/gssapi/mechglue/g_rel_buffer.c
lib/gssapi/mechglue/g_rel_cred.c
lib/gssapi/mechglue/g_rel_name.c
lib/gssapi/mechglue/g_rel_oid_set.c
lib/gssapi/mechglue/g_seal.c
lib/gssapi/mechglue/g_sign.c
lib/gssapi/mechglue/g_store_cred.c
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:

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
lib/krb5/error_tables/kdb5_err.et
slave/kpropd_rpc.c
slave/kproplog.c

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1.9 pinentry 0.8.1 17.el7

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1.10 keyutils-libs 1.5.8 3.el7

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1.11 nss-pem 1.0.3-7.el7

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1.12 kmod-libs 20-28.el7

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=====

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1.14 glibc-common 2.17-325.el7_9

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```
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```
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```

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be combined with the library in order to run.

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@enumerate 0

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@item

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@item

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@subheading END OF TERMS AND CONDITIONS

@page

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```
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@var{one line to give the library's name and an idea of what it does.}
Copyright (C) @var{year} @var{name of author}
```

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```
@end smallexample
```

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```
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`Frob' (a library for tweaking knobs) written by James Random Hacker.
```

```
@var{signature of Ty Coon}, 1 April 1990
Ty Coon, President of Vice
@end smallexample
```

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Version 2, June 1991

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under certain conditions; type `show c' for details.
```

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

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

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

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

This General Public License does not permit incorporating your program into

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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

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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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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.

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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.

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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.

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.

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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.

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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:

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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 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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```

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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:

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

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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.

^L

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

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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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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.

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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.

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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.

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1.18 dbus-python 1.1.1 9.e17

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1.19 libstdc++ 4.8.5-44.e17

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

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

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

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

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

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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.

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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The End

@ignore

@c Set file name and title for man page.

@setfilename gpl

@settitle GNU General Public License

@c man begin SEEALSO

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

@c man end
@c man begin COPYRIGHT
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@c man end
@end ignore
@node Copying
@c man begin DESCRIPTION
@unnumbered GNU General Public License
@center Version 3, 29 June 2007

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@enumerate a

@item

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@item

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@enumerate a

@item

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@item

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@item

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@item

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@item

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```
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@c man end

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Version 2.1, February 1999

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<signature of Ty Coon>, 1 April 1990
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Source code for a work means the preferred form of the work for making modifications to it. For an executable file, complete source code means all the source code for all modules it contains; but, as a special exception, it need not include source code for modules which are standard libraries that accompany the operating system on which the executable file runs, or for standard header files or definitions files that accompany that operating system.

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Appendix: How to Apply These Terms to Your New Programs

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

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

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

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

```
Gnomovision version 69, Copyright (C) 19xx name of author
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute it
under certain conditions; type `show c' for details.
```

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

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

```
Yoyodyne, Inc., hereby disclaims all copyright interest in the
program `Gnomovision' (a program to direct compilers to make passes
at assemblers) written by James Hacker.
```

<signature of Ty Coon>, 1 April 1989

Ty Coon, President of Vice

That's all there is to it!

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

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

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

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

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

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

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

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- a) Accompany the work with the complete corresponding

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

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

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.

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That's all there is to it!

This is the Debian GNU/Linux prepackaged version of the GNU compiler collection, containing Ada, C, C++, Fortran 95, Java, Objective-C, Objective-C++, and Treelang compilers, documentation, and support libraries. In addition, Debian provides the gdc compiler, either in the same source package, or built from a separate same source package. Packaging is done by the Debian GCC Maintainers <debian-gcc@lists.debian.org>, with sources obtained from:

<ftp://gcc.gnu.org/pub/gcc/releases/> (for full releases)
<svn://gcc.gnu.org/svn/gcc/> (for prereleases)
<http://bitbucket.org/goshawk/gdc> (for D)

The current gcc-4.8 source package is taken from the SVN gcc-4_8-branch.

Changes: See changelog.Debian.gz

Debian splits the GNU Compiler Collection into packages for each language,

library, and documentation as follows:

Language	Compiler package	Library package	Documentation
Ada	gnat-4.8	libgnat-4.8	gnat-4.8-doc
C	gcc-4.8		gcc-4.8-doc
C++	g++-4.8	libstdc++6	libstdc++6-4.8-doc
D	gdc-4.8		
Fortran 95	gfortran-4.8	libgfortran3	gfortran-4.8-doc
Go	gccgo-4.8	libgo0	
Java	gcj-4.8	libgcj10	libgcj-doc
Objective C	gobjc-4.8	libobjc2	
Objective C++	gobjc++-4.8		

For some language run-time libraries, Debian provides source files, development files, debugging symbols and libraries containing position-independent code in separate packages:

Language	Sources	Development	Debugging	Position-Independent
C++		libstdc++6-4.8-dbg	libstdc++6-4.8-pic	
D	libphobos-4.8-dev			
Java	libgcj10-src	libgcj10-dev	libgcj10-dbg	

Additional packages include:

All languages:

libgcc1, libgcc2, libgcc4	GCC intrinsics (platform-dependent)
gcc-4.8-base	Base files common to all compilers
gcc-4.8-soft-float	Software floating point (ARM only)
gcc-4.8-source	The sources with patches

Ada:

libgnatvsn-dev, libgnatvsn4.8	GNAT version library
libgnatprj-dev, libgnatprj4.8	GNAT Project Manager library

C:

cpp-4.8, cpp-4.8-doc	GNU C Preprocessor
libmudflap0-dev, libmudflap0	Library for instrumenting pointers
libssp0-dev, libssp0	GCC stack smashing protection library
libquadmath0	Math routines for the __float128 type
fixincludes	Fix non-ANSI header files
protoize	Create/remove ANSI prototypes from C code

Java:

gij	The Java bytecode interpreter and VM
libgcj-common	Common files for the Java run-time
libgcj10-awt	The Abstract Windowing Toolkit

libgcj10-jar

Java ARchive for the Java run-time

C, C++ and Fortran 95:

libgomp1-dev, libgomp1 GCC OpenMP (GOMP) support library

libitm1-dev, libitm1 GNU Transactional Memory Library

Biarch support: On some 64-bit platforms which can also run 32-bit code, Debian provides additional packages containing 32-bit versions of some libraries. These packages have names beginning with 'lib32' instead of 'lib', for example lib32stdc++6. Similarly, on some 32-bit platforms which can also run 64-bit code, Debian provides additional packages with names beginning with 'lib64' instead of 'lib'. These packages contain 64-bit versions of the libraries. (At this time, not all platforms and not all libraries support biarch.) The license terms for these lib32 or lib64 packages are identical to the ones for the lib packages.

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gcc/tsystem.h, gcc/typeclass.h).
- libatomic
 - libdecnumber
 - libgomp
 - libitm
 - libssp
 - libstdc++-v3
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 - libgfortran
 - The libgnat-4.8 Ada support library and libgnatvsn library.
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Version 3.1, 31 March 2009

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libquadmath/math:

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- * Conversion to long double by Ulrich Drepper,
- * Cygnus Support, drepper@cygnus.com.

cosq_kernel.c, expq.c, sincos_table.c, sincosq.c, sincosq_kernel.c, sinq_kernel.c, truncq.c:

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D:

```
gdc-4.8          GNU D Compiler
libphobos-4.8-dev  D standard runtime library
```

The D source package is made up of the following components.

The D front-end for GCC:

- d/*

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Modified by Vincenzo Ampolo, Michael Parrot, Iain Buclaw, (C) 2009, 2010

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The DMD Compiler implementation of the D programming language:
- `d/dmd/*`

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The Zlib data compression library:
- `d/phobos/etc/c/zlib/*`

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The Phobos standard runtime library:
- `d/phobos/*`

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Version 3.1, 31 March 2009

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Developed by:

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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.

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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

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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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```
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@ifinfo
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```

```
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@page

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@smallexample

@var{one line to give the library's name and an idea of what it does.}

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

HISTORY -

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

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

Some other contributors:

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

The SPARC specific code was originally contributed by Mark Weiser.

The Encore Multimax modifications were supplied by

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

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

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

Al 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(agg@uts.amdahl.com) supplied the NetBSD and 386BSD ports.

Jeffrey Hsu (hsu@soda.berkeley.edu) provided the FreeBSD port.

Brent Benson (brent@jade.ssd.csd.harris.com) ported the collector to a Motorola 88K processor running CX/UX (Harris NightHawk).

Ari Huttunen (Ari.Huttunen@hut.fi) generalized the OS/2 port to nonIBM development environments (a nontrivial task).
Patrick Beard (beard@cs.ucdavis.edu) provided the initial MacOS port.
David Chase, then at Olivetti Research, suggested several improvements.
Scott Schwartz (schwartz@groucho.cse.psu.edu) supplied some of the code to save and print call stacks for leak detection on a SPARC.
Jesse Hull and John Ellis supplied the C++ interface code.
Zhong Shao performed much of the experimentation that led to the current typed allocation facility. (His dynamic type inference code hasn't made it into the released version of the collector, yet.)
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Directory native/fdlibm

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1998-05-11

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* m4/ax_func_which_gethostbyname_r.m4

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1.24 libpwquality 1.2.3 5.e17

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1.25 yum-plugin-ovl 1.1.31-54.el7_8

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```
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```

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

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1.26 yum 3.4.3-168.el7.centos

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```

```
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Ty Coon, President of Vice
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1.27 device-mapper 7:1.02.170-6.el7_9.5

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1.29 nss-tools 3.67.0-4.el7_9

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

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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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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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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

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

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

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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It may happen that this requirement contradicts the license

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

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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!
This package was debianized by Jean Pierre LeJacq <jplejacq@quoininc.com> on Wed, 25 Feb 1998. Martin Pitt <martin@piware.de> was the package's maintainer up to version 2.7.19-1. The current maintainer is Jan Dittberner <jandd@debian.org>.

It was downloaded from <http://sourceforge.net/projects/cracklib>

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Copyright (c) 2005-2009 Nathan Neulinger <nneul@umr.edu>,

Copyright (c) 2008-2009 Jan Dittberner <jan@dittberner.info>

Modifications: Added cronjob, configuration file, and man pages.

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Copyright information:

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. Cracklib's license was changed from the GPL to the LGPL after consensus of all previous developers in October 2008, effective with release 2.8.15 released on 2009-11-19. See the email discussion below for both license changes.

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

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=
r=20
GPL-2 is not desirable at all ... this is why the LGPL-2.1 exists
=2Dmike

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

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.
=2Dmike

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:
> > I understand that, and you're welcome to bring it up with Alec
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> 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:

>> 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...

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:
>>> 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

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>>> additional code, so whatever licensing y'all come up with is fine
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>> I am sympathetic. Guys, what do you reckon?
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>> 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.

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:

>>> 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++

Nathan Neulinger is the only one who can actually make said change ...

-mike

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-56FBFE6E9F@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

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

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=
r=20

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

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

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=
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change until it was mentioned in the latest notes.

unlike the old license, GPL-2 prevents people from using cracklib unless th=
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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.
=2Dmike

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

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> -----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:

> > 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,

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> 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:

>> 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
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>> by me.
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> I am sympathetic. Guys, what do you reckon?
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> 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:
>>> Seems like the ideal thing here would be for you and the other distro
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>>> much other than cleaning up the packaging and patches and a small
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-mike

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yes. go for it. thanks++

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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 191Gxtp020623
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-56FBFE6E9F@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

1.31 libverto 0.2.5 4.el7

1.31.1 Available under license :

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1.32 findutils 1:4.5.11-6.el7

1.32.1 Available under license :

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Version 3, 29 June 2007

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

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

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1. Source Code.

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

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

The "System Libraries" of an executable work include anything, other than the work as a whole, that (a) is included in the normal form of packaging a Major Component, but which is not part of that Major

Component, and (b) serves only to enable use of the work with that Major Component, or to implement a Standard Interface for which an implementation is available to the public in source code form. A "Major Component", in this context, means a major essential component (kernel, window system, and so on) of the specific operating system (if any) on which the executable work runs, or a compiler used to produce the work, or an object code interpreter used to run it.

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

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

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

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

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1.35 kpartx 0.4.9-135.el7_9

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1.36 dbus-glib 0.100-7.el7

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1.37 cyrus-sasl-lib 2.1.26 23.el7

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```

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* Tim Martin
```

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* Rob Earhart
```

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* Rob Siemborski
```

```
*/
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/*
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* Rob Earhart

* Rob Siemborski

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1.44 python-iniparse 0.4 9.e17

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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 from	Derived from	Year	Owner	GPL-compatible? (1)
0.9.0 thru 1.2		1991-1995	CWI	yes
1.3 thru 1.5.2	1.2	1995-1999	CNRI	yes
1.6	1.5.2	2000	CNRI	no
2.0	1.6	2000	BeOpen.com	no
1.6.1	1.6	2001	CNRI	yes (2)
2.1	2.0+1.6.1	2001	PSF	no
2.0.1	2.0+1.6.1	2001	PSF	yes
2.1.1	2.1+2.0.1	2001	PSF	yes
2.2	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
2.2.2	2.2.1	2002	PSF	yes
2.2.3	2.2.2	2003	PSF	yes
2.3	2.2.2	2002-2003	PSF	yes

2.3.1	2.3	2002-2003	PSF	yes
2.3.2	2.3.1	2002-2003	PSF	yes
2.3.3	2.3.2	2002-2003	PSF	yes

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1.45 audit-lib 2.8.5 4.e17

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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.

^L

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

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work

during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

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

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

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

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

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

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

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally

accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

^L

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

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

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

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

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^L

11. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or

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

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

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

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

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

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the Free Software Foundation.

^L

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

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END OF TERMS AND CONDITIONS

^L

How to Apply These Terms to Your New Libraries

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

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

notice is found.

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

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

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

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

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

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

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

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

That's all there is to it!
This package was debianized by Jean Pierre LeJacq <jplejacq@quoininc.com> on Wed, 25 Feb 1998. Martin Pitt <martin@piware.de> was the package's maintainer up to version 2.7.19-1. The current maintainer is Jan Dittberner <jandd@debian.org>.

It was downloaded from <http://sourceforge.net/projects/cracklib>

Copyright (c) 1993 Alec Muffett <alecm@crypto.dircon.co.uk>,
Copyright (c) 2005-2009 Nathan Neulinger <nneul@umr.edu>,
Copyright (c) 2008-2009 Jan Dittberner <jan@dittberner.info>

Modifications: Added cronjob, configuration file, and man pages.

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Copyright information:

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. Cracklib's license was changed from the GPL to the LGPL after consensus of all previous developers in October 2008, effective with release 2.8.15 released on 2009-11-19. See the email discussion below for both license changes.

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

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=
r=20

GPL-2 is not desirable at all ... this is why the LGPL-2.1 exists

=2Dmike

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

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> libraries under

> GPL-2 is not desirable at all ... this is why the LGPL-2.1 exists

> -mike

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:

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> 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

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> clarification of the licensing that was already in place.

the original license (before moving to sourceforge -- aka, 2.7) was not=20
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change until it was mentioned in the latest notes.

unlike the old license, GPL-2 prevents people from using cracklib unless th=
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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.
=2Dmike

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:
>> 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
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> 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:

>> 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...

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:
>>> 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
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>>> much other than cleaning up the packaging and patches and a small
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>>> additional code, so whatever licensing y'all come up with is fine
>>> by me.
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>> linked with any code, not just GPL...
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> 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:

>>> 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++

Nathan Neulinger is the only one who can actually make said change ...

-mike

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-56FBFE6E9F@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

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

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

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=2Dmike

Re: [Cracklib-devel] cracklib license

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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

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Attachments: Message as HTML

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=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.
=20Dmike

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:

>> 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
> 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:

>> 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...

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:
>>> 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...
>
> 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:

>>> 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++

Nathan Neulinger is the only one who can actually make said change ...

-mike

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 I91Gxtpr020623
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-56FBFE6E9F@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

1.48 vim-minimal 2:7.4.629-8.el7_9

1.49 tar 2:1.26-35.el7

1.49.1 Available under license :

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Version 3, 29 June 2007

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```

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1.53 util-linux 2.23.2-65.el7_9.1

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- */

```
NR START END SECTORS SIZE NAME UUID
1 32 7679 7648 3.7M 8f8378c0-01
2 7680 16383 8704 4.3M 8f8378c0-02
5 7936 12799 4864 2.4M
6 12544 16127 3584 1.8M
```

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```
WEV @@ WEV[B "1
```

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

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

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1.54 python-kitchen 1.1.1 5.e17

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

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

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations (now Zope

Corporation, see <http://www.zope.com>). In 2001, the Python Software Foundation (PSF, see <http://www.python.org/psf/>) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation is a sponsoring member of the PSF.

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

Release	Derived from	Year	Owner	GPL-compatible? (1)
0.9.0 thru 1.2		1991-1995	CWI	yes
1.3 thru 1.5.2	1.2	1995-1999	CNRI	yes
1.6	1.5.2	2000	CNRI	no
2.0	1.6	2000	BeOpen.com	no
1.6.1	1.6	2001	CNRI	yes (2)
2.1	2.0+1.6.1	2001	PSF	no
2.0.1	2.0+1.6.1	2001	PSF	yes
2.1.1	2.1+2.0.1	2001	PSF	yes
2.2	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
2.2.2	2.2.1	2002	PSF	yes
2.2.3	2.2.2	2003	PSF	yes
2.3	2.2.2	2002-2003	PSF	yes
2.3.1	2.3	2002-2003	PSF	yes
2.3.2	2.3.1	2002-2003	PSF	yes
2.3.3	2.3.2	2002-2003	PSF	yes
2.3.4	2.3.3	2004	PSF	yes
2.3.5	2.3.4	2005	PSF	yes
2.4	2.3	2004	PSF	yes
2.4.1	2.4	2005	PSF	yes
2.4.2	2.4.1	2005	PSF	yes
2.4.3	2.4.2	2006	PSF	yes
2.4.4	2.4.3	2006	PSF	yes
2.5	2.4	2006	PSF	yes
2.5.1	2.5	2007	PSF	yes
2.5.2	2.5.1	2008	PSF	yes
2.5.3	2.5.2	2008	PSF	yes
2.6	2.5	2008	PSF	yes
2.6.1	2.6	2008	PSF	yes
2.6.2	2.6.1	2009	PSF	yes
2.6.3	2.6.2	2009	PSF	yes
2.6.4	2.6.3	2009	PSF	yes

2.6.5	2.6.4	2010	PSF	yes
2.7	2.6	2010	PSF	yes

Footnotes:

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

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

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Version 3, 29 June 2007

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Special Recognition

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.

Contributors:

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

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```
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```

```
<signature of Ty Coon>, 1 April 1989
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<signature of Ty Coon>, 1 April 1990

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1.64 diffutils 3.3 5.e17

1.64.1 Available under license :

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```
#define GDIFF_MAIN
#include "diff.h"
#include <assert.h>
#include "paths.h"
#include <c-stack.h>
#include <dirname.h>
#include <error.h>
#include <exclude.h>
#include <exitfail.h>
#include <filenamecat.h>
#include <file-type.h>
#include <fnmatch.h>
#include <getopt.h>
#include <hard-locale.h>
```

```

#include <prepargs.h>
#include <progrname.h>
#include <sh-quote.h>
#include <stat-time.h>
#include <timespec.h>
#include <version-etc.h>
#include <xalloc.h>
#include <xreadlink.h>
#include <binary-io.h>

/* The official name of this program (e.g., no 'g' prefix). */
#define PROGRAM_NAME "diff"

#define AUTHORS \
proper_name ("Paul Eggert"), \
proper_name ("Mike Haertel"), \
proper_name ("David Hayes"), \
proper_name ("Richard Stallman"), \
proper_name ("Len Tower")

#ifndef GUTTER_WIDTH_MINIMUM
# define GUTTER_WIDTH_MINIMUM 3
#endif

struct regexp_list
{
char *regexps; /* chars representing disjunction of the regexps */
size_t len; /* chars used in 'regexps' */
size_t size; /* size malloc'ed for 'regexps'; 0 if not malloc'ed */
bool multiple_regexps; /* Does 'regexps' represent a disjunction? */
struct re_pattern_buffer *buf;
};

static int compare_files (struct comparison const *, char const *, char const *);
static void add_regexp (struct regexp_list *, char const *);
static void summarize_regexp_list (struct regexp_list *);
static void specify_style (enum output_style);
static void specify_value (char const **, char const *, char const *);
static void try_help (char const *, char const *) __attribute__((noreturn));
static void check_stdout (void);
static void usage (void);

/* If comparing directories, compare their common subdirectories
recursively. */
static bool recursive;

/* In context diffs, show previous lines that match these regexps. */
static struct regexp_list function_regexp_list;

```

```

/* Ignore changes affecting only lines that match these regexps. */
static struct regexp_list ignore_regexp_list;

#if O_BINARY
/* Use binary I/O when reading and writing data (--binary).
   On POSIX hosts, this has no effect. */
static bool binary;
#else
enum { binary = true };
#endif

/* If one file is missing, treat it as present but empty (-N). */
static bool new_file;

/* If the first file is missing, treat it as present but empty
   (--unidirectional-new-file). */
static bool unidirectional_new_file;

/* Report files compared that are the same (-s).
   Normally nothing is output when that happens. */
static bool report_identical_files;

static char const shortopts[] =
"0123456789abBcC:dD:eEfF:hHiI:lL:nNpPqrsS:tTuU:vwW:x:X:yZ";

/* Values for long options that do not have single-letter equivalents. */
enum
{
    BINARY_OPTION = CHAR_MAX + 1,
    FROM_FILE_OPTION,
    HELP_OPTION,
    HORIZON_LINES_OPTION,
    IGNORE_FILE_NAME_CASE_OPTION,
    INHIBIT_HUNK_MERGE_OPTION,
    LEFT_COLUMN_OPTION,
    LINE_FORMAT_OPTION,
    NO_DEREFERENCE_OPTION,
    NO_IGNORE_FILE_NAME_CASE_OPTION,
    NORMAL_OPTION,
    SDIFF_MERGE_ASSIST_OPTION,
    STRIP_TRAILING_CR_OPTION,
    SUPPRESS_BLANK_EMPTY_OPTION,
    SUPPRESS_COMMON_LINES_OPTION,
    TABSIZE_OPTION,
    TO_FILE_OPTION,

    /* These options must be in sequence. */

```



```

UNCHANGED_LINE_FORMAT_OPTION,
OLD_LINE_FORMAT_OPTION,
NEW_LINE_FORMAT_OPTION,

/* These options must be in sequence. */
UNCHANGED_GROUP_FORMAT_OPTION,
OLD_GROUP_FORMAT_OPTION,
NEW_GROUP_FORMAT_OPTION,
CHANGED_GROUP_FORMAT_OPTION
};

static char const group_format_option[][sizeof "--unchanged-group-format"] =
{
    "--unchanged-group-format",
    "--old-group-format",
    "--new-group-format",
    "--changed-group-format"
};

static char const line_format_option[][sizeof "--unchanged-line-format"] =
{
    "--unchanged-line-format",
    "--old-line-format",
    "--new-line-format"
};

static struct option const longopts[] =
{
    {"binary", 0, 0, BINARY_OPTION},
    {"brief", 0, 0, 'q'},
    {"changed-group-format", 1, 0, CHANGED_GROUP_FORMAT_OPTION},
    {"context", 2, 0, 'C'},
    {"ed", 0, 0, 'e'},
    {"exclude", 1, 0, 'x'},
    {"exclude-from", 1, 0, 'X'},
    {"expand-tabs", 0, 0, 't'},
    {"forward-ed", 0, 0, 'f'},
    {"from-file", 1, 0, FROM_FILE_OPTION},
    {"help", 0, 0, HELP_OPTION},
    {"horizon-lines", 1, 0, HORIZON_LINES_OPTION},
    {"ifdef", 1, 0, 'D'},
    {"ignore-all-space", 0, 0, 'w'},
    {"ignore-blank-lines", 0, 0, 'B'},
    {"ignore-case", 0, 0, 'i'},
    {"ignore-file-name-case", 0, 0, IGNORE_FILE_NAME_CASE_OPTION},
    {"ignore-matching-lines", 1, 0, 'I'},
    {"ignore-space-change", 0, 0, 'b'},
    {"ignore-tab-expansion", 0, 0, 'E'},

```

```

{"ignore-trailing-space", 0, 0, 'Z'},
{"inhibit-hunk-merge", 0, 0, INHIBIT_HUNK_MERGE_OPTION},
{"initial-tab", 0, 0, 'T'},
{"label", 1, 0, 'L'},
{"left-column", 0, 0, LEFT_COLUMN_OPTION},
{"line-format", 1, 0, LINE_FORMAT_OPTION},
{"minimal", 0, 0, 'd'},
{"new-file", 0, 0, 'N'},
{"new-group-format", 1, 0, NEW_GROUP_FORMAT_OPTION},
{"new-line-format", 1, 0, NEW_LINE_FORMAT_OPTION},
{"no-dereference", 0, 0, NO_DEREFERENCE_OPTION},
{"no-ignore-file-name-case", 0, 0, NO_IGNORE_FILE_NAME_CASE_OPTION},
{"normal", 0, 0, NORMAL_OPTION},
{"old-group-format", 1, 0, OLD_GROUP_FORMAT_OPTION},
{"old-line-format", 1, 0, OLD_LINE_FORMAT_OPTION},
{"paginate", 0, 0, 'l'},
{"rcs", 0, 0, 'n'},
{"recursive", 0, 0, 'r'},
{"report-identical-files", 0, 0, 's'},
{"sdiff-merge-assist", 0, 0, SDIFF_MERGE_ASSIST_OPTION},
{"show-c-function", 0, 0, 'p'},
{"show-function-line", 1, 0, 'F'},
{"side-by-side", 0, 0, 'y'},
{"speed-large-files", 0, 0, 'H'},
{"starting-file", 1, 0, 'S'},
{"strip-trailing-cr", 0, 0, STRIP_TRAILING_CR_OPTION},
{"suppress-blank-empty", 0, 0, SUPPRESS_BLANK_EMPTY_OPTION},
{"suppress-common-lines", 0, 0, SUPPRESS_COMMON_LINES_OPTION},
{"tabsize", 1, 0, TABSIZE_OPTION},
{"text", 0, 0, 'a'},
{"to-file", 1, 0, TO_FILE_OPTION},
{"unchanged-group-format", 1, 0, UNCHANGED_GROUP_FORMAT_OPTION},
{"unchanged-line-format", 1, 0, UNCHANGED_LINE_FORMAT_OPTION},
{"unidirectional-new-file", 0, 0, 'P'},
{"unified", 2, 0, 'U'},
{"version", 0, 0, 'v'},
{"width", 1, 0, 'W'},
{0, 0, 0, 0}
};

```

/* Return a string containing the command options with which diff was invoked.

Spaces appear between what were separate ARGV-elements.

There is a space at the beginning but none at the end.

If there were no options, the result is an empty string.

Arguments: OPTIONVEC, a vector containing separate ARGV-elements, and COUNT, the length of that vector. */

```

static char *
option_list (char **optionvec, int count)
{
    int i;
    size_t size = 1;
    char *result;
    char *p;

    for (i = 0; i < count; i++)
        size += 1 + shell_quote_length (optionvec[i]);

    p = result = xmalloc (size);

    for (i = 0; i < count; i++)
    {
        *p++ = ' ';
        p = shell_quote_copy (p, optionvec[i]);
    }

    *p = '\0';
    return result;
}

/* Return an option value suitable for add_exclude. */

static int
exclude_options (void)
{
    return EXCLUDE_WILDCARDS | (ignore_file_name_case ? FNM_CASEFOLD : 0);
}

int
main (int argc, char **argv)
{
    int exit_status = EXIT_SUCCESS;
    int c;
    int i;
    int prev = -1;
    lin ocontext = -1;
    bool explicit_context = false;
    size_t width = 0;
    bool show_c_function = false;
    char const *from_file = NULL;
    char const *to_file = NULL;
    uintmax_t numval;
    char *numend;

```

```

/* Do our initializations. */
exit_failure = EXIT_TROUBLE;
initialize_main (&argc, &argv);
set_program_name (argv[0]);
setlocale (LC_ALL, "");
bindtextdomain (PACKAGE, LOCALEDIR);
textdomain (PACKAGE);
c_stack_action (0);
function_regexp_list.buf = &function_regexp;
ignore_regexp_list.buf = &ignore_regexp;
re_set_syntax (RE_SYNTAX_GREP | RE_NO_POSIX_BACKTRACKING);
excluded = new_exclude ();

/* Decode the options. */

while ((c = getopt_long (argc, argv, shortopts, longopts, NULL)) != -1)
  {
    switch (c)
    {
case 0:
    break;

case '0':
case '1':
case '2':
case '3':
case '4':
case '5':
case '6':
case '7':
case '8':
case '9':
    if (! ISDIGIT (prev))
      ocontext = c - '0';
    else if (LIN_MAX / 10 < ocontext
             || ((ocontext = 10 * ocontext + c - '0') < 0))
      ocontext = LIN_MAX;
    break;

case 'a':
    text = true;
    break;

case 'b':
    if (ignore_white_space < IGNORE_SPACE_CHANGE)
      ignore_white_space = IGNORE_SPACE_CHANGE;
    break;

```

```

case 'Z':
    if (ignore_white_space < IGNORE_SPACE_CHANGE)
        ignore_white_space |= IGNORE_TRAILING_SPACE;
    break;

case 'B':
    ignore_blank_lines = true;
    break;

case 'C':
case 'U':
    {
        if (optarg)
            {
                numval = strtoumax (optarg, &numend, 10);
                if (*numend)
                    try_help ("invalid context length '%s'", optarg);
                if (LIN_MAX < numval)
                    numval = LIN_MAX;
            }
        else
            numval = 3;

        specify_style (c == 'U' ? OUTPUT_UNIFIED : OUTPUT_CONTEXT);
        if (context < numval)
            context = numval;
        explicit_context = true;
    }
    break;

case 'c':
    specify_style (OUTPUT_CONTEXT);
    if (context < 3)
        context = 3;
    break;

case 'd':
    minimal = true;
    break;

case 'D':
    specify_style (OUTPUT_IFDEF);
    {
        static char const C_ifdef_group_formats[] =
            "%c%#ifndef %s\n%>#endif /* ! %s *\n%c#ifndef %s\n%>#endif /* %s *\n%c#ifndef %s\n%>#else
/* %s *\n%>#endif /* %s *\n";
        char *b = xmalloc (sizeof C_ifdef_group_formats
            + 7 * strlen (optarg) - 14 /* 7*"%s" */

```

```

    - 8 /* 5*"%%" + 3*"%c" */);
printf (b, C_ifdef_group_formats,
    0,
    optarg, optarg, 0,
    optarg, optarg, 0,
    optarg, optarg, optarg);
for (i = 0; i < sizeof group_format / sizeof group_format[0]; i++)
    {
specify_value (&group_format[i], b, "-D");
b += strlen (b) + 1;
    }
}
break;

case 'e':
specify_style (OUTPUT_ED);
break;

case 'E':
if (ignore_white_space < IGNORE_SPACE_CHANGE)
    ignore_white_space |= IGNORE_TAB_EXPANSION;
break;

case 'f':
specify_style (OUTPUT_FORWARD_ED);
break;

case 'F':
add_regexp (&function_regexp_list, optarg);
break;

case 'h':
/* Split the files into chunks for faster processing.
    Usually does not change the result.

    This currently has no effect. */
break;

case 'H':
speed_large_files = true;
break;

case 'i':
ignore_case = true;
break;

case 'T':
add_regexp (&ignore_regexp_list, optarg);

```

```

break;

case 'l':
if (!pr_program[0])
    try_help ("pagination not supported on this host", NULL);
paginate = true;
#ifdef SIGCHLD
    /* Pagination requires forking and waiting, and
    System V fork+wait does not work if SIGCHLD is ignored. */
    signal (SIGCHLD, SIG_DFL);
#endif
break;

case 'L':
if (!file_label[0])
    file_label[0] = optarg;
else if (!file_label[1])
    file_label[1] = optarg;
else
    fatal ("too many file label options");
break;

case 'n':
    specify_style (OUTPUT_RCS);
break;

case 'N':
    new_file = true;
break;

case 'p':
    show_c_function = true;
    add_regexp (&function_regexp_list, "^[[:alpha:]]$_");
break;

case 'P':
    unidirectional_new_file = true;
break;

case 'q':
    brief = true;
break;

case 'r':
    recursive = true;
break;

case 's':

```

```

report_identical_files = true;
break;

case 'S':
    specify_value (&starting_file, optarg, "-S");
    break;

case 't':
    expand_tabs = true;
    break;

case 'T':
    initial_tab = true;
    break;

case 'u':
    specify_style (OUTPUT_UNIFIED);
    if (context < 3)
        context = 3;
    break;

case 'v':
    version_etc (stdout, PROGRAM_NAME, PACKAGE_NAME, Version,
        AUTHORS, (char *) NULL);
    check_stdout ();
    return EXIT_SUCCESS;

case 'w':
    ignore_white_space = IGNORE_ALL_SPACE;
    break;

case 'x':
    add_exclude (excluded, optarg, exclude_options ());
    break;

case 'X':
    if (add_exclude_file (add_exclude, excluded, optarg,
        exclude_options (), '\n'))
        pfatal_with_name (optarg);
    break;

case 'y':
    specify_style (OUTPUT_SDIFF);
    break;

case 'W':
    numval = strtoumax (optarg, &numend, 10);
    if (! (0 < numval && numval <= SIZE_MAX) || *numend)

```



```

    try_help ("invalid width '%s'", optarg);
    if (width != numval)
    {
        if (width)
        fatal ("conflicting width options");
        width = numval;
    }
    break;

case BINARY_OPTION:
#if O_BINARY
    binary = true;
    if (! isatty (STDOUT_FILENO))
        set_binary_mode (STDOUT_FILENO, O_BINARY);
#endif
    break;

case FROM_FILE_OPTION:
    specify_value (&from_file, optarg, "--from-file");
    break;

case HELP_OPTION:
    usage ();
    check_stdout ();
    return EXIT_SUCCESS;

case HORIZON_LINES_OPTION:
    numval = strtoumax (optarg, &numend, 10);
    if (*numend)
        try_help ("invalid horizon length '%s'", optarg);
    horizon_lines = MAX (horizon_lines, MIN (numval, LIN_MAX));
    break;

case IGNORE_FILE_NAME_CASE_OPTION:
    ignore_file_name_case = true;
    break;

case INHIBIT_HUNK_MERGE_OPTION:
    /* This option is obsolete, but accept it for backward
       compatibility. */
    break;

case LEFT_COLUMN_OPTION:
    left_column = true;
    break;

case LINE_FORMAT_OPTION:
    specify_style (OUTPUT_IFDEF);

```

```

for (i = 0; i < sizeof line_format / sizeof line_format[0]; i++)
    specify_value (&line_format[i], optarg, "--line-format");
break;

case NO_DEREFERENCE_OPTION:
    no_dereference_symlinks = true;
    break;

case NO_IGNORE_FILE_NAME_CASE_OPTION:
    ignore_file_name_case = false;
    break;

case NORMAL_OPTION:
    specify_style (OUTPUT_NORMAL);
    break;

case SDIFF_MERGE_ASSIST_OPTION:
    specify_style (OUTPUT_SDIFF);
    sdiff_merge_assist = true;
    break;

case STRIP_TRAILING_CR_OPTION:
    strip_trailing_cr = true;
    break;

case SUPPRESS_BLANK_EMPTY_OPTION:
    suppress_blank_empty = true;
    break;

case SUPPRESS_COMMON_LINES_OPTION:
    suppress_common_lines = true;
    break;

case TABSIZE_OPTION:
    numval = strtoumax (optarg, &numend, 10);
    if (! (0 < numval && numval <= SIZE_MAX) || *numend)
        try_help ("invalid tabsize '%s'", optarg);
    if (tabsize != numval)
    {
        if (tabsize)
            fatal ("conflicting tabsize options");
        tabsize = numval;
    }
    break;

case TO_FILE_OPTION:
    specify_value (&to_file, optarg, "--to-file");
    break;

```

```

case UNCHANGED_LINE_FORMAT_OPTION:
case OLD_LINE_FORMAT_OPTION:
case NEW_LINE_FORMAT_OPTION:
    specify_style (OUTPUT_IFDEF);
    c -= UNCHANGED_LINE_FORMAT_OPTION;
    specify_value (&line_format[c], optarg, line_format_option[c]);
    break;

case UNCHANGED_GROUP_FORMAT_OPTION:
case OLD_GROUP_FORMAT_OPTION:
case NEW_GROUP_FORMAT_OPTION:
case CHANGED_GROUP_FORMAT_OPTION:
    specify_style (OUTPUT_IFDEF);
    c -= UNCHANGED_GROUP_FORMAT_OPTION;
    specify_value (&group_format[c], optarg, group_format_option[c]);
    break;

default:
    try_help (NULL, NULL);
}
    prev = c;
}

if (output_style == OUTPUT_UNSPECIFIED)
{
    if (show_c_function)
    {
        specify_style (OUTPUT_CONTEXT);
        if (ocontext < 0)
            context = 3;
    }
    else
        specify_style (OUTPUT_NORMAL);
}

if (output_style != OUTPUT_CONTEXT || hard_locale (LC_TIME))
{
    #if (defined STAT_TIMESPEC || defined STAT_TIMESPEC_NS \
        || defined HAVE_STRUCT_STAT_ST_SPARE1)
        time_format = "%Y-%m-%d %H:%M:%S.%N %z";
    #else
        time_format = "%Y-%m-%d %H:%M:%S %z";
    #endif
}
else
{
    /* See POSIX 1003.1-2001 for this format. */

```

```

    time_format = "%a %b %e %T %Y";
}

if (0 <= ocontext
    && (output_style == OUTPUT_CONTEXT
    || output_style == OUTPUT_UNIFIED)
    && (context < ocontext
    || (ocontext < context && ! explicit_context)))
    context = ocontext;

if (! tabsize)
    tabsize = 8;
if (! width)
    width = 130;

{
    /* Maximize first the half line width, and then the gutter width,
       according to the following constraints:

1. Two half lines plus a gutter must fit in a line.
2. If the half line width is nonzero:
    a. The gutter width is at least GUTTER_WIDTH_MINIMUM.
    b. If tabs are not expanded to spaces,
a half line plus a gutter is an integral number of tabs,
so that tabs in the right column line up. */

    intmax_t t = expand_tabs ? 1 : tabsize;
    intmax_t w = width;
    intmax_t off = (w + t + GUTTER_WIDTH_MINIMUM) / (2 * t) * t;
    sdiff_half_width = MAX (0, MIN (off - GUTTER_WIDTH_MINIMUM, w - off)),
    sdiff_column2_offset = sdiff_half_width ? off : w;
}

/* Make the horizon at least as large as the context, so that
   shift_boundaries has more freedom to shift the first and last hunks. */
if (horizon_lines < context)
    horizon_lines = context;

summarize_regexp_list (&function_regexp_list);
summarize_regexp_list (&ignore_regexp_list);

if (output_style == OUTPUT_IFDEF)
{
    for (i = 0; i < sizeof line_format / sizeof line_format[0]; i++)
if (!line_format[i])
    line_format[i] = "%l\n";
    if (!group_format[OLD])
group_format[OLD]

```

```

= group_format[CHANGED] ? group_format[CHANGED] : "%<";
  if (!group_format[NEW])
group_format[NEW]
= group_format[CHANGED] ? group_format[CHANGED] : "%>";
  if (!group_format[UNCHANGED])
group_format[UNCHANGED] = "%=";
  if (!group_format[CHANGED])
group_format[CHANGED] = concat (group_format[OLD],
  group_format[NEW], "");
}

```

```

no_diff_means_no_output =
(output_style == OUTPUT_IFDEF ?
  (!*group_format[UNCHANGED]
  || (STREQ (group_format[UNCHANGED], "%=")
  && !*line_format[UNCHANGED]))
: (output_style != OUTPUT_SDIFF) | suppress_common_lines);

```

```

files_can_be_treated_as_binary =
(brief & binary
& ~ (ignore_blank_lines | ignore_case | strip_trailing_cr
| (ignore_regexp_list.regexprs || ignore_white_space)));

```

```

switch_string = option_list (argv + 1, optind - 1);

```

```

if (from_file)
{
  if (to_file)
fatal ("--from-file and --to-file both specified");
  else
for (; optind < argc; optind++)
{
  int status = compare_files (NULL, from_file, argv[optind]);
  if (exit_status < status)
    exit_status = status;
}
}
else
{
  if (to_file)
for (; optind < argc; optind++)
{
  int status = compare_files (NULL, argv[optind], to_file);
  if (exit_status < status)
    exit_status = status;
}
}
else
{

```

```

if (argc - optind != 2)
{
    if (argc - optind < 2)
try_help ("missing operand after '%s'", argv[argc - 1]);
    else
try_help ("extra operand '%s'", argv[optind + 2]);
}

    exit_status = compare_files (NULL, argv[optind], argv[optind + 1]);
}
}

/* Print any messages that were saved up for last. */
print_message_queue ();

check_stdout ();
exit (exit_status);
return exit_status;
}

/* Append to REGLIST the regexp PATTERN. */

static void
add_regexp (struct regexp_list *reglist, char const *pattern)
{
    size_t patlen = strlen (pattern);
    char const *m = re_compile_pattern (pattern, patlen, reglist->buf);

    if (m != 0)
        error (0, 0, "%s: %s", pattern, m);
    else
    {
        char *regexps = reglist->regexps;
        size_t len = reglist->len;
        bool multiple_regexps = reglist->multiple_regexps = regexps != 0;
        size_t newlen = reglist->len = len + 2 * multiple_regexps + patlen;
        size_t size = reglist->size;

        if (size <= newlen)
        {
            if (!size)
                size = 1;

            do size *= 2;
            while (size <= newlen);

            reglist->size = size;
            reglist->regexps = regexps = xrealloc (regexps, size);

```

```

}
  if (multiple_regexp)
  {
    regexps[len++] = '\\';
    regexps[len++] = '|';
  }
  memcpy (regexps + len, pattern, patlen + 1);
}
}

/* Ensure that REGLIST represents the disjunction of its regexps.
   This is done here, rather than earlier, to avoid O(N^2) behavior. */

static void
summarize_regexp_list (struct regexp_list *reglist)
{
  if (reglist->regexps)
  {
    /* At least one regexp was specified. Allocate a fastmap for it. */
    reglist->buf->fastmap = xmalloc (1 << CHAR_BIT);
    if (reglist->multiple_regexp)
    {
      /* Compile the disjunction of the regexps.
         (If just one regexp was specified, it is already compiled.) */
      char const *m = re_compile_pattern (reglist->regexps, reglist->len,
        reglist->buf);
      if (m)
        error (EXIT_TROUBLE, 0, "%s: %s", reglist->regexps, m);
    }
  }
}

static void
try_help (char const *reason_msgid, char const *operand)
{
  if (reason_msgid)
    error (0, 0, _(reason_msgid), operand);
  error (EXIT_TROUBLE, 0, _("Try '%s --help' for more information."),
    program_name);
  abort ();
}

static void
check_stdout (void)
{
  if (ferror (stdout))
    fatal ("write failed");
  else if (fclose (stdout) != 0)

```

```

    pfatal_with_name (_("standard output"));
}

static char const * const option_help_msgid[] = {
    N_(" --normal          output a normal diff (the default)"),
    N_(" -q, --brief       report only when files differ"),
    N_(" -s, --report-identical-files report when two files are the same"),
    N_(" -c, -C NUM, --context[=NUM] output NUM (default 3) lines of copied context"),
    N_(" -u, -U NUM, --unified[=NUM] output NUM (default 3) lines of unified context"),
    N_(" -e, --ed          output an ed script"),
    N_(" -n, --rcs         output an RCS format diff"),
    N_(" -y, --side-by-side output in two columns"),
    N_(" -W, --width=NUM    output at most NUM (default 130) print columns"),
    N_(" --left-column      output only the left column of common lines"),
    N_(" --suppress-common-lines do not output common lines"),
    "",
    N_(" -p, --show-c-function show which C function each change is in"),
    N_(" -F, --show-function-line=RE show the most recent line matching RE"),
    N_(" --label LABEL      use LABEL instead of file name\n"
    "                      (can be repeated)"),
    "",
    N_(" -t, --expand-tabs   expand tabs to spaces in output"),
    N_(" -T, --initial-tab   make tabs line up by prepending a tab"),
    N_(" --tabsize=NUM       tab stops every NUM (default 8) print columns"),
    N_(" --suppress-blank-empty suppress space or tab before empty output lines"),
    N_(" -l, --paginate     pass output through 'pr' to paginate it"),
    "",
    N_(" -r, --recursive     recursively compare any subdirectories found"),
    N_(" --no-dereference    don't follow symbolic links"),
    N_(" -N, --new-file       treat absent files as empty"),
    N_(" --unidirectional-new-file treat absent first files as empty"),
    N_(" --ignore-file-name-case ignore case when comparing file names"),
    N_(" --no-ignore-file-name-case consider case when comparing file names"),
    N_(" -x, --exclude=PAT   exclude files that match PAT"),
    N_(" -X, --exclude-from=FILE exclude files that match any pattern in FILE"),
    N_(" -S, --starting-file=FILE start with FILE when comparing directories"),
    N_(" --from-file=FILE1   compare FILE1 to all operands;\n"
    "                      FILE1 can be a directory"),
    N_(" --to-file=FILE2     compare all operands to FILE2;\n"
    "                      FILE2 can be a directory"),
    "",
    N_(" -i, --ignore-case    ignore case differences in file contents"),
    N_(" -E, --ignore-tab-expansion ignore changes due to tab expansion"),
    N_(" -Z, --ignore-trailing-space ignore white space at line end"),
    N_(" -b, --ignore-space-change ignore changes in the amount of white space"),
    N_(" -w, --ignore-all-space ignore all white space"),
    N_(" -B, --ignore-blank-lines ignore changes where lines are all blank"),
    N_(" -I, --ignore-matching-lines=RE ignore changes where all lines match RE"),

```



```

"",
N_(" -a, --text          treat all files as text"),
N_(" --strip-trailing-cr  strip trailing carriage return on input"),
#if O_BINARY
N_(" --binary          read and write data in binary mode"),
#endif
"",
N_(" -D, --ifdef=NAME      output merged file with '#ifdef NAME' diffs"),
N_(" --GTYPE-group-format=GFMT  format GTYPE input groups with GFMT"),
N_(" --line-format=LFMT      format all input lines with LFMT"),
N_(" --LTYPE-line-format=LFMT  format LTYPE input lines with LFMT"),
N_(" These format options provide fine-grained control over the output\n"
  "  of diff, generalizing -D/--ifdef."),
N_(" LTYPE is 'old', 'new', or 'unchanged'.  GTYPE is LTYPE or 'changed'."),
N_(" GFMT (only) may contain:\n\
%< lines from FILE1\n\
%> lines from FILE2\n\
%= lines common to FILE1 and FILE2\n\
%[-][[WIDTH]][.[PREC]]{doxX}LETTER  printf-style spec for LETTER\n\
LETTERS are as follows for new group, lower case for old group:\n\
  F first line number\n\
  L last line number\n\
  N number of lines = L-F+1\n\
  E F-1\n\
  M L+1\n\
%(A=B?T:E) if A equals B then T else E"),
N_(" LFMT (only) may contain:\n\
%L contents of line\n\
%l contents of line, excluding any trailing newline\n\
%[-][[WIDTH]][.[PREC]]{doxX}n  printf-style spec for input line number"),
N_(" Both GFMT and LFMT may contain:\n\
%% %\n\
%c'C' the single character C\n\
%c\\'OOO' the character with octal code OOO\n\
C  the character C (other characters represent themselves)"),
"",
N_(" -d, --minimal        try hard to find a smaller set of changes"),
N_(" --horizon-lines=NUM  keep NUM lines of the common prefix and suffix"),
N_(" --speed-large-files  assume large files and many scattered small changes"),
"",
N_(" --help              display this help and exit"),
N_(" -v, --version        output version information and exit"),
"",
N_("FILES are 'FILE1 FILE2' or 'DIR1 DIR2' or 'DIR FILE...' or 'FILE... DIR.'"),
N_("If --from-file or --to-file is given, there are no restrictions on FILE(s)."),
N_("If a FILE is '-', read standard input."),
N_("Exit status is 0 if inputs are the same, 1 if different, 2 if trouble."),
0

```

```

};

static void
usage (void)
{
char const * const *p;

printf (_("Usage: %s [OPTION]... FILES\n"), program_name);
printf ("%s\n\n", _("Compare FILES line by line."));

fputs (_("\n
Mandatory arguments to long options are mandatory for short options too.\n\n"), stdout);

for (p = option_help_msgid; *p; p++)
{
if (!**p)
putchar ('\n');
else
{
char const *msg = _(*p);
char const *nl;
while ((nl = strchr (msg, '\n')))
{
int msglen = nl + 1 - msg;
printf (" %.*s", msglen, msg);
msg = nl + 1;
}

printf (" %s\n" + 2 * (*msg != ' ' && *msg != '-'), msg);
}
}
emit_bug_reporting_address ();
}

/* Set VAR to VALUE, reporting an OPTION error if this is a
conflict. */
static void
specify_value (char const **var, char const *value, char const *option)
{
if (*var && !STREQ (*var, value))
{
error (0, 0, _("conflicting %s option value '%s'"), option, value);
try_help (NULL, NULL);
}
*var = value;
}

```

```

/* Set the output style to STYLE, diagnosing conflicts. */
static void
specify_style (enum output_style style)
{
    if (output_style != style)
    {
        if (output_style != OUTPUT_UNSPECIFIED)
            try_help ("conflicting output style options", NULL);
        output_style = style;
    }
}

/* Set the last-modified time of *ST to be the current time. */

static void
set_mtime_to_now (struct stat *st)
{
#ifdef STAT_TIMESPEC
    gettimeofday (&STAT_TIMESPEC (st, st_mtim));
#else
    struct timespec t;
    gettimeofday (&t);
    st->st_mtime = t.tv_sec;
# if defined STAT_TIMESPEC_NS
    STAT_TIMESPEC_NS (st, st_mtim) = t.tv_nsec;
# elif defined HAVE_STRUCT_STAT_ST_SPARE1
    st->st_spare1 = t.tv_nsec / 1000;
# endif
#endif
}

/* Compare two files (or dirs) with parent comparison PARENT
and names NAME0 and NAME1.
(If PARENT is null, then the first name is just NAME0, etc.)
This is self-contained; it opens the files and closes them.

Value is EXIT_SUCCESS if files are the same, EXIT_FAILURE if
different, EXIT_TROUBLE if there is a problem opening them. */

static int
compare_files (struct comparison const *parent,
               char const *name0,
               char const *name1)
{
    struct comparison cmp;
#define DIR_P(f) (S_ISDIR (cmp.file[f].stat.st_mode) != 0)
    register int f;
    int status = EXIT_SUCCESS;

```

```

bool same_files;
char *free0;
char *free1;

/* If this is directory comparison, perhaps we have a file
   that exists only in one of the directories.
   If so, just print a message to that effect. */

if (!(name0 && name1)
    || (unidirectional_new_file && name1)
    || new_file))
{
    char const *name = name0 ? name0 : name1;
    char const *dir = parent->file[!name0].name;

    /* See POSIX 1003.1-2001 for this format. */
    message ("Only in %s: %s\n", dir, name);

    /* Return EXIT_FAILURE so that diff_dirs will return
       EXIT_FAILURE ("some files differ"). */
    return EXIT_FAILURE;
}

memset (cmp.file, 0, sizeof cmp.file);
cmp.parent = parent;

/* cmp.file[f].desc markers */
#define NONEXISTENT (-1) /* nonexistent file */
#define UNOPENED (-2) /* unopened file (e.g. directory) */
#define ERRNO_ENCODE(errno) (-3 - (errno)) /* encoded errno value */

#define ERRNO_DECODE(desc) (-3 - (desc)) /* inverse of ERRNO_ENCODE */

cmp.file[0].desc = name0 ? UNOPENED : NONEXISTENT;
cmp.file[1].desc = name1 ? UNOPENED : NONEXISTENT;

/* Now record the full name of each file, including nonexistent ones. */

if (!name0)
    name0 = name1;
if (!name1)
    name1 = name0;

if (!parent)
{
    free0 = NULL;
    free1 = NULL;
    cmp.file[0].name = name0;

```

```

    cmp.file[1].name = name1;
}
else
{
    cmp.file[0].name = free0
= file_name_concat (parent->file[0].name, name0, NULL);
    cmp.file[1].name = free1
= file_name_concat (parent->file[1].name, name1, NULL);
}

/* Stat the files. */

for (f = 0; f < 2; f++)
{
    if (cmp.file[f].desc != NONEXISTENT)
{
    if (f && file_name_cmp (cmp.file[f].name, cmp.file[0].name) == 0)
    {
        cmp.file[f].desc = cmp.file[0].desc;
        cmp.file[f].stat = cmp.file[0].stat;
    }
    else if (STREQ (cmp.file[f].name, "-"))
    {
        cmp.file[f].desc = STDIN_FILENO;
        if (binary && ! isatty (STDIN_FILENO))
set_binary_mode (STDIN_FILENO, O_BINARY);
        if (fstat (STDIN_FILENO, &cmp.file[f].stat) != 0)
cmp.file[f].desc = ERRNO_ENCODE (errno);
        else
        {
            if (S_ISREG (cmp.file[f].stat.st_mode))
            {
                off_t pos = lseek (STDIN_FILENO, 0, SEEK_CUR);
                if (pos < 0)
cmp.file[f].desc = ERRNO_ENCODE (errno);
                else
cmp.file[f].stat.st_size =
                MAX (0, cmp.file[f].stat.st_size - pos);
            }

            /* POSIX 1003.1-2001 requires current time for
            stdin. */
            set_mtime_to_now (&cmp.file[f].stat);
        }
    }
    else if ((no_dereference_symlinks
? lstat (cmp.file[f].name, &cmp.file[f].stat)
: stat (cmp.file[f].name, &cmp.file[f].stat))

```

```

!= 0)
cmp.file[f].desc = ERRNO_ENCODE (errno);
}
}

/* Mark files as nonexistent as needed for -N and -P, if they are
inaccessible empty regular files (the kind of files that 'patch'
creates to indicate nonexistent backups), or if they are
top-level files that do not exist but their counterparts do
exist. */
for (f = 0; f < 2; f++)
if ((new_file || (f == 0 && unidirectional_new_file))
&& (cmp.file[f].desc == UNOPENED
? (S_ISREG (cmp.file[f].stat.st_mode)
&& !(cmp.file[f].stat.st_mode & (S_IRWXU | S_IRWXG | S_IRWXO))
&& cmp.file[f].stat.st_size == 0)
: ((cmp.file[f].desc == ERRNO_ENCODE (ENOENT)
|| cmp.file[f].desc == ERRNO_ENCODE (EBADF))
&& ! parent
&& (cmp.file[1 - f].desc == UNOPENED
|| cmp.file[1 - f].desc == STDIN_FILENO))))
cmp.file[f].desc = NONEXISTENT;

for (f = 0; f < 2; f++)
if (cmp.file[f].desc == NONEXISTENT)
{
memset (&cmp.file[f].stat, 0, sizeof cmp.file[f].stat);
cmp.file[f].stat.st_mode = cmp.file[1 - f].stat.st_mode;
}

for (f = 0; f < 2; f++)
{
int e = ERRNO_DECODE (cmp.file[f].desc);
if (0 <= e)
{
errno = e;
perror_with_name (cmp.file[f].name);
status = EXIT_TROUBLE;
}
}

if (status == EXIT_SUCCESS && ! parent && DIR_P (0) != DIR_P (1))
{
/* If one is a directory, and it was specified in the command line,
use the file in that dir with the other file's basename. */

int fnm_arg = DIR_P (0);
int dir_arg = 1 - fnm_arg;

```

```

    char const *fnm = cmp.file[fnm_arg].name;
    char const *dir = cmp.file[dir_arg].name;
    char const *filename = cmp.file[dir_arg].name = free0
= find_dir_file_pathname (dir, last_component (fnm));

    if (STREQ (fnm, "-"))
fatal ("cannot compare '-' to a directory");

    if ((no_dereference_symlinks
? lstat (filename, &cmp.file[dir_arg].stat)
: stat (filename, &cmp.file[dir_arg].stat)
!= 0)
{
    perror_with_name (filename);
    status = EXIT_TROUBLE;
}
}

if (status != EXIT_SUCCESS)
{
    /* One of the files should exist but does not. */
}
else if (cmp.file[0].desc == NONEXISTENT
&& cmp.file[1].desc == NONEXISTENT)
{
    /* Neither file "exists", so there's nothing to compare. */
}
else if ((same_files
= (cmp.file[0].desc != NONEXISTENT
&& cmp.file[1].desc != NONEXISTENT
&& 0 < same_file (&cmp.file[0].stat, &cmp.file[1].stat)
&& same_file_attributes (&cmp.file[0].stat,
&cmp.file[1].stat)))
&& no_diff_means_no_output)
{
    /* The two named files are actually the same physical file.
We know they are identical without actually reading them. */
}
else if (DIR_P (0) & DIR_P (1))
{
    if (output_style == OUTPUT_IFDEF)
fatal ("-D option not supported with directories");

    /* If both are directories, compare the files in them. */

    if (parent && !recursive)
{
        /* But don't compare dir contents one level down

```

```

    unless -r was specified.
    See POSIX 1003.1-2001 for this format. */
message ("Common subdirectories: %s and %s\n",
    cmp.file[0].name, cmp.file[1].name);
}
else
status = diff_dirs (&cmp, compare_files);
}
else if ((DIR_P (0) | DIR_P (1))
    || (parent
        && !((S_ISREG (cmp.file[0].stat.st_mode)
            || S_ISLNK (cmp.file[0].stat.st_mode)
            && (S_ISREG (cmp.file[1].stat.st_mode)
            || S_ISLNK (cmp.file[1].stat.st_mode))))))
{
    if (cmp.file[0].desc == NONEXISTENT || cmp.file[1].desc == NONEXISTENT)
{
    /* We have a subdirectory that exists only in one directory. */

    if ((DIR_P (0) | DIR_P (1))
        && recursive
        && (new_file
            || (unidirectional_new_file
                && cmp.file[0].desc == NONEXISTENT)))
        status = diff_dirs (&cmp, compare_files);
    else
    {
        char const *dir;

        /* PARENT must be non-NULL here. */
        assert (parent);
        dir = parent->file[cmp.file[0].desc == NONEXISTENT].name;

        /* See POSIX 1003.1-2001 for this format. */
        message ("Only in %s: %s\n", dir, name0);

        status = EXIT_FAILURE;
    }
}
else
{
    /* We have two files that are not to be compared. */

    /* See POSIX 1003.1-2001 for this format. */
    message5 ("File %s is a %s while file %s is a %s\n",
        file_label[0] ? file_label[0] : cmp.file[0].name,
        file_type (&cmp.file[0].stat),
        file_label[1] ? file_label[1] : cmp.file[1].name,

```



```

    file_type (&cmp.file[1].stat);

    /* This is a difference. */
    status = EXIT_FAILURE;
}
}
else if (S_ISLNK (cmp.file[0].stat.st_mode)
    || S_ISLNK (cmp.file[1].stat.st_mode))
{
    /* We get here only if we use lstat(), not stat(). */
    assert (no_dereference_symlinks);

    if (S_ISLNK (cmp.file[0].stat.st_mode)
        && S_ISLNK (cmp.file[1].stat.st_mode))
    {
        /* Compare the values of the symbolic links. */
        char *link_value[2] = { NULL, NULL };

        for (f = 0; f < 2; f++)
        {
            link_value[f] = xreadlink (cmp.file[f].name);
            if (link_value[f] == NULL)
            {
                perror_with_name (cmp.file[f].name);
                status = EXIT_TROUBLE;
                break;
            }
        }
        if (status == EXIT_SUCCESS)
        {
            if ( ! STREQ (link_value[0], link_value[1]))
            {
                message ("Symbolic links %s and %s differ\n",
                    cmp.file[0].name, cmp.file[1].name);
                /* This is a difference. */
                status = EXIT_FAILURE;
            }
        }
        for (f = 0; f < 2; f++)
            free (link_value[f]);
    }
    else
    {
        /* We have two files that are not to be compared, because
           one of them is a symbolic link and the other one is not. */

        message5 ("File %s is a %s while file %s is a %s\n",
            file_label[0] ? file_label[0] : cmp.file[0].name,

```

```

    file_type (&cmp.file[0].stat),
    file_label[1] ? file_label[1] : cmp.file[1].name,
    file_type (&cmp.file[1].stat));

/* This is a difference. */
status = EXIT_FAILURE;
}
}
else if (files_can_be_treated_as_binary
    && S_ISREG (cmp.file[0].stat.st_mode)
    && S_ISREG (cmp.file[1].stat.st_mode)
    && cmp.file[0].stat.st_size != cmp.file[1].stat.st_size)
{
    message ("Files %s and %s differ\n",
        file_label[0] ? file_label[0] : cmp.file[0].name,
        file_label[1] ? file_label[1] : cmp.file[1].name);
    status = EXIT_FAILURE;
}
else
{
    /* Both exist and neither is a directory. */

    /* Open the files and record their descriptors. */

    int oflags = O_RDONLY | (binary ? O_BINARY : 0);

    if (cmp.file[0].desc == UNOPENED)
if ((cmp.file[0].desc = open (cmp.file[0].name, oflags, 0)) < 0)
    {
        perror_with_name (cmp.file[0].name);
        status = EXIT_TROUBLE;
    }
    if (cmp.file[1].desc == UNOPENED)
    {
if (same_files)
        cmp.file[1].desc = cmp.file[0].desc;
else if ((cmp.file[1].desc = open (cmp.file[1].name, oflags, 0)) < 0)
        {
            perror_with_name (cmp.file[1].name);
            status = EXIT_TROUBLE;
        }
    }
}

/* Compare the files, if no error was found. */

if (status == EXIT_SUCCESS)
status = diff_2_files (&cmp);

```

```

/* Close the file descriptors. */

if (0 <= cmp.file[0].desc && close (cmp.file[0].desc) != 0)
{
perror_with_name (cmp.file[0].name);
status = EXIT_TROUBLE;
}
if (0 <= cmp.file[1].desc && cmp.file[0].desc != cmp.file[1].desc
&& close (cmp.file[1].desc) != 0)
{
perror_with_name (cmp.file[1].name);
status = EXIT_TROUBLE;
}
}

/* Now the comparison has been done, if no error prevented it,
and STATUS is the value this function will return. */

if (status == EXIT_SUCCESS)
{
if (report_identical_files && !DIR_P (0))
message ("Files %s and %s are identical\n",
file_label[0] ? file_label[0] : cmp.file[0].name,
file_label[1] ? file_label[1] : cmp.file[1].name);
}
else
{
/* Flush stdout so that the user sees differences immediately.
This can hurt performance, unfortunately. */
if (fflush (stdout) != 0)
pfatal_with_name (_("standard output"));
}

free (free0);
free (free1);

return status;
}

```

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1.65 gobject-introspection 1.56.1-1.el7

1.65.1 Available under license :

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1.66 pygpgme 0.3 9.el7

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1.67 ncurses 5.9 14.20130511.el7_4

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Current ncurses maintainer: Thomas Dickey <dickey@invisible-island.net>

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Files: install-sh

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This script is compatible with the BSD install script, but was written from scratch. It can only install one file at a time, a restriction shared with many OS's install programs.

On Debian systems, the complete text of the GNU General

1.68 libidn 1.28 4.e17

1.68.1 Available under license :

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Version 3, 29 June 2007

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1.72 pam 1.1.8 23.el7

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1.73 qrencode-libs 3.4.1 3.e17

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1.74 python 2.7.5-90.el7

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A. HISTORY OF THE SOFTWARE

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

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

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations (now Zope

Corporation, see <http://www.zope.com>). In 2001, the Python Software Foundation (PSF, see <http://www.python.org/psf/>) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation is a sponsoring member of the PSF.

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

Release	Derived from	Year	Owner	GPL-compatible? (1)
0.9.0 thru 1.2		1991-1995	CWI	yes
1.3 thru 1.5.2	1.2	1995-1999	CNRI	yes
1.6	1.5.2	2000	CNRI	no
2.0	1.6	2000	BeOpen.com	no
1.6.1	1.6	2001	CNRI	yes (2)
2.1	2.0+1.6.1	2001	PSF	no
2.0.1	2.0+1.6.1	2001	PSF	yes
2.1.1	2.1+2.0.1	2001	PSF	yes
2.2	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
2.2.2	2.2.1	2002	PSF	yes
2.2.3	2.2.2	2003	PSF	yes
2.3	2.2.2	2002-2003	PSF	yes
2.3.1	2.3	2002-2003	PSF	yes
2.3.2	2.3.1	2002-2003	PSF	yes
2.3.3	2.3.2	2002-2003	PSF	yes
2.3.4	2.3.3	2004	PSF	yes
2.3.5	2.3.4	2005	PSF	yes
2.4	2.3	2004	PSF	yes
2.4.1	2.4	2005	PSF	yes
2.4.2	2.4.1	2005	PSF	yes
2.4.3	2.4.2	2006	PSF	yes
2.4.4	2.4.3	2006	PSF	yes
2.5	2.4	2006	PSF	yes
2.5.1	2.5	2007	PSF	yes
2.5.2	2.5.1	2008	PSF	yes
2.5.3	2.5.2	2008	PSF	yes
2.6	2.5	2008	PSF	yes
2.6.1	2.6	2008	PSF	yes
2.6.2	2.6.1	2009	PSF	yes
2.6.3	2.6.2	2009	PSF	yes
2.6.4	2.6.3	2009	PSF	yes

2.6.5	2.6.4	2010	PSF	yes
2.7	2.6	2010	PSF	yes

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

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1.76 ustr 1.0.4 16.el7

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1.79 grep 2.20-3.el7

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```

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1.80 sqlite 3.7.17-8.e17_7.1

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/*

** CAPI3REF: Configuration Options

** KEYWORDS: {configuration option}

**

** These constants are the available integer configuration options that
** can be passed as the first argument to the [sqlite3_config()] interface.

**

** New configuration options may be added in future releases of SQLite.
** Existing configuration options might be discontinued. Applications
** should check the return code from [sqlite3_config()] to make sure that
** the call worked. The [sqlite3_config()] interface will return a
** non-zero [error code] if a discontinued or unsupported configuration option
** is invoked.

**

** <dl>

** [[SQLITE_CONFIG_SINGLETHREAD]] <dt>SQLITE_CONFIG_SINGLETHREAD</dt>

** <dd>There are no arguments to this option. ^This option sets the
** [threading mode] to Single-thread. In other words, it disables
** all mutexing and puts SQLite into a mode where it can only be used
** by a single thread. ^If SQLite is compiled with
** the [SQLITE_THREADSAFE | SQLITE_THREADSAFE=0] compile-time option then
** it is not possible to change the [threading mode] from its default
** value of Single-thread and so [sqlite3_config()] will return
** [SQLITE_ERROR] if called with the SQLITE_CONFIG_SINGLETHREAD
** configuration option.</dd>

**

** [[SQLITE_CONFIG_MULTITHREAD]] <dt>SQLITE_CONFIG_MULTITHREAD</dt>

** <dd>There are no arguments to this option. ^This option sets the
** [threading mode] to Multi-thread. In other words, it disables
** mutexing on [database connection] and [prepared statement] objects.
** The application is responsible for serializing access to
** [database connections] and [prepared statements]. But other mutexes
** are enabled so that SQLite will be safe to use in a multi-threaded
** environment as long as no two threads attempt to use the same
** [database connection] at the same time. ^If SQLite is compiled with
** the [SQLITE_THREADSAFE | SQLITE_THREADSAFE=0] compile-time option then
** it is not possible to set the Multi-thread [threading mode] and

** [sqlite3_config()] will return [SQLITE_ERROR] if called with the
 ** SQLITE_CONFIG_MULTITHREAD configuration option.</dd>
 **
 ** [[SQLITE_CONFIG_SERIALIZED]] <dt>SQLITE_CONFIG_SERIALIZED</dt>
 ** <dd>There are no arguments to this option. ^This option sets the
 ** [threading mode] to Serialized. In other words, this option enables
 ** all mutexes including the recursive
 ** mutexes on [database connection] and [prepared statement] objects.
 ** In this mode (which is the default when SQLite is compiled with
 ** [SQLITE_THREADSafe=1]) the SQLite library will itself serialize access
 ** to [database connections] and [prepared statements] so that the
 ** application is free to use the same [database connection] or the
 ** same [prepared statement] in different threads at the same time.
 ** ^If SQLite is compiled with
 ** the [SQLITE_THREADSafe | SQLITE_THREADSafe=0] compile-time option then
 ** it is not possible to set the Serialized [threading mode] and
 ** [sqlite3_config()] will return [SQLITE_ERROR] if called with the
 ** SQLITE_CONFIG_SERIALIZED configuration option.</dd>
 **
 ** [[SQLITE_CONFIG_MALLOC]] <dt>SQLITE_CONFIG_MALLOC</dt>
 ** <dd> ^This option takes a single argument which is a pointer to an
 ** instance of the [sqlite3_mem_methods] structure. The argument specifies
 ** alternative low-level memory allocation routines to be used in place of
 ** the memory allocation routines built into SQLite.)^ ^SQLite makes
 ** its own private copy of the content of the [sqlite3_mem_methods] structure
 ** before the [sqlite3_config()] call returns.</dd>
 **
 ** [[SQLITE_CONFIG_GETMALLOC]] <dt>SQLITE_CONFIG_GETMALLOC</dt>
 ** <dd> ^This option takes a single argument which is a pointer to an
 ** instance of the [sqlite3_mem_methods] structure. The [sqlite3_mem_methods]
 ** structure is filled with the currently defined memory allocation routines.)^
 ** This option can be used to overload the default memory allocation
 ** routines with a wrapper that simulations memory allocation failure or
 ** tracks memory usage, for example. </dd>
 **
 ** [[SQLITE_CONFIG_MEMSTATUS]] <dt>SQLITE_CONFIG_MEMSTATUS</dt>
 ** <dd> ^This option takes single argument of type int, interpreted as a
 ** boolean, which enables or disables the collection of memory allocation
 ** statistics. ^When memory allocation statistics are disabled, the
 ** following SQLite interfaces become non-operational:
 **
 ** [sqlite3_memory_used()]
 ** [sqlite3_memory_highwater()]
 ** [sqlite3_soft_heap_limit64()]
 ** [sqlite3_status()]
 ** ^
 ** ^Memory allocation statistics are enabled by default unless SQLite is
 ** compiled with [SQLITE_DEFAULT_MEMSTATUS]=0 in which case memory

** allocation statistics are disabled by default.

** </dd>

**

** [[SQLITE_CONFIG_SCRATCH]] <dt>SQLITE_CONFIG_SCRATCH</dt>

** <dd> ^This option specifies a static memory buffer that SQLite can use for scratch memory. There are three arguments: A pointer an 8-byte aligned memory buffer from which the scratch allocations will be drawn, the size of each scratch allocation (sz), and the maximum number of scratch allocations (N). The sz argument must be a multiple of 16. The first argument must be a pointer to an 8-byte aligned buffer of at least sz*N bytes of memory. ^SQLite will use no more than two scratch buffers per thread. So N should be set to twice the expected maximum number of threads. ^SQLite will never require a scratch buffer that is more than 6 times the database page size. ^If SQLite needs needs additional scratch memory beyond what is provided by this configuration option, then [sqlite3_malloc()] will be used to obtain the memory needed.</dd>

**

** [[SQLITE_CONFIG_PAGECACHE]] <dt>SQLITE_CONFIG_PAGECACHE</dt>

** <dd> ^This option specifies a static memory buffer that SQLite can use for the database page cache with the default page cache implementation. This configuration should not be used if an application-define page cache implementation is loaded using the SQLITE_CONFIG_PCACHE2 option. There are three arguments to this option: A pointer to 8-byte aligned memory, the size of each page buffer (sz), and the number of pages (N). The sz argument should be the size of the largest database page (a power of two between 512 and 32768) plus a little extra for each page header. ^The page header size is 20 to 40 bytes depending on the host architecture. ^It is harmless, apart from the wasted memory, to make sz a little too large. The first argument should point to an allocation of at least sz*N bytes of memory. ^SQLite will use the memory provided by the first argument to satisfy its memory needs for the first N pages that it adds to cache. ^If additional page cache memory is needed beyond what is provided by this option, then SQLite goes to [sqlite3_malloc()] for the additional storage space. The pointer in the first argument must be aligned to an 8-byte boundary or subsequent behavior of SQLite will be undefined.</dd>

**

** [[SQLITE_CONFIG_HEAP]] <dt>SQLITE_CONFIG_HEAP</dt>

** <dd> ^This option specifies a static memory buffer that SQLite will use for all of its dynamic memory allocation needs beyond those provided for by [SQLITE_CONFIG_SCRATCH] and [SQLITE_CONFIG_PAGECACHE]. There are three arguments: An 8-byte aligned pointer to the memory, the number of bytes in the memory buffer, and the minimum allocation size. ^If the first pointer (the memory pointer) is NULL, then SQLite reverts to using its default memory allocator (the system malloc() implementation),

** undoing any prior invocation of [SQLITE_CONFIG_MALLOC]. ^If the
 ** memory pointer is not NULL and either [SQLITE_ENABLE_MEMSYS3] or
 ** [SQLITE_ENABLE_MEMSYS5] are defined, then the alternative memory
 ** allocator is engaged to handle all of SQLite's memory allocation needs.
 ** The first pointer (the memory pointer) must be aligned to an 8-byte
 ** boundary or subsequent behavior of SQLite will be undefined.
 ** The minimum allocation size is capped at 2**12. Reasonable values
 ** for the minimum allocation size are 2**5 through 2**8.</dd>
 **
 ** [[SQLITE_CONFIG_MUTEX]] <dt>SQLITE_CONFIG_MUTEX</dt>
 ** <dd> ^This option takes a single argument which is a pointer to an
 ** instance of the [sqlite3_mutex_methods] structure. The argument specifies
 ** alternative low-level mutex routines to be used in place
 ** the mutex routines built into SQLite.)^ ^SQLite makes a copy of the
 ** content of the [sqlite3_mutex_methods] structure before the call to
 ** [sqlite3_config()] returns. ^If SQLite is compiled with
 ** the [SQLITE_THREADSAFE | SQLITE_THREADSAFE=0] compile-time option then
 ** the entire mutexing subsystem is omitted from the build and hence calls to
 ** [sqlite3_config()] with the SQLITE_CONFIG_MUTEX configuration option will
 ** return [SQLITE_ERROR].</dd>
 **
 ** [[SQLITE_CONFIG_GETMUTEX]] <dt>SQLITE_CONFIG_GETMUTEX</dt>
 ** <dd> ^This option takes a single argument which is a pointer to an
 ** instance of the [sqlite3_mutex_methods] structure. The
 ** [sqlite3_mutex_methods]
 ** structure is filled with the currently defined mutex routines.)^
 ** This option can be used to overload the default mutex allocation
 ** routines with a wrapper used to track mutex usage for performance
 ** profiling or testing, for example. ^If SQLite is compiled with
 ** the [SQLITE_THREADSAFE | SQLITE_THREADSAFE=0] compile-time option then
 ** the entire mutexing subsystem is omitted from the build and hence calls to
 ** [sqlite3_config()] with the SQLITE_CONFIG_GETMUTEX configuration option will
 ** return [SQLITE_ERROR].</dd>
 **
 ** [[SQLITE_CONFIG_LOOKASIDE]] <dt>SQLITE_CONFIG_LOOKASIDE</dt>
 ** <dd> ^This option takes two arguments that determine the default
 ** memory allocation for the lookaside memory allocator on each
 ** [database connection]. The first argument is the
 ** size of each lookaside buffer slot and the second is the number of
 ** slots allocated to each database connection.)^ ^This option sets the
 ** <i>default</i> lookaside size. The [SQLITE_DBCONFIG_LOOKASIDE]
 ** verb to [sqlite3_db_config()] can be used to change the lookaside
 ** configuration on individual connections.)^ </dd>
 **
 ** [[SQLITE_CONFIG_PCACHE2]] <dt>SQLITE_CONFIG_PCACHE2</dt>
 ** <dd> ^This option takes a single argument which is a pointer to
 ** an [sqlite3_pcache_methods2] object. This object specifies the interface
 ** to a custom page cache implementation.)^ ^SQLite makes a copy of the

** object and uses it for page cache memory allocations.</dd>

**

** [[SQLITE_CONFIG_GETPCACHE2]] <dt>SQLITE_CONFIG_GETPCACHE2</dt>

** <dd> ^(This option takes a single argument which is a pointer to an

** [sqlite3_pcache_methods2] object. SQLite copies of the current

** page cache implementation into that object.)^ </dd>

**

** [[SQLITE_CONFIG_LOG]] <dt>SQLITE_CONFIG_LOG</dt>

** <dd> The SQLITE_CONFIG_LOG option is used to configure the SQLite

** global [error log].

** (^The SQLITE_CONFIG_LOG option takes two arguments: a pointer to a

** function with a call signature of void*(*)(void*,int,const char*),

** and a pointer to void. ^If the function pointer is not NULL, it is

** invoked by [sqlite3_log()] to process each logging event. ^If the

** function pointer is NULL, the [sqlite3_log()] interface becomes a no-op.

** ^The void pointer that is the second argument to SQLITE_CONFIG_LOG is

** passed through as the first parameter to the application-defined logger

** function whenever that function is invoked. ^The second parameter to

** the logger function is a copy of the first parameter to the corresponding

** [sqlite3_log()] call and is intended to be a [result code] or an

** [extended result code]. ^The third parameter passed to the logger is

** log message after formatting via [sqlite3_snprintf()].

** The SQLite logging interface is not reentrant; the logger function

** supplied by the application must not invoke any SQLite interface.

** In a multi-threaded application, the application-defined logger

** function must be threadsafe. </dd>

**

** [[SQLITE_CONFIG_URI]] <dt>SQLITE_CONFIG_URI

** <dd> This option takes a single argument of type int. If non-zero, then

** URI handling is globally enabled. If the parameter is zero, then URI handling

** is globally disabled. If URI handling is globally enabled, all filenames

** passed to [sqlite3_open()], [sqlite3_open_v2()], [sqlite3_open16()] or

** specified as part of [ATTACH] commands are interpreted as URIs, regardless

** of whether or not the [SQLITE_OPEN_URI] flag is set when the database

** connection is opened. If it is globally disabled, filenames are

** only interpreted as URIs if the SQLITE_OPEN_URI flag is set when the

** database connection is opened. By default, URI handling is globally

** disabled. The default value may be changed by compiling with the

** [SQLITE_USE_URI] symbol defined.

**

** [[SQLITE_CONFIG_COVERING_INDEX_SCAN]] <dt>SQLITE_CONFIG_COVERING_INDEX_SCAN

** <dd> This option takes a single integer argument which is interpreted as

** a boolean in order to enable or disable the use of covering indices for

** full table scans in the query optimizer. The default setting is determined

** by the [SQLITE_ALLOW_COVERING_INDEX_SCAN] compile-time option, or is "on"

** if that compile-time option is omitted.

** The ability to disable the use of covering indices for full table scans

** is because some incorrectly coded legacy applications might malfunction


```

** malfunction when the optimization is enabled. Providing the ability to
** disable the optimization allows the older, buggy application code to work
** without change even with newer versions of SQLite.
**
** [[SQLITE_CONFIG_PCACHE]] [[SQLITE_CONFIG_GETPCACHE]]
** <dt>SQLITE_CONFIG_PCACHE and SQLITE_CONFIG_GETPCACHE
** <dd> These options are obsolete and should not be used by new code.
** They are retained for backwards compatibility but are now no-ops.
** </dd>
**
** [[SQLITE_CONFIG_SQLLOG]]
** <dt>SQLITE_CONFIG_SQLLOG
** <dd>This option is only available if sqlite is compiled with the
** [SQLITE_ENABLE_SQLLOG] pre-processor macro defined. The first argument should
** be a pointer to a function of type void(*)(void*,sqlite3*,const char*, int).
** The second should be of type (void*). The callback is invoked by the library
** in three separate circumstances, identified by the value passed as the
** fourth parameter. If the fourth parameter is 0, then the database connection
** passed as the second argument has just been opened. The third argument
** points to a buffer containing the name of the main database file. If the
** fourth parameter is 1, then the SQL statement that the third parameter
** points to has just been executed. Or, if the fourth parameter is 2, then
** the connection being passed as the second parameter is being closed. The
** third parameter is passed NULL in this case. An example of using this
** configuration option can be seen in the "test_sqllog.c" source file in
** the canonical SQLite source tree.</dd>
**
** [[SQLITE_CONFIG_MMAP_SIZE]]
** <dt>SQLITE_CONFIG_MMAP_SIZE
** <dd>SQLITE_CONFIG_MMAP_SIZE takes two 64-bit integer (sqlite3_int64) values
** that are the default mmap size limit (the default setting for
** [PRAGMA mmap_size]) and the maximum allowed mmap size limit.
** The default setting can be overridden by each database connection using
** either the [PRAGMA mmap_size] command, or by using the
** [SQLITE_FCNTL_MMAP_SIZE] file control. The maximum allowed mmap size
** cannot be changed at run-time. Nor may the maximum allowed mmap size
** exceed the compile-time maximum mmap size set by the
** [SQLITE_MAX_MMAP_SIZE] compile-time option.
** If either argument to this option is negative, then that argument is
** changed to its compile-time default.
** </dd>
**
*/

```

Found in path(s):

```

* /opt/cola/permits/1146568937_1616563472.04/0/sqlite-3.7.17-8.el7_7.1-1.src.rpm-cosi-expand-archive-
lltKQC5N/sqlite-src-3071700.zip-cosi-expand-archive-cheW8kUH/sqlite-src-3071700/src/sqlite.h.in

```

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application is free to use the same [database connection](#sqlite3) or the

Found in path(s):

* /opt/cola/permits/1146568937_1616563472.04/0/sqlite-3.7.17-8.el7_7.1-1.src.rpm-cosi-expand-archive-lltKQC5N/sqlite-doc-3071700.zip-cosi-expand-archive-r9EckcaZ/sqlite-doc-3071700/capi3ref.html

No license file was found, but licenses were detected in source scan.

[public domain](copyright.html) and is thus free for

Found in path(s):

* /opt/cola/permits/1146568937_1616563472.04/0/sqlite-3.7.17-8.el7_7.1-1.src.rpm-cosi-expand-archive-lltKQC5N/sqlite-doc-3071700.zip-cosi-expand-archive-r9EckcaZ/sqlite-doc-3071700/about.html

No license file was found, but licenses were detected in source scan.

[public domain](copyright.html). No claim of ownership is made

Found in path(s):

* /opt/cola/permits/1146568937_1616563472.04/0/sqlite-3.7.17-8.el7_7.1-1.src.rpm-cosi-expand-archive-lltKQC5N/sqlite-doc-3071700.zip-cosi-expand-archive-r9EckcaZ/sqlite-doc-3071700/faq.html

No license file was found, but licenses were detected in source scan.

procset Adobe_CoolType_Utility_MAKEOCF 1.23 0

procset Adobe_CoolType_Utility_T42 1.0 0

procset Adobe_AGM_Image 1.0 0

Found in path(s):

* %%BeginResource

No license file was found, but licenses were detected in source scan.

Suppose the demo_data.boundary field holds some proprietary data description

Found in path(s):

* /opt/cola/permits/1146568937_1616563472.04/0/sqlite-3.7.17-8.el7_7.1-1.src.rpm-cosi-expand-archive-lltKQC5N/sqlite-doc-3071700.zip-cosi-expand-archive-r9EckcaZ/sqlite-doc-3071700/rtree.html

No license file was found, but licenses were detected in source scan.

License: Public Domain

Found in path(s):

* /opt/cola/permits/1146568937_1616563472.04/0/sqlite-3.7.17-8.el7_7.1-1.src.rpm-cosi-expand-archive-lltKQC5N/sqlite.spec

No license file was found, but licenses were detected in source scan.

[public domain](copyright.html) and so many groups use SQLite

Found in path(s):

* /opt/cola/permits/1146568937_1616563472.04/0/sqlite-3.7.17-8.el7_7.1-1.src.rpm-cosi-expand-archive-lltKQC5N/sqlite-doc-3071700.zip-cosi-expand-archive-r9EckcaZ/sqlite-doc-3071700/famous.html

No license file was found, but licenses were detected in source scan.

```
# 2006 September 14
#
# The author disclaims copyright to this source code. In place of
# a legal notice, here is a blessing:
#
# May you do good and not evil.
# May you find forgiveness for yourself and forgive others.
# May you share freely, never taking more than you give.
#
#*****
# This file implements regression tests for SQLite library. The
# focus of this script is testing the FTS1 module.
#
# $Id: fts1c.test,v 1.11 2006/10/04 17:35:28 drh Exp $
#

set testdir [file dirname $argv0]
source $testdir/tester.tcl

# If SQLITE_ENABLE_FTS1 is defined, omit this file.
ifcapable !fts1 {
    finish_test
    return
}

# Create a table of sample email data. The data comes from email
# archives of Enron executives that was published as part of the
# litigation against that company.
#
do_test fts1c-1.1 {
    db eval {
        CREATE VIRTUAL TABLE email USING fts1([from],[to],subject,body);
        BEGIN TRANSACTION;
        INSERT INTO email([from],[to],subject,body) VALUES('savita.puthigai@enron.com', 'traders.eol@enron.com,
traders.eol@enron.com', 'EnronOnline- Change to Autohedge', 'Effective Monday, October 22, 2001 the following
changes will be made to the Autohedge functionality on EnronOnline.

The volume on the hedge will now respect the minimum volume and volume increment settings on the parent
product. See rules below:

? If the transaction volume on the child is less than half of the parent's minimum volume no hedge will occur.
? If the transaction volume on the child is more than half the parent's minimum volume but less than half the volume
increment on the parent, the hedge will volume will be the parent's minimum volume.
? For all other volumes, the same rounding rules will apply based on the volume increment on the parent product.
```

Please see example below:

Parent's Settings:

Minimum: 5000

Increment: 1000

Volume on Autohedge transaction Volume Hedged

1 - 2499 0

2500 - 5499 5000

5500 - 6499 6000');

INSERT INTO email([from],[to],subject,body) VALUES('dana.davis@enron.com', 'laynie.east@enron.com, lisa.king@enron.com, lisa.best@enron.com,', 'Leaving Early', 'FYI:

If it's ok with everyone's needs, I would like to leave @4pm. If you think you will need my assistance past the 4 o'clock hour just let me know; I'll be more than willing to stay.');

INSERT INTO email([from],[to],subject,body) VALUES('enron_update@concuere workplace.com', 'louise.kitchen@enron.com', '<<Concur Expense Document>> - CC02.06.02', 'The following expense report is ready for approval:

Employee Name: Christopher F. Calger

Status last changed by: Mollie E. Gustafson Ms

Expense Report Name: CC02.06.02

Report Total: \$3,972.93

Amount Due Employee: \$3,972.93

To approve this expense report, click on the following link for Concur Expense.

<http://expensexms.enron.com>');

INSERT INTO email([from],[to],subject,body) VALUES('jeff.duff@enron.com', 'julie.johnson@enron.com', 'Work request', 'Julie,

Could you print off the current work request report by 1:30 today?

Gentlemen,

I'd like to review this today at 1:30 in our office. Also, could you provide me with your activity reports so I can have Julie enter this information.

JD');

INSERT INTO email([from],[to],subject,body) VALUES('v.weldon@enron.com', 'gary.l.carrier@usa.dupont.com, scott.joyce@bankofamerica.com', 'Enron News', 'This could turn into something big....

<http://biz.yahoo.com/rf/010129/n29305829.html>');

INSERT INTO email([from],[to],subject,body) VALUES('mark.haedicke@enron.com', 'paul.simons@enron.com', 'Re: First Polish Deal!', 'Congrats! Things seem to be building rapidly now on the Continent. Mark');

INSERT INTO email([from],[to],subject,body) VALUES('e.carter@enron.com', 't..robinson@enron.com', 'FW: Producers Newsletter 9-24-2001', '

The producer lumber pricing sheet.

-----Original Message-----

From: Johnson, Jay

Sent: Tuesday, October 16, 2001 3:42 PM
To: Carter, Karen E.
Subject: FW: Producers Newsletter 9-24-2001

-----Original Message-----

From: Daigre, Sergai
Sent: Friday, September 21, 2001 8:33 PM
Subject: Producers Newsletter 9-24-2001

);

INSERT INTO email([from],[to],subject,body) VALUES('david.delainey@enron.com', 'kenneth.lay@enron.com', 'Greater Houston Partnership', 'Ken, in response to the letter from Mr Miguel San Juan, my suggestion would be to offer up the Falcon for their use; however, given the tight time frame and your recent visit with Mr. Fox that it would be difficult for either you or me to participate.

I spoke to Max and he agrees with this approach.

I hope this meets with your approval.

Regards

Delainey');

INSERT INTO email([from],[to],subject,body) VALUES('lachandra.fenceroy@enron.com', 'lindy.donoho@enron.com', 'FW: Bus Applications Meeting Follow Up', 'Lindy,

Here is the original memo we discussed earlier. Please provide any information that you may have.

Your cooperation is greatly appreciated.

Thanks,

lachandra.fenceroy@enron.com
713.853.3884
877.498.3401 Pager

-----Original Message-----

From: Bisbee, Joanne
Sent: Wednesday, September 26, 2001 7:50 AM
To: Fenceroy, LaChandra
Subject: FW: Bus Applications Meeting Follow Up

Lachandra, Please get with David Duff today and see what this is about. Who are our TW accounting business users?

-----Original Message-----

From: Koh, Wendy

Sent: Tuesday, September 25, 2001 2:41 PM
To: Bisbee, Joanne
Subject: Bus Applications Meeting Follow Up

Lisa brought up a TW change effective Nov 1. It involves eliminating a turnback surcharge. I have no other information, but you might check with the business folks for any system changes required.

Wendy');

INSERT INTO email([from],[to],subject,body) VALUES('danny.mccarty@enron.com', 'fran.fagan@enron.com', 'RE: worksheets', 'Fran,

If Julie's merit needs to be lump sum, just move it over to that column. Also, send me Eric Gadd's sheets as well.

Thanks.

Dan

-----Original Message-----

From: Fagan, Fran
Sent: Thursday, December 20, 2001 11:10 AM
To: McCarty, Danny
Subject: worksheets

As discussed, attached are your sheets for bonus and merit.

Thanks,

Fran Fagan
Sr. HR Rep
713.853.5219

<< File: McCartyMerit.xls >> << File: mccartyBonusCommercial_UnP.xls >>

);

INSERT INTO email([from],[to],subject,body) VALUES('bert.meyers@enron.com', 'shift.dl-portland@enron.com', 'OCTOBER SCHEDULE', 'TEAM,

PLEASE SEND ME ANY REQUESTS THAT YOU HAVE FOR OCTOBER. SO FAR I HAVE THEM FOR LEAF. I WOULD LIKE TO HAVE IT DONE BY THE 15TH OF THE MONTH. ANY QUESTIONS PLEASE GIVE ME A CALL.

BERT');

INSERT INTO email([from],[to],subject,body) VALUES('errol.mclaughlin@enron.com', 'john.arnold@enron.com, bilal.bajwa@enron.com, john.griffith@enron.com,', 'TRV Notification: (NG - PROPT P/L - 09/27/2001)', 'The report named: NG - PROPT P/L <http://trv.corp.enron.com/linkFromExcel.asp?report_cd=11&report_name=NG+-+PROPT+P/L&category_cd=5&category_name=FINANCIAL&toc_hide=1&sTV1=5&TV1Exp=Y¤t_efct_d ate=09/27/2001>, published as of 09/27/2001 is now available for viewing on the website.');

INSERT INTO email([from],[to],subject,body) VALUES('patrice.mims@enron.com', 'calvin.eakins@enron.com', 'Re: Small business supply assistance', 'Hi Calvin

I spoke with Rickey (boy, is he long-winded!!). Gave him the name of our credit guy, Russell Diamond.

Thank for your help!);

INSERT INTO email([from],[to],subject,body) VALUES('legal <.hall@enron.com>', 'stephanie.panus@enron.com', 'Termination update', 'City of Vernon and Salt River Project terminated their contracts. I will fax these notices to you.');

INSERT INTO email([from],[to],subject,body) VALUES('d..steffes@enron.com', 'richard.shapiro@enron.com', 'EES / ENA Government Affairs Staffing & Outside Services', 'Rick --

Here is the information on staffing and outside services. Call if you need anything else.

Jim

);

INSERT INTO email([from],[to],subject,body) VALUES('gelliott@industrialinfo.com', 'pcopello@industrialinfo.com', 'ECAAR (Gavin), WSCC (Diablo Canyon), & NPCC (Seabrook)', 'Dear Power Outage Database Customer,

Attached you will find an excel document. The outages contained within are forced or rescheduled outages. Your daily delivery will still contain these outages.

In addition to the two excel documents, there is a dbf file that is formatted like your daily deliveries you receive nightly. This will enable you to load the data into your regular database. Any questions please let me know. Thanks.

Greg Elliott

IRR, Inc.

713-783-5147 x 3481

outages@industrialinfo.com

THE INFORMATION CONTAINED IN THIS E-MAIL IS LEGALLY PRIVILEGED AND CONFIDENTIAL INFORMATION INTENDED ONLY FOR THE USE OF THE INDIVIDUAL OR ENTITY NAMED ABOVE. YOU ARE HEREBY NOTIFIED THAT ANY DISSEMINATION, DISTRIBUTION, OR COPY OF THIS E-MAIL TO UNAUTHORIZED ENTITIES IS STRICTLY PROHIBITED. IF YOU HAVE RECEIVED THIS E-MAIL IN ERROR, PLEASE DELETE IT.

- OUTAGE.dbf

- 111201R.xls

- 111201.xls ');

INSERT INTO email([from],[to],subject,body) VALUES('enron.announcements@enron.com', 'all_ena_egm_eim@enron.com', 'EWS Brown Bag', 'MARK YOUR LUNCH CALENDARS NOW !

You are invited to attend the EWS Brown Bag Lunch Series

Featuring: RAY BOWEN, COO

Topic: Enron Industrial Markets

Thursday, March 15, 2001

11:30 am - 12:30 pm

EB 5 C2

You bring your lunch, Limited Seating
We provide drinks and dessert. RSVP x 3-9610');
INSERT INTO email([from],[to],subject,body) VALUES('chris.germany@enron.com',
'ingrid.immer@williams.com', 'Re: About St Pauls', 'Sounds good to me. I bet this is next to the Warick?? Hotel.

"Immer, Ingrid" <Ingrid.Immer@Williams.com> on 12/21/2000 11:48:47 AM
To: "'chris.germany@enron.com'" <chris.germany@enron.com>
cc:
Subject: About St Pauls

<<About St Pauls.url>>
?
?http://www.stpaulshouston.org/about.html

Chris,

I like the looks of this place.? What do you think about going here Christmas
eve?? They have an 11:00 a.m. service and a candlelight service at 5:00 p.m.,
among others.

Let me know.?? ii

- About St Pauls.url

);
INSERT INTO email([from],[to],subject,body) VALUES('nas@cpuc.ca.gov', 'skatz@sempratradng.com,
kmccrea@sablau.com, thompson@wrightlaw.com,', 'Reply Brief filed July 31, 2000', '- CPUC01-#76371-v1-
Revised_Reply_Brief__Due_today_7_31_.doc');
INSERT INTO email([from],[to],subject,body) VALUES('gascontrol@aglresources.com', 'dscott4@enron.com,
lcampbel@enron.com', 'Alert Posted 10:00 AM November 20,2000: E-GAS Request Reminder', 'Alert Posted 10:00
AM November 20,2000: E-GAS Request Reminder
As discussed in the Winter Operations Meeting on Sept.29,2000,
E-Gas(Emergency Gas) will not be offered this winter as a service from AGLC.
Marketers and Poolers can receive gas via Peaking and IBSS nominations(daisy
chain) from other marketers up to the 6 p.m. Same Day 2 nomination cycle.
);
INSERT INTO email([from],[to],subject,body) VALUES('dutch.quigley@enron.com',
'rwolkwitz@powermerchants.com', ', ')

Here is a goody for you');
INSERT INTO email([from],[to],subject,body) VALUES('ryan.o"rourke@enron.com', 'k..allen@enron.com,

randy.bhatia@enron.com, frank.ermis@enron.com,', 'TRV Notification: (West VaR - 11/07/2001)', 'The report named: West VaR
<http://trv.corp.enron.com/linkFromExcel.asp?report_cd=36&report_name=West+VaR&category_cd=2&category_name=WEST&toc_hide=1&sTV1=2&TV1Exp=Y¤t_efct_date=11/07/2001>, published as of 11/07/2001 is now available for viewing on the website.');

INSERT INTO email([from],[to],subject,body) VALUES('mjones7@txu.com', 'cstone1@txu.com, ggreen2@txu.com, timpowell@txu.com,', 'Enron / HPL Actuals for July 10, 2000', 'Teco Tap 10.000 / Enron ; 110.000 / HPL IFERC

LS HPL LSK IC 30.000 / Enron

');

INSERT INTO email([from],[to],subject,body) VALUES('susan.pereira@enron.com', 'kkw816@aol.com', 'soccer practice', 'Kathy-

Is it safe to assume that practice is cancelled for tonight??

Susan Pereira');

INSERT INTO email([from],[to],subject,body) VALUES('mark.whitt@enron.com', 'barry.tycholiz@enron.com', 'Huber Internal Memo', 'Please look at this. I didn"t know how deep to go with the desk. Do you think this works.

');

INSERT INTO email([from],[to],subject,body) VALUES('m..forney@enron.com', 'george.phillips@enron.com', ', 'George,

Give me a call and we will further discuss opportunities on the 13st floor.

Thanks,

JMForney

3-7160');

INSERT INTO email([from],[to],subject,body) VALUES('brad.mckay@enron.com', 'angusmcka@aol.com', 'Re: (no subject)', 'not yet');

INSERT INTO email([from],[to],subject,body) VALUES('adam.bayer@enron.com', 'jonathan.mckay@enron.com', 'FW: Curve Fetch File', 'Here is the curve fetch file sent to me. It has plenty of points in it. If you give me a list of which ones you need we may be able to construct a secondary worksheet to vlookup the values.

adam

35227

-----Original Message-----

From: Royed, Jeff

Sent: Tuesday, September 25, 2001 11:37 AM

To: Bayer, Adam

Subject: Curve Fetch File

Let me know if it works. It may be required to have a certain version of Oracle for it to work properly.

Jeff Royed

Enron

Energy Operations

Phone: 713-853-5295');

INSERT INTO email([from],[to],subject,body) VALUES('matt.smith@enron.com', 'yan.wang@enron.com', 'Report Formats', 'Yan,

The merged reports look great. I believe the only orientation changes are to "unmerge" the following six reports:

31 Keystone Receipts

15 Questar Pipeline

40 Rockies Production

22 West_2

23 West_3

25 CIG_WIC

The orientation of the individual reports should be correct. Thanks.

Mat

PS. Just a reminder to add the "*" by the title of calculated points.');

INSERT INTO email([from],[to],subject,body) VALUES('michelle.lokay@enron.com', 'jimboman@bigfoot.com', 'Egyptian Festival', '----- Forwarded by Michelle Lokay/ET&S/Enron on 09/07/2000 10:08 AM -----

"Karkour, Randa" <Randa.Karkour@COMPAQ.com> on 09/07/2000 09:01:04 AM
To: ""Agheb (E-mail)" <Agheb@aol.com>, "Leila Mankarious (E-mail)" <Leila_Mankarious@mhhs.org>, ""Marymankarious (E-mail)" <marymankarious@aol.com>, "Michelle lokay (E-mail)" <mlokay@enron.com>, "Ramy Mankarious (E-mail)" <Mankarious@aol.com>
cc:

Subject: Egyptian Festival

<<Egyptian Festival.url>>

<http://www.egyptianfestival.com/>

- Egyptian Festival.url

');

INSERT INTO email([from],[to],subject,body) VALUES('errol.mclaughlin@enron.com', 'sherry.dawson@enron.com', 'Urgent!!! --- New EAST books', 'This has to be done.....

Thanks

----- Forwarded by Errol McLaughlin/Corp/Enron on 12/20/2000

08:39 AM -----

From: William Kelly @ ECT

12/20/2000 08:31 AM

To: Kam Keiser/HOU/ECT@ECT, Darron C Giron/HOU/ECT@ECT, David Baumbach/HOU/ECT@ECT, Errol McLaughlin/Corp/Enron@ENRON
cc: Kimat Singla/HOU/ECT@ECT, Kulvinder Fowler/NA/Enron@ENRON, Kyle R Lilly/HOU/ECT@ECT, Jeff Royed/Corp/Enron@ENRON, Alejandra Chavez/NA/Enron@ENRON, Crystal Hyde/HOU/ECT@ECT

Subject: New EAST books

We have new book names in TAGG for our intramonth portfolios and it is extremely important that any deal booked to the East is communicated quickly to someone on my team. I know it will take some time for the new names to sink in and I do not want us to miss any positions or P&L.

Thanks for your help on this.

New:

Scott Neal : East Northeast

Dick Jenkins: East Marketeast

WK

);

INSERT INTO email([from],[to],subject,body) VALUES('david.forster@enron.com', 'eol.wide@enron.com', 'Change to Stack Manager', 'Effective immediately, there is a change to the Stack Manager which will affect any Inactive Child.

An inactive Child with links to Parent products will not have their calculated prices updated until the Child product is Activated.

When the Child Product is activated, the price will be recalculated and updated BEFORE it is displayed on the web.

This means that if you are inputting a basis price on a Child product, you will not see the final, calculated price until you Activate the product, at which time the customer will also see it.

If you have any questions, please contact the Help Desk on:

Americas: 713 853 4357

Europe: + 44 (0) 20 7783 7783

Asia/Australia: +61 2 9229 2300

Dave');

INSERT INTO email([from],[to],subject,body) VALUES('vince.kaminski@enron.com', 'jhh1@email.msn.com', 'Re: Light reading - see pieces beginning on page 7', 'John,

I saw it. Very interesting.

Vince

"John H Herbert" <jhh1@email.msn.com> on 07/28/2000 08:38:08 AM

To: "Vince J Kaminski" <Vince_J_Kaminski@enron.com>

cc:

Subject: Light reading - see pieces beginning on page 7

Cheers and have a nice weekend,

JHHerbert

- gd000728.pdf

');

INSERT INTO email([from],[to],subject,body) VALUES('matthew.lenhart@enron.com', 'mmmarcanel@equiva.com', 'RE:', 'i will try to line up a pig for you ');

INSERT INTO email([from],[to],subject,body) VALUES('jae.black@enron.com', 'claudette.harvey@enron.com, chaun.roberts@enron.com, judy.martinez@enron.com,', 'Disaster Recovery Equipment', 'As a reminder...there are several pieces of equipment that are set up on the 30th Floor, as well as on our floor, for the Disaster Recovery Team. PLEASE DO NOT TAKE, BORROW OR USE this equipment. Should you need to use another computer system, other than yours, or make conference calls please work with your Assistant to help find or set up equipment for you to use.

Thanks for your understanding in this matter.

T.Jae Black

East Power Trading

Assistant to Kevin Presto

off. 713-853-5800

fax 713-646-8272

cell 713-539-4760');

INSERT INTO email([from],[to],subject,body) VALUES('eric.bass@enron.com', 'dale.neuner@enron.com', '5 X 24', 'Dale,

Have you heard anything more on the 5 X 24s? We would like to get this product out ASAP.

Thanks,

Eric');

INSERT INTO email([from],[to],subject,body) VALUES('messenger@smartreminders.com', 'm..tholt@enron.com', '10% Coupon - PrintPal Printer Cartridges - 100% Guaranteed', '[IMAGE]
[IMAGE][IMAGE][IMAGE]

Dear SmartReminders Member,

[IMAGE] [IMAGE] [IMAGE] [IMAGE] [IMAGE] [IMAGE] [IMAGE] [IMAGE]

We respect your privacy and are a Certified Participant of the BBBOnLine Privacy Program. To be removed from future offers,click here.

SmartReminders.com is a permission based service. To unsubscribe click here . ');

INSERT INTO email([from],[to],subject,body) VALUES('benjamin.rogers@enron.com', 'mark.bernstein@enron.com', ', 'The guy you are talking about left CIN under a "cloud of suspicion" sort of speak. He was the one who got into several bad deals and PPA's in California for CIN, thus he left on a bad note. Let me know if you need more detail than that, I felt this was the type of info you were looking for. Thanks!

Ben');

INSERT INTO email([from],[to],subject,body) VALUES('enron_update@concreworkplace.com', 'michelle.cash@enron.com', 'Expense Report Receipts Not Received', 'Employee Name: Michelle Cash
Report Name: Houston Cellular 8-11-01

Report Date: 12/13/01
Report ID: 594D37C9ED2111D5B452
Submitted On: 12/13/01

You are only allowed 2 reports with receipts outstanding. Your expense reports will not be paid until you meet this requirement.);

INSERT INTO email([from],[to],subject,body) VALUES('susan.mara@enron.com', 'ray.alvarez@enron.com, mark.palmer@enron.com, karen.denne@enron.com,', 'CAISO Emergency Motion -- to discontinue market-based rates for', 'FYI. the latest broadside against the generators.

Sue Mara

Enron Corp.

Tel: (415) 782-7802

Fax:(415) 782-7854

----- Forwarded by Susan J Mara/NA/Enron on 06/08/2001 12:24 PM -----

"Milner, Marcie" <MMilner@coral-energy.com> 06/08/2001 11:13 AM To: ""smara@enron.com""
<smara@enron.com> cc: Subject: CAISO Emergency Motion

Sue, did you see this emergency motion the CAISO filed today? Apparently they are requesting that FERC discontinue market-based rates immediately and grant refunds plus interest on the difference between cost-based rates and market revenues received back to May 2000. They are requesting the commission act within 14 days. Have you heard anything about what they are doing?

Marcie

<http://www.caiso.com/docs/2001/06/08/200106081005526469.pdf>

);

INSERT INTO email([from],[to],subject,body) VALUES('fletcher.sturm@enron.com', 'eloy.escobar@enron.com', 'Re: General Brinks Position Meeting', 'Eloy,

Who is General Brinks?

Fletch);

INSERT INTO email([from],[to],subject,body) VALUES('nailia.dindarova@enron.com', 'richard.shapiro@enron.com', 'Documents for Mark Frevert (on EU developments and lessons from', 'Rick,

Here are the documents that Peter has prepared for Mark Frevert.

Nailia

----- Forwarded by Nailia Dindarova/LON/ECT on 25/06/2001

16:36 -----

Nailia Dindarova

25/06/2001 15:36

To: Michael Brown/Enron@EUEnronXGate

cc: Ross Sankey/Enron@EUEnronXGate, Eric Shaw/ENRON@EUEnronXGate, Peter Styles/LON/ECT@ECT

Subject: Documents for Mark Frevert (on EU developments and lessons from California)

Michael,

These are the documents that Peter promised to give to you for Mark Frevert. He has now handed them to him in person but asked me to transmit them electronically to you, as well as Eric and Ross.

Nailia

');

INSERT INTO email([from],[to],subject,body) VALUES('peggy.a.kostial@accenture.com', 'dave.samuels@enron.com', 'EOL-Accenture Deal Sheet', 'Dave -

Attached are our comments and suggested changes. Please call to review.

On the time line for completion, we have four critical steps to complete:

- Finalize market analysis to refine business case, specifically projected revenue stream
- Complete counterparty surveying, including targeting 3 CPs for letters of intent
- Review Enron asset base for potential reuse/ licensing
- Contract negotiations

Joe will come back to us with an updated time line, but it is my expectation that we are still on the same schedule (we just begun week three) with possibly a week or so slippage.....contract negotiations will probably be the critical path.

We will send our cut at the actual time line here shortly. Thanks,

Peggy

(See attached file: accenture-dealpoints v2.doc)

- accenture-dealpoints v2.doc ');

INSERT INTO email([from],[to],subject,body) VALUES('thomas.martin@enron.com', 'thomas.martin@enron.com',

'Re: Guadalupe Power Partners LP', '----- Forwarded by Thomas A Martin/HOU/ECT on 03/20/2001
03:49 PM -----

Thomas A Martin
10/11/2000 03:55 PM
To: Patrick Wade/HOU/ECT@ECT
cc:
Subject: Re: Guadalupe Power Partners LP

The deal is physically served at Oasis Waha or Oasis Katy and is priced at either HSC, Waha or Katytailgate GD at buyers option three days prior to NYMEX close.

);
INSERT INTO email([from],[to],subject,body) VALUES('judy.townsend@enron.com', 'dan.junek@enron.com, chris.germany@enron.com', 'Columbia Distribution's Capacity Available for Release - Sum', '-----
Forwarded by Judy Townsend/HOU/ECT on 03/09/2001 11:04
AM -----

agoddard@nsource.com on 03/08/2001 09:16:57 AM
To: " - *Koch, Kent" <kkoch@nsource.com>, " -
*Millar, Debra" <dmillar@nsource.com>, " - *Burke, Lynn"
<lburke@nsource.com>
cc: " - *Heckathorn, Tom" <theckathorn@nsource.com>
Subject: Columbia Distribution's Capacity Available for Release - Sum

Attached is Columbia Distribution's notice of capacity available for release for the summer of 2001 (Apr. 2001 through Oct. 2001).

Please note that the deadline for bids is 3:00pm EST on March 20, 2001.

If you have any questions, feel free to contact any of the representatives listed at the bottom of the attachment.

Aaron Goddard

- 2001Summer.doc

);
INSERT INTO email([from],[to],subject,body) VALUES('rhonda.denton@enron.com', 'tim.belden@enron.com, dana.davis@enron.com, genia.fitzgerald@enron.com,', 'Split Rock Energy LLC', 'We have received the executed

EEl contract from this CP dated 12/12/2000.

Copies will be distributed to Legal and Credit.');

INSERT INTO email([from],[to],subject,body) VALUES('kerrymcelroy@dwt.com', 'jack.speer@alcoa.com, crow@millernash.com, michaelearly@earthlink.net,', 'Oral Argument Request', ' - Oral Argument Request.doc');
INSERT INTO email([from],[to],subject,body) VALUES('mike.carson@enron.com', 'rlmichaelis@hormel.com', ', 'Did you come in town this wk end..... My new number at our house is :
713-668-3712..... my cell # is 281-381-7332

the kid');

INSERT INTO email([from],[to],subject,body) VALUES('cooper.richey@enron.com', 'trycooper@hotmail.com', 'FW: Contact Info', '

-----Original Message-----

From: Punja, Karim

Sent: Thursday, December 13, 2001 2:35 PM

To: Richey, Cooper

Subject: Contact Info

Cooper,

Its been a real pleasure working with you (even though it was for only a small amount of time)
I hope we can stay in touch.

Home# 234-0249

email: kpunja@hotmail.com

Take Care,

Karim.

');

INSERT INTO email([from],[to],subject,body) VALUES('bjm30@earthlink.net', 'mcguinn.k@enron.com, mcguinn.ian@enron.com, mcguinn.stephen@enron.com,', 'email address change', 'Hello all.

I haven't talked to many of you via email recently but I do want to give you
my new address for your email file:

bjm30@earthlink.net

I hope all is well.

Brian McGuinn');

INSERT INTO email([from],[to],subject,body) VALUES('shelley.corman@enron.com', 'steve.hotte@enron.com', 'Flat Panels', 'Can you please advise what is going on with the flat panels that we had planned to distribute to our gas logistics team. It was in the budget and we had the okay, but now I'm hearing there is some hold-up & the units are stored on 44.

Shelley');

INSERT INTO email([from],[to],subject,body) VALUES('sara.davidson@enron.com',
'john.schwartzenburg@enron.com, scott.dieball@enron.com, recipients@enron.com,', '2001 Enron Law Conference
(Distribution List 2)', ' Enron Law Conference

San Antonio, Texas May 2-4, 2001 Westin Riverwalk

See attached memo for more details!!

? Registration for the law conference this year will be handled through an
Online RSVP Form on the Enron Law Conference Website at
<http://lawconference.corp.enron.com>. The website is still under construction
and will not be available until Thursday, March 15, 2001.

? We will send you another e-mail to confirm when the Law Conference Website
is operational.

? Please complete the Online RSVP Form as soon as it is available and submit
it no later than Friday, March 30th.

);

INSERT INTO email([from],[to],subject,body) VALUES('tori.kuykendall@enron.com',
'heath.b.taylor@accenture.com', 'Re:', 'hey - thats funny about john - he definitely remembers him - i"ll call pat
and let him know - we are coming on saturday - i just havent had a chance to
call you guys back -- looking forward to it -- i probably need the
directions again though');

INSERT INTO email([from],[to],subject,body) VALUES('darron.giron@enron.com', 'bryce.baxter@enron.com',
'Re: Feedback for Audrey Cook', 'Bryce,

I"ll get it done today.

DG 3-9573

From: Bryce Baxter 06/12/2000 07:15 PM

To: Darron C Giron/HOU/ECT@ECT

cc:

Subject: Feedback for Audrey Cook

You were identified as a reviewer for Audrey Cook. If possible, could you

complete her feedback by end of business Wednesday? It will really help me in the PRC process to have your input. Thanks.

');

```
INSERT INTO email([from],[to],subject,body) VALUES('casey.evans@enron.com', 'stephanie.sever@enron.com', 'Gas EOL ID', 'Stephanie,
```

In conjunction with the recent movement of several power traders, they are changing the names of their gas books as well. The names of the new gas books and traders are as follows:

PWR-NG-LT-SPP: Mike Carson

PWR-NG-LT-SERC: Jeff King

If you need to know their power desk to map their ID to their gas books, those desks are as follows:

EPMI-LT-SPP: Mike Carson

EPMI-LT-SERC: Jeff King

I will be in training this afternoon, but will be back when class is over. Let me know if you have any questions.

Thanks for your help!

Casey');

```
INSERT INTO email([from],[to],subject,body) VALUES('darrell.schoolcraft@enron.com', 'david.roensch@enron.com, kimberly.watson@enron.com, michelle.lokay@enron.com,', 'Postings', 'Please see the attached.
```

ds

');

```
INSERT INTO email([from],[to],subject,body) VALUES('mcominsky@aol.com', 'cpatman@bracepatt.com, james_derrick@enron.com', 'Jurisprudence Luncheon', 'Carrin & Jim --
```

It was an honor and a pleasure to meet both of you yesterday. I know we will have fun working together on this very special event.

Jeff left the jurisprudence luncheon lists for me before he left on vacation.

I wasn't sure whether he transmitted them to you as well. Would you please advise me if you would like them sent to you? I can email the MS Excel files or I can fax the hard copies to you. Please advise what is most convenient.

I plan to be in town through the holidays and can be reached by phone, email, or cell phone at any time. My cell phone number is 713/705-4829.

Thanks again for your interest in the ADL's work. Martin.

Martin B. Cominsky
Director, Southwest Region
Anti-Defamation League
713/627-3490, ext. 122
713/627-2011 (fax)
MCominsky@aol.com);

INSERT INTO email([from],[to],subject,body) VALUES('phillip.love@enron.com', 'todagost@utmb.edu, gbsonnta@utmb.edu', 'New President', 'I had a little bird put a word in my ear. Is there any possibility for Ben Raimer to be Bush's secretary of HHS? Just curious about that infamous UTMB rumor mill. Hope things are well, happy holidays.

PL');

INSERT INTO email([from],[to],subject,body) VALUES('marie.heard@enron.com', 'ehamilton@fna.com', 'ISDA Master Agreement', 'Erin:

Pursuant to your request, attached are the Schedule to the ISDA Master Agreement, together with Paragraph 13 to the ISDA Credit Support Annex. Please let me know if you need anything else. We look forward to hearing your comments.

Marie

Marie Heard
Senior Legal Specialist
Enron North America Corp.
Phone: (713) 853-3907
Fax: (713) 646-3490
marie.heard@enron.com

');

INSERT INTO email([from],[to],subject,body) VALUES('andrea.ring@enron.com', 'beverly.beaty@enron.com', 'Re: Tennessee Buy - Louis Dreyfus', 'Beverly - once again thanks so much for your help on this.

');

INSERT INTO email([from],[to],subject,body) VALUES('karolyn.criado@enron.com', 'j.bonin@enron.com, felicia.case@enron.com, b.clapp@enron.com', 'Price List week of Oct. 8-9, 2001', '

Please contact me if you have any questions regarding last weeks prices.

Thank you,
Karolyn Criado
3-9441

');

INSERT INTO email([from],[to],subject,body) VALUES('kevin.presto@enron.com',

'edward.baughman@enron.com, billy.braddock@enron.com', 'Associated', 'Please begin working on filling our Associated short position in 02. I would like to take this risk off the books.

In addition, please find out what a buy-out of VEPCO would cost us. With Rogers transitioning to run our retail risk management, I would like to clean up our customer positions.

We also need to continue to explore a JEA buy-out.

Thanks.');

INSERT INTO email([from],[to],subject,body) VALUES('stacy.dickson@enron.com', 'gregg.penman@enron.com', 'RE: Constellation TC 5-7-01', 'Gregg,

I am at home with a sick baby. (Lots of fun!) I will call you about this tomorrow.

Stacy');

INSERT INTO email([from],[to],subject,body) VALUES('joe.quenet@enron.com', 'dfincher@utilicorp.com', '', 'hey big guy.....check this out.....

w ww.gorelieberman-2000.com/');

INSERT INTO email([from],[to],subject,body) VALUES('k..allen@enron.com', 'jacqestc@aol.com', '', 'Jacques,

I sent you a fax of Kevin Kolb's comments on the release. The payoff on the note would be \$36,248 (\$36090(principal) + \$158 (accrued interest)).

This is assuming we wrap this up on Tuesday.

Please email to confirm that their changes are ok so I can set up a meeting on Tuesday to reach closure.

Phillip');

INSERT INTO email([from],[to],subject,body) VALUES('kourtney.nelson@enron.com', 'mike.swerzbin@enron.com', 'Adjusted L/R Balance', 'Mike,

I placed the adjusted L/R Balance on the Enronwest site. It is under the "Staff/Kourtney Nelson". There are two links:

- 1) "Adj L_R" is the same data/format from the weekly strategy meeting.
- 2) "New Gen 2001_2002" link has all of the supply side info that is used to calculate the L/R balance
-Please note the Data Flag column, a value of "3" indicates the project was cancelled, on hold, etc and is not included in the calc.

Both of these sheets are interactive Excel spreadsheets and thus you can play around with the data as you please. Also, James Bruce is working to get his gen report on the web. That will help with your access to information on new gen.

Please let me know if you have any questions or feedback,

Kourtney

Kourtney Nelson

Fundamental Analysis

Enron North America

(503) 464-8280

kourtney.nelson@enron.com');

INSERT INTO email([from],[to],subject,body) VALUES('d.thomas@enron.com', 'naveed.ahmed@enron.com',
'FW: Current Enron TCC Portfolio', '

-----Original Message-----

From: Grace, Rebecca M.

Sent: Monday, December 17, 2001 9:44 AM

To: Thomas, Paul D.

Cc: Cashion, Jim; Allen, Thresa A.; May, Tom

Subject: RE: Current Enron TCC Portfolio

Paul,

I reviewed NY's list. I agree with all of their contracts numbers and mw amounts.

Call if you have any more questions.

Rebecca

-----Original Message-----

From: Thomas, Paul D.

Sent: Monday, December 17, 2001 9:08 AM

To: Grace, Rebecca M.

Subject: FW: Current Enron TCC Portfolio

<< File: enrntccs.xls >>

Rebecca,

Let me know if you see any differences.

Paul

X 3-0403

-----Original Message-----

From: Thomas, Paul D.

Sent: Monday, December 17, 2001 9:04 AM

To: Ahmed, Naveed

Subject: FW: Current Enron TCC Portfolio

-----Original Message-----

From: Thomas, Paul D.
Sent: Thursday, December 13, 2001 10:01 AM
To: Baughman, Edward D.
Subject: Current Enron TCC Portfolio

);
INSERT INTO email([from],[to],subject,body) VALUES('stephanie.panus@enron.com',
'william.bradford@enron.com, debbie.brackett@enron.com,', 'Coastal Merchant Energy/El Paso Merchant Energy',
'Coastal Merchant Energy, L.P. merged with and into El Paso Merchant Energy,
L.P., effective February 1, 2001, with the surviving entity being El Paso
Merchant Energy, L.P. We currently have ISDA Master Agreements with both
counterparties. Please see the attached memo regarding the existing Masters
and let us know which agreement should be terminated.

Thanks,
Stephanie

);
INSERT INTO email([from],[to],subject,body) VALUES('kam.keiser@enron.com', 'c..kenne@enron.com', 'RE:
What about this too???' , '

-----Original Message-----

From: Kenne, Dawn C.
Sent: Wednesday, February 06, 2002 11:50 AM
To: Keiser, Kam
Subject: What about this too???

<< File: Netco Trader Matrix.xls >>

);
INSERT INTO email([from],[to],subject,body) VALUES('chris.meyer@enron.com', 'joe.parks@enron.com',
'Centana', 'Talked to Chip. We do need Cash Committe approval given the netting feature of your deal, which
means Batch Funding Request. Please update per my previous e-mail and forward.

Thanks

chris
x31666');
INSERT INTO email([from],[to],subject,body) VALUES('debra.perlingiere@enron.com',
'jworman@academyofhealth.com', ', ', 'Have a great weekend! Happy Fathers Day!

Debra Perlingiere
Enron North America Corp.
1400 Smith Street, EB 3885
Houston, Texas 77002

dperlin@enron.com

Phone 713-853-7658

Fax 713-646-3490);

INSERT INTO email([from],[to],subject,body) VALUES('outlook.team@enron.com', '', 'Demo by Martha Janousek of Dashboard & Pipeline Profile / Julia &', 'CALENDAR ENTRY: APPOINTMENT

Description:

Demo by Martha Janousek of Dashboard & Pipeline Profile / Julia & Dir Rpts. - 4102

Date: 1/5/2001

Time: 9:00 AM - 10:00 AM (Central Standard Time)

Chairperson: Outlook Migration Team

Detailed Description:');

INSERT INTO email([from],[to],subject,body) VALUES('diana.seifert@enron.com', 'mark.taylor@enron.com', 'Guest access Chile', 'Hello Mark,

Justin Boyd told me that you can help me with questions regarding Chile.

We got a request for guest access through MG.

The company is called Escondida and is a subsidiary of BHP Australia.

Please advise if I can set up a guest account or not.

F.Y.I.: MG is planning to put a "in w/h Chile" contract for Copper on-line as soon as Enron has done the due diligence for this country.

Thanks !

Best regards

Diana Seifert

EOL PCG');

INSERT INTO email([from],[to],subject,body) VALUES('enron_update@concuere workplace.com', 'mark.whitt@enron.com', '<<Concur Expense Document>> - 121001', 'The Approval status has changed on the following report:

Status last changed by: Barry L. Tycholiz

Expense Report Name: 121001

Report Total: \$198.98

Amount Due Employee: \$198.98

Amount Approved: \$198.98

Amount Paid: \$0.00

Approval Status: Approved

Payment Status: Pending

To review this expense report, click on the following link for Concur Expense.

<http://expense.ms.enron.com>);

INSERT INTO email([from],[to],subject,body) VALUES('kevin.hyatt@enron.com', ', 'Technical Support', 'Outside the U.S., please refer to the list below:

Australia:
1800 678-515
support@palm-au.com

Canada:
1905 305-6530
support@palm.com

New Zealand:
0800 446-398
support@palm-nz.com

U.K.:
0171 867 0108
eurosupport@palm.3com.com

Please refer to the Worldwide Customer Support card for a complete technical support contact list.');

INSERT INTO email([from],[to],subject,body) VALUES('geoff.storey@enron.com', 'dutch.quigley@enron.com', 'RE:', 'duke contact?'

-----Original Message-----

From: Quigley, Dutch
Sent: Wednesday, October 31, 2001 10:14 AM
To: Storey, Geoff
Subject: RE:

bp corp Albert LaMore 281-366-4962

running the reports now

-----Original Message-----

From: Storey, Geoff
Sent: Wednesday, October 31, 2001 10:10 AM
To: Quigley, Dutch
Subject: RE:

give me a contact over there too
BP

-----Original Message-----

From: Quigley, Dutch
Sent: Wednesday, October 31, 2001 9:42 AM
To: Storey, Geoff

Subject:

Coral Jeff Whitnah 713-767-5374

Relaint Steve McGinn 713-207-4000');

INSERT INTO email([from],[to],subject,body) VALUES('pete.davis@enron.com', 'pete.davis@enron.com', 'Start Date: 4/22/01; HourAhead hour: 3; <CODESITE>', 'Start Date: 4/22/01; HourAhead hour: 3; No ancillary schedules awarded.

Variances detected.

Variances detected in Load schedule.

LOG MESSAGES:

PARSING FILE -->> O:\Portland\WestDesk\California Scheduling\ISO Final Schedules\2001042203.txt

---- Load Schedule ----

\$\$\$ Variance found in table tblLoads.

Details: (Hour: 3 / Preferred: 1.92 / Final: 1.89)

TRANS_TYPE: FINAL

LOAD_ID: PGE4

MKT_TYPE: 2

TRANS_DATE: 4/22/01

SC_ID: EPMI

');

INSERT INTO email([from],[to],subject,body) VALUES('john.postlethwaite@enron.com', 'john.zufferli@enron.com', 'Reference', 'John, hope things are going well up there for you. The big day is almost here for you and Jessica. I was wondering if I could use your name as a job reference if need be. I am just trying to get everything in order just in case something happens.

John');

INSERT INTO email([from],[to],subject,body) VALUES('jeffrey.shankman@enron.com', 'Ischiffm@jonesday.com', 'Re:', 'I saw you called on the cell this a.m. Sorry I missed you. (I was in the shower). I have had a shitty week--I suspect my silence (not only to you, but others) after our phone call is a result of the week. I'm seeing Glen at 11:15....talk to you');

INSERT INTO email([from],[to],subject,body) VALUES('litebytz@enron.com', ', 'Lite Bytz RSVP', ' This week's Lite Bytz presentation will feature the following TOOLZ speaker:

Richard McDougall

Solaris 8

Thursday, June 7, 2001

If you have not already signed up, please RSVP via email to litebytz@enron.com by the end of the day Tuesday, June 5, 2001.

*Remember: this is now a Brown Bag Event--so bring your lunch and we will provide cookies and drinks.

Click below for more details.

```
http://home.enron.com:84/messaging/litebytzttoolzprint.jpg');  
  COMMIT;  
}  
} {}
```

```
#####  
# Everything above just builds an interesting test database. The actual  
# tests come after this comment.  
#####
```

```
do_test fts1c-1.2 {  
  execsql {  
    SELECT rowid FROM email WHERE email MATCH 'mark'  
  }  
} {6 17 25 38 40 42 73 74}  
do_test fts1c-1.3 {  
  execsql {  
    SELECT rowid FROM email WHERE email MATCH 'susan'  
  }  
} {24 40}  
do_test fts1c-1.4 {  
  execsql {  
    SELECT rowid FROM email WHERE email MATCH 'mark susan'  
  }  
} {40}  
do_test fts1c-1.5 {  
  execsql {  
    SELECT rowid FROM email WHERE email MATCH 'susan mark'  
  }  
} {40}  
do_test fts1c-1.6 {  
  execsql {  
    SELECT rowid FROM email WHERE email MATCH "'mark susan'"  
  }  
} {}  
do_test fts1c-1.7 {  
  execsql {  
    SELECT rowid FROM email WHERE email MATCH 'mark -susan'  
  }  
} {6 17 25 38 42 73 74}  
do_test fts1c-1.8 {  
  execsql {  
    SELECT rowid FROM email WHERE email MATCH '-mark susan'  
  }  
} {24}  
do_test fts1c-1.9 {
```

```

execsql {
  SELECT rowid FROM email WHERE email MATCH 'mark OR susan'
}
} {6 17 24 25 38 40 42 73 74}

# Some simple tests of the automatic "offsets(email)" column. In the sample
# data set above, only one message, number 20, contains the words
# "gas" and "reminder" in both body and subject.
#
do_test fts1c-2.1 {
  execsql {
    SELECT rowid, offsets(email) FROM email
    WHERE email MATCH 'gas reminder'
  }
} {20 {2 0 42 3 2 1 54 8 3 0 42 3 3 1 54 8 3 0 129 3 3 0 143 3 3 0 240 3}}
do_test fts1c-2.2 {
  execsql {
    SELECT rowid, offsets(email) FROM email
    WHERE email MATCH 'subject:gas reminder'
  }
} {20 {2 0 42 3 2 1 54 8 3 1 54 8}}
do_test fts1c-2.3 {
  execsql {
    SELECT rowid, offsets(email) FROM email
    WHERE email MATCH 'body:gas reminder'
  }
} {20 {2 1 54 8 3 0 42 3 3 1 54 8 3 0 129 3 3 0 143 3 3 0 240 3}}
do_test fts1c-2.4 {
  execsql {
    SELECT rowid, offsets(email) FROM email
    WHERE subject MATCH 'gas reminder'
  }
} {20 {2 0 42 3 2 1 54 8}}
do_test fts1c-2.5 {
  execsql {
    SELECT rowid, offsets(email) FROM email
    WHERE body MATCH 'gas reminder'
  }
} {20 {3 0 42 3 3 1 54 8 3 0 129 3 3 0 143 3 3 0 240 3}}

# Document 32 contains 5 instances of the word "child". But only
# 3 of them are paired with "product". Make sure only those instances
# that match the phrase appear in the offsets(email) list.
#
do_test fts1c-3.1 {
  execsql {
    SELECT rowid, offsets(email) FROM email
    WHERE body MATCH 'child product' AND +rowid=32
  }
}

```

```

}
} {32 {3 0 94 5 3 0 114 5 3 0 207 5 3 1 213 7 3 0 245 5 3 1 251 7 3 0 409 5 3 1 415 7 3 1 493 7}}
do_test fts1c-3.2 {
  execsql {
    SELECT rowid, offsets(email) FROM email
    WHERE body MATCH "'child product'"
  }
} {32 {3 0 207 5 3 1 213 7 3 0 245 5 3 1 251 7 3 0 409 5 3 1 415 7}}

# Snippet generator tests
#
do_test fts1c-4.1 {
  execsql {
    SELECT snippet(email) FROM email
    WHERE email MATCH 'subject:gas reminder'
  }
} {{Alert Posted 10:00 AM November 20,2000: E-<b>GAS</b> Request <b>Reminder</b>}}
do_test fts1c-4.2 {
  execsql {
    SELECT snippet(email) FROM email
    WHERE email MATCH 'christmas candlelight'
  }
} {{<b>...</b> place.? What do you think about going here <b>Christmas</b>
eve?? They have an 11:00 a.m. service and a <b>candlelight</b> service at 5:00 p.m.,
among others. <b>...</b>}}

do_test fts1c-4.3 {
  execsql {
    SELECT snippet(email) FROM email
    WHERE email MATCH 'deal sheet potential reuse'
  }
} {{EOL-Accenture <b>Deal</b> <b>Sheet</b> <b>...</b> intent
Review Enron asset base for <b>potential</b> <b>reuse</b>/ licensing
Contract negotiations <b>...</b>}}
do_test fts1c-4.4 {
  execsql {
    SELECT snippet(email,'<<<','>>>',') FROM email
    WHERE email MATCH 'deal sheet potential reuse'
  }
} {{EOL-Accenture <<<Deal>>> <<<Sheet>>> intent
Review Enron asset base for <<<potential>>> <<<reuse>>>/ licensing
Contract negotiations }}
do_test fts1c-4.5 {
  execsql {
    SELECT snippet(email,'<<<','>>>',') FROM email
    WHERE email MATCH 'first things'
  }
} {{Re: <<<First>>> Polish Deal! Congrats! <<<Things>>> seem to be building rapidly now on the }}

```

```
do_test fts1c-4.6 {
  execsql {
    SELECT snippet(email) FROM email
    WHERE email MATCH 'chris is here'
  }
} {{<b>chris</b>.germany@enron.com <b>...</b> Sounds good to me. I bet this <b>is</b> next to the Warick??
Hotel. <b>...</b> place.? What do you think about going <b>here</b> Christmas
eve?? They have an 11:00 a.m. <b>...</b>}}
```

```
do_test fts1c-4.7 {
  execsql {
    SELECT snippet(email) FROM email
    WHERE email MATCH "'pursuant to'"
  }
} {{Erin:
```

Pursuant to your request, attached are the Schedule to ...}}

```
do_test fts1c-4.8 {
  execsql {
    SELECT snippet(email) FROM email
    WHERE email MATCH 'ancillary load davis'
  }
} {{pete.<b>davis</b>@enron.com <b>...</b> Start Date: 4/22/01; HourAhead hour: 3; No <b>ancillary</b>
schedules awarded.
Variances detected.
Variances detected in <b>Load</b> schedule.
```

LOG MESSAGES:

PARSING ...}}

Combinations of AND and OR operators:
#

```
do_test fts1c-5.1 {
  execsql {
    SELECT snippet(email) FROM email
    WHERE email MATCH 'questar enron OR com'
  }
} {{matt.smith@<b>enron</b>.<b>com</b> <b>...</b> six reports:
```

31 Keystone Receipts
15 Questar Pipeline
40 Rockies Production
22 West_2 ...}}

```
do_test fts1c-5.2 {
  execsql {
    SELECT snippet(email) FROM email
    WHERE email MATCH 'enron OR com questar'
  }
}
```

} { { matt.smith@enron.com ... six reports:

31 Keystone Receipts
15 Questar Pipeline
40 Rockies Production
22 West_2 ...}}

finish_test

Found in path(s):

* /opt/cola/permits/1146568937_1616563472.04/0/sqlite-3.7.17-8.el7_7.1-1.src.rpm-cosi-expand-archive-lltKQC5N/sqlite-src-3071700.zip-cosi-expand-archive-cheW8kUH/sqlite-src-3071700/test/fts1c.test
No license file was found, but licenses were detected in source scan.

```
# 2001 September 15
#
# The author disclaims copyright to this source code. In place of
# a legal notice, here is a blessing:
#
# May you do good and not evil.
# May you find forgiveness for yourself and forgive others.
# May you share freely, never taking more than you give.
#
#*****
# This file implements regression tests for SQLite library. The
# focus of this file is testing built-in functions.
#
```

```
set testdir [file dirname $argv0]
source $testdir/tester.tcl
```

```
# Create a table to work with.
#
do_test func-0.0 {
  execsql {CREATE TABLE tbl1(t1 text)}
  foreach word {this program is free software} {
    execsql "INSERT INTO tbl1 VALUES('$word')"
  }
  execsql {SELECT t1 FROM tbl1 ORDER BY t1}
} {free is program software this}
do_test func-0.1 {
  execsql {
    CREATE TABLE t2(a);
    INSERT INTO t2 VALUES(1);
    INSERT INTO t2 VALUES(NULL);
    INSERT INTO t2 VALUES(345);
    INSERT INTO t2 VALUES(NULL);
    INSERT INTO t2 VALUES(67890);
```

```

SELECT * FROM t2;
}
} {1 {} 345 {} 67890}

# Check out the length() function
#
do_test func-1.0 {
  execsql {SELECT length(t1) FROM tbl1 ORDER BY t1}
} {4 2 7 8 4}
do_test func-1.1 {
  set r [catch {execsql {SELECT length(*) FROM tbl1 ORDER BY t1}} msg]
  lappend r $msg
} {1 {wrong number of arguments to function length()}}
do_test func-1.2 {
  set r [catch {execsql {SELECT length(t1,5) FROM tbl1 ORDER BY t1}} msg]
  lappend r $msg
} {1 {wrong number of arguments to function length()}}
do_test func-1.3 {
  execsql {SELECT length(t1), count(*) FROM tbl1 GROUP BY length(t1)
          ORDER BY length(t1)}
} {2 1 4 2 7 1 8 1}
do_test func-1.4 {
  execsql {SELECT coalesce(length(a),-1) FROM t2}
} {1 -1 3 -1 5}

# Check out the substr() function
#
do_test func-2.0 {
  execsql {SELECT substr(t1,1,2) FROM tbl1 ORDER BY t1}
} {fr is pr so th}
do_test func-2.1 {
  execsql {SELECT substr(t1,2,1) FROM tbl1 ORDER BY t1}
} {r s r o h}
do_test func-2.2 {
  execsql {SELECT substr(t1,3,3) FROM tbl1 ORDER BY t1}
} {ee {} ogr ftw is}
do_test func-2.3 {
  execsql {SELECT substr(t1,-1,1) FROM tbl1 ORDER BY t1}
} {e s m e s}
do_test func-2.4 {
  execsql {SELECT substr(t1,-1,2) FROM tbl1 ORDER BY t1}
} {e s m e s}
do_test func-2.5 {
  execsql {SELECT substr(t1,-2,1) FROM tbl1 ORDER BY t1}
} {e i a r i}
do_test func-2.6 {
  execsql {SELECT substr(t1,-2,2) FROM tbl1 ORDER BY t1}
} {ee is am re is}

```



```

do_test func-2.7 {
    execsql {SELECT substr(t1,-4,2) FROM tbl1 ORDER BY t1}
} {fr {} gr wa th}
do_test func-2.8 {
    execsql {SELECT t1 FROM tbl1 ORDER BY substr(t1,2,20)}
} {this software free program is}
do_test func-2.9 {
    execsql {SELECT substr(a,1,1) FROM t2}
} {1 {} 3 {} 6}
do_test func-2.10 {
    execsql {SELECT substr(a,2,2) FROM t2}
} {{} {} 45 {} 78}

```

Only do the following tests if TCL has UTF-8 capabilities

#

```
if {"\u1234"!="u1234"} {
```

Put some UTF-8 characters in the database

#

```

do_test func-3.0 {
    execsql {DELETE FROM tbl1}
    foreach word "contains UTF-8 characters hi\u1234ho" {
        execsql "INSERT INTO tbl1 VALUES('$word')"
    }
    execsql {SELECT t1 FROM tbl1 ORDER BY t1}
} "UTF-8 characters contains hi\u1234ho"
do_test func-3.1 {
    execsql {SELECT length(t1) FROM tbl1 ORDER BY t1}
} {5 10 8 5}
do_test func-3.2 {
    execsql {SELECT substr(t1,1,2) FROM tbl1 ORDER BY t1}
} {UT ch co hi}
do_test func-3.3 {
    execsql {SELECT substr(t1,1,3) FROM tbl1 ORDER BY t1}
} "UTF cha con hi\u1234"
do_test func-3.4 {
    execsql {SELECT substr(t1,2,2) FROM tbl1 ORDER BY t1}
} "TF ha on i\u1234"
do_test func-3.5 {
    execsql {SELECT substr(t1,2,3) FROM tbl1 ORDER BY t1}
} "TF- har ont i\u1234h"
do_test func-3.6 {
    execsql {SELECT substr(t1,3,2) FROM tbl1 ORDER BY t1}
} "F- ar nt \u1234h"
do_test func-3.7 {
    execsql {SELECT substr(t1,4,2) FROM tbl1 ORDER BY t1}
} "-8 ra ta ho"
do_test func-3.8 {

```

```

execsql {SELECT substr(t1,-1,1) FROM tbl1 ORDER BY t1}
} "8 s s o"
do_test func-3.9 {
execsql {SELECT substr(t1,-3,2) FROM tbl1 ORDER BY t1}
} "F- er in \u1234h"
do_test func-3.10 {
execsql {SELECT substr(t1,-4,3) FROM tbl1 ORDER BY t1}
} "TF- ter ain i\u1234h"
do_test func-3.99 {
execsql {DELETE FROM tbl1}
foreach word {this program is free software} {
execsql "INSERT INTO tbl1 VALUES('$word')"
}
execsql {SELECT t1 FROM tbl1}
} {this program is free software}

} ;# End \u1234!=u1234

# Test the abs() and round() functions.
#
ifcapable !floatingpoint {
do_test func-4.1 {
execsql {
CREATE TABLE t1(a,b,c);
INSERT INTO t1 VALUES(1,2,3);
INSERT INTO t1 VALUES(2,12345678901234,-1234567890);
INSERT INTO t1 VALUES(3,-2,-5);
}
catchsql {SELECT abs(a,b) FROM t1}
} {1 {wrong number of arguments to function abs()}}
}
ifcapable floatingpoint {
do_test func-4.1 {
execsql {
CREATE TABLE t1(a,b,c);
INSERT INTO t1 VALUES(1,2,3);
INSERT INTO t1 VALUES(2,1.2345678901234,-12345.67890);
INSERT INTO t1 VALUES(3,-2,-5);
}
catchsql {SELECT abs(a,b) FROM t1}
} {1 {wrong number of arguments to function abs()}}
}
do_test func-4.2 {
catchsql {SELECT abs() FROM t1}
} {1 {wrong number of arguments to function abs()}}
ifcapable floatingpoint {
do_test func-4.3 {
catchsql {SELECT abs(b) FROM t1 ORDER BY a}

```

```

} {0 {2 1.2345678901234 2}}
do_test func-4.4 {
  catchsql {SELECT abs(c) FROM t1 ORDER BY a}
} {0 {3 12345.6789 5}}
}
ifcapable !floatingpoint {
  if {[working_64bit_int]} {
    do_test func-4.3 {
      catchsql {SELECT abs(b) FROM t1 ORDER BY a}
    } {0 {2 12345678901234 2}}
  }
  do_test func-4.4 {
    catchsql {SELECT abs(c) FROM t1 ORDER BY a}
  } {0 {3 1234567890 5}}
}
do_test func-4.4.1 {
  execsql {SELECT abs(a) FROM t2}
} {1 {} 345 {} 67890}
do_test func-4.4.2 {
  execsql {SELECT abs(t1) FROM tbl1}
} {0.0 0.0 0.0 0.0 0.0}

ifcapable floatingpoint {
  do_test func-4.5 {
    catchsql {SELECT round(a,b,c) FROM t1}
  } {1 {wrong number of arguments to function round()}}
  do_test func-4.6 {
    catchsql {SELECT round(b,2) FROM t1 ORDER BY b}
  } {0 {-2.0 1.23 2.0}}
  do_test func-4.7 {
    catchsql {SELECT round(b,0) FROM t1 ORDER BY a}
  } {0 {2.0 1.0 -2.0}}
  do_test func-4.8 {
    catchsql {SELECT round(c) FROM t1 ORDER BY a}
  } {0 {3.0 -12346.0 -5.0}}
  do_test func-4.9 {
    catchsql {SELECT round(c,a) FROM t1 ORDER BY a}
  } {0 {3.0 -12345.68 -5.0}}
  do_test func-4.10 {
    catchsql {SELECT 'x' || round(c,a) || 'y' FROM t1 ORDER BY a}
  } {0 {x3.0y x-12345.68y x-5.0y}}
  do_test func-4.11 {
    catchsql {SELECT round() FROM t1 ORDER BY a}
  } {1 {wrong number of arguments to function round()}}
  do_test func-4.12 {
    execsql {SELECT coalesce(round(a,2),'nil') FROM t2}
  } {1.0 nil 345.0 nil 67890.0}
  do_test func-4.13 {

```

```

    execsql {SELECT round(t1,2) FROM tbl1}
  } {0.0 0.0 0.0 0.0 0.0}
do_test func-4.14 {
  execsql {SELECT typeof(round(5.1,1));}
} {real}
do_test func-4.15 {
  execsql {SELECT typeof(round(5.1));}
} {real}
do_test func-4.16 {
  catchsql {SELECT round(b,2.0) FROM t1 ORDER BY b}
} {0 {-2.0 1.23 2.0}}
# Verify some values reported on the mailing list.
# Some of these fail on MSVC builds with 64-bit
# long doubles, but not on GCC builds with 80-bit
# long doubles.
for {set i 1} {$i<999} {incr i} {
  set x1 [expr 40222.5 + $i]
  set x2 [expr 40223.0 + $i]
  do_test func-4.17.$i {
    execsql {SELECT round($x1);}
  } $x2
}
for {set i 1} {$i<999} {incr i} {
  set x1 [expr 40222.05 + $i]
  set x2 [expr 40222.10 + $i]
  do_test func-4.18.$i {
    execsql {SELECT round($x1,1);}
  } $x2
}
do_test func-4.20 {
  execsql {SELECT round(40223.4999999999);}
} {40223.0}
do_test func-4.21 {
  execsql {SELECT round(40224.4999999999);}
} {40224.0}
do_test func-4.22 {
  execsql {SELECT round(40225.4999999999);}
} {40225.0}
for {set i 1} {$i<10} {incr i} {
  do_test func-4.23.$i {
    execsql {SELECT round(40223.4999999999,$i);}
  } {40223.5}
  do_test func-4.24.$i {
    execsql {SELECT round(40224.4999999999,$i);}
  } {40224.5}
  do_test func-4.25.$i {
    execsql {SELECT round(40225.4999999999,$i);}
  } {40225.5}
}

```

```

}
for {set i 10} {$i<32} {incr i} {
do_test func-4.26.$i {
execsql {SELECT round(40223.4999999999,$i);}
} {40223.4999999999}
do_test func-4.27.$i {
execsql {SELECT round(40224.4999999999,$i);}
} {40224.4999999999}
do_test func-4.28.$i {
execsql {SELECT round(40225.4999999999,$i);}
} {40225.4999999999}
}
do_test func-4.29 {
execsql {SELECT round(1234567890.5);}
} {1234567891.0}
do_test func-4.30 {
execsql {SELECT round(12345678901.5);}
} {12345678902.0}
do_test func-4.31 {
execsql {SELECT round(123456789012.5);}
} {123456789013.0}
do_test func-4.32 {
execsql {SELECT round(1234567890123.5);}
} {1234567890124.0}
do_test func-4.33 {
execsql {SELECT round(12345678901234.5);}
} {12345678901235.0}
do_test func-4.34 {
execsql {SELECT round(1234567890123.35,1);}
} {1234567890123.4}
do_test func-4.35 {
execsql {SELECT round(1234567890123.445,2);}
} {1234567890123.45}
do_test func-4.36 {
execsql {SELECT round(9999999999994.5);}
} {9999999999995.0}
do_test func-4.37 {
execsql {SELECT round(999999999999.55,1);}
} {999999999999.6}
do_test func-4.38 {
execsql {SELECT round(999999999999.556,2);}
} {999999999999.56}
}

# Test the upper() and lower() functions
#
do_test func-5.1 {
execsql {SELECT upper(t1) FROM tb1}

```

```

} {THIS PROGRAM IS FREE SOFTWARE}
do_test func-5.2 {
  execsql {SELECT lower(upper(t1)) FROM tbl1}
} {this program is free software}
do_test func-5.3 {
  execsql {SELECT upper(a), lower(a) FROM t2}
} {1 1 {} {} 345 345 {} {} 67890 67890}
ifcapable !icu {
  do_test func-5.4 {
    catchsql {SELECT upper(a,5) FROM t2}
  } {1 {wrong number of arguments to function upper()}}
}
do_test func-5.5 {
  catchsql {SELECT upper(*) FROM t2}
} {1 {wrong number of arguments to function upper()}}

```

Test the coalesce() and nullif() functions

```

#
do_test func-6.1 {
  execsql {SELECT coalesce(a,'xyz') FROM t2}
} {1 xyz 345 xyz 67890}
do_test func-6.2 {
  execsql {SELECT coalesce(upper(a),'nil') FROM t2}
} {1 nil 345 nil 67890}
do_test func-6.3 {
  execsql {SELECT coalesce(nullif(1,1),'nil')}
} {nil}
do_test func-6.4 {
  execsql {SELECT coalesce(nullif(1,2),'nil')}
} {1}
do_test func-6.5 {
  execsql {SELECT coalesce(nullif(1,NULL),'nil')}
} {1}

```

Test the last_insert_rowid() function

```

#
do_test func-7.1 {
  execsql {SELECT last_insert_rowid()}
} [db last_insert_rowid]

```

Tests for aggregate functions and how they handle NULLs.

```

#
ifcapable floatingpoint {
  do_test func-8.1 {
    ifcapable explain {
      execsql {EXPLAIN SELECT sum(a) FROM t2;}
    }
  }
}

```

```

execsql {
  SELECT sum(a), count(a), round(avg(a),2), min(a), max(a), count(*) FROM t2;
}
} {68236 3 22745.33 1 67890 5}
}
ifcapable !floatingpoint {
do_test func-8.1 {
  ifcapable explain {
    execsql {EXPLAIN SELECT sum(a) FROM t2;}
  }
  execsql {
    SELECT sum(a), count(a), avg(a), min(a), max(a), count(*) FROM t2;
  }
} {68236 3 22745.0 1 67890 5}
}
do_test func-8.2 {
  execsql {
    SELECT max('z+'||a||'abcdefghijklmnopqrstuvwxyABCDEFGHIJKLMNOPQRSTUVWXYZ') FROM t2;
  }
} {z+67890abcdefghijklmnopqrstuvwxyABCDEFGHIJKLMNOPQRSTUVWXYZ}

ifcapable tempdb {
do_test func-8.3 {
  execsql {
    CREATE TEMP TABLE t3 AS SELECT a FROM t2 ORDER BY a DESC;
    SELECT min('z+'||a||'abcdefghijklmnopqrstuvwxyABCDEFGHIJKLMNOPQRSTUVWXYZ') FROM t3;
  }
} {z+1abcdefghijklmnopqrstuvwxyABCDEFGHIJKLMNOPQRSTUVWXYZ}
} else {
do_test func-8.3 {
  execsql {
    CREATE TABLE t3 AS SELECT a FROM t2 ORDER BY a DESC;
    SELECT min('z+'||a||'abcdefghijklmnopqrstuvwxyABCDEFGHIJKLMNOPQRSTUVWXYZ') FROM t3;
  }
} {z+1abcdefghijklmnopqrstuvwxyABCDEFGHIJKLMNOPQRSTUVWXYZ}
}
do_test func-8.4 {
  execsql {
    SELECT max('z+'||a||'abcdefghijklmnopqrstuvwxyABCDEFGHIJKLMNOPQRSTUVWXYZ') FROM t3;
  }
} {z+67890abcdefghijklmnopqrstuvwxyABCDEFGHIJKLMNOPQRSTUVWXYZ}
ifcapable compound {
do_test func-8.5 {
  execsql {
    SELECT sum(x) FROM (SELECT '9223372036' || '854775807' AS x
      UNION ALL SELECT -9223372036854775807)
  }
} {0}
}

```

```

do_test func-8.6 {
  execsql {
    SELECT typeof(sum(x)) FROM (SELECT '9223372036' || '854775807' AS x
      UNION ALL SELECT -9223372036854775807)
  }
} {integer}
do_test func-8.7 {
  execsql {
    SELECT typeof(sum(x)) FROM (SELECT '9223372036' || '854775808' AS x
      UNION ALL SELECT -9223372036854775807)
  }
} {real}
ifcapable floatingpoint {
do_test func-8.8 {
  execsql {
    SELECT sum(x)>0.0 FROM (SELECT '9223372036' || '854775808' AS x
      UNION ALL SELECT -9223372036850000000)
  }
} {1}
}
ifcapable !floatingpoint {
do_test func-8.8 {
  execsql {
    SELECT sum(x)>0 FROM (SELECT '9223372036' || '854775808' AS x
      UNION ALL SELECT -9223372036850000000)
  }
} {1}
}
}

# How do you test the random() function in a meaningful, deterministic way?
#
do_test func-9.1 {
  execsql {
    SELECT random() is not null;
  }
} {1}
do_test func-9.2 {
  execsql {
    SELECT typeof(random());
  }
} {integer}
do_test func-9.3 {
  execsql {
    SELECT randblob(32) is not null;
  }
} {1}
do_test func-9.4 {

```



```

execsql {
  SELECT typeof(randblob(32));
}
} {blob}
do_test func-9.5 {
  execsql {
    SELECT length(randblob(32)), length(randblob(-5)),
           length(randblob(2000))
  }
} {32 1 2000}

# The "hex()" function was added in order to be able to render blobs
# generated by randblob(). So this seems like a good place to test
# hex().
#
ifcapable bloblit {
  do_test func-9.10 {
    execsql {SELECT hex(x'00112233445566778899aAbBcCdDeEfF')}
  } {00112233445566778899AABBCCDDEEFF}
}
set encoding [db one {PRAGMA encoding}]
if {$encoding=="UTF-16le"} {
  do_test func-9.11-utf16le {
    execsql {SELECT hex(replace('abcdefg','ef','12'))}
  } {6100620063006400310032006700}
  do_test func-9.12-utf16le {
    execsql {SELECT hex(replace('abcdefg','','12'))}
  } {6100620063006400650066006700}
  do_test func-9.13-utf16le {
    execsql {SELECT hex(replace('abcdefg','a','aaa'))}
  } {61006100610061006100620063006400650066006700}
} elseif {$encoding=="UTF-8"} {
  do_test func-9.11-utf8 {
    execsql {SELECT hex(replace('abcdefg','ef','12'))}
  } {61626364313267}
  do_test func-9.12-utf8 {
    execsql {SELECT hex(replace('abcdefg','','12'))}
  } {61626364656667}
  do_test func-9.13-utf8 {
    execsql {SELECT hex(replace('abcdefg','a','aaa'))}
  } {616161616161626364656667}
}

# Use the "sqlite_register_test_function" TCL command which is part of
# the text fixture in order to verify correct operation of some of
# the user-defined SQL function APIs that are not used by the built-in
# functions.
#

```

```

set ::DB [sqlite3_connection_pointer db]
sqlite_register_test_function $::DB testfunc
do_test func-10.1 {
catchsql {
    SELECT testfunc(NULL,NULL);
}
} {1 {first argument should be one of: int int64 string double null value}}
do_test func-10.2 {
execsql {
    SELECT testfunc(
        'string', 'abcdefghijklmnopqrstuvwxyABCDEFGHIJKLMNOPQRSTUVWXYZ',
        'int', 1234
    );
}
} {1234}
do_test func-10.3 {
execsql {
    SELECT testfunc(
        'string', 'abcdefghijklmnopqrstuvwxyABCDEFGHIJKLMNOPQRSTUVWXYZ',
        'string', NULL
    );
}
} {{}}

ifcapable floatingpoint {
do_test func-10.4 {
execsql {
    SELECT testfunc(
        'string', 'abcdefghijklmnopqrstuvwxyABCDEFGHIJKLMNOPQRSTUVWXYZ',
        'double', 1.234
    );
}
} {1.234}
do_test func-10.5 {
execsql {
    SELECT testfunc(
        'string', 'abcdefghijklmnopqrstuvwxyABCDEFGHIJKLMNOPQRSTUVWXYZ',
        'int', 1234,
        'string', 'abcdefghijklmnopqrstuvwxyABCDEFGHIJKLMNOPQRSTUVWXYZ',
        'string', NULL,
        'string', 'abcdefghijklmnopqrstuvwxyABCDEFGHIJKLMNOPQRSTUVWXYZ',
        'double', 1.234,
        'string', 'abcdefghijklmnopqrstuvwxyABCDEFGHIJKLMNOPQRSTUVWXYZ',
        'int', 1234,
        'string', 'abcdefghijklmnopqrstuvwxyABCDEFGHIJKLMNOPQRSTUVWXYZ',
        'string', NULL,
        'string', 'abcdefghijklmnopqrstuvwxyABCDEFGHIJKLMNOPQRSTUVWXYZ',
        'double', 1.234
    );
}
}

```

```

    );
  }
} {1.234}
}

# Test the built-in sqlite_version(*) SQL function.
#
do_test func-11.1 {
  execsql {
    SELECT sqlite_version(*)
  }
} [sqlite3 -version]

# Test that destructors passed to sqlite3 by calls to sqlite3_result_text()
# etc. are called. These tests use two special user-defined functions
# (implemented in func.c) only available in test builds.
#
# Function test_destructor() takes one argument and returns a copy of the
# text form of that argument. A destructor is associated with the return
# value. Function test_destructor_count() returns the number of outstanding
# destructor calls for values returned by test_destructor().
#
if {[db eval {PRAGMA encoding}]=="UTF-8"} {
  do_test func-12.1-utf8 {
    execsql {
      SELECT test_destructor('hello world'), test_destructor_count();
    }
  } {{hello world} 1}
} else {
  ifcapable {utf16} {
    do_test func-12.1-utf16 {
      execsql {
        SELECT test_destructor16('hello world'), test_destructor_count();
      }
    } {{hello world} 1}
  }
}
do_test func-12.2 {
  execsql {
    SELECT test_destructor_count();
  }
} {0}
do_test func-12.3 {
  execsql {
    SELECT test_destructor('hello')||' world'
  }
} {{hello world}}
do_test func-12.4 {

```

```

execsql {
  SELECT test_destructor_count();
}
} {0}
do_test func-12.5 {
execsql {
  CREATE TABLE t4(x);
  INSERT INTO t4 VALUES(test_destructor('hello'));
  INSERT INTO t4 VALUES(test_destructor('world'));
  SELECT min(test_destructor(x)), max(test_destructor(x)) FROM t4;
}
} {hello world}
do_test func-12.6 {
execsql {
  SELECT test_destructor_count();
}
} {0}
do_test func-12.7 {
execsql {
  DROP TABLE t4;
}
} {}

```

Test that the auxdata API for scalar functions works. This test uses
a special user-defined function only available in test builds,
test_auxdata(). Function test_auxdata() takes any number of arguments.

```

do_test func-13.1 {
execsql {
  SELECT test_auxdata('hello world');
}
} {0}

do_test func-13.2 {
execsql {
  CREATE TABLE t4(a, b);
  INSERT INTO t4 VALUES('abc', 'def');
  INSERT INTO t4 VALUES('ghi', 'jkl');
}
} {}
do_test func-13.3 {
execsql {
  SELECT test_auxdata('hello world') FROM t4;
}
} {0 1}
do_test func-13.4 {
execsql {
  SELECT test_auxdata('hello world', 123) FROM t4;
}
} {}

```

```

}
} {{0 0} {1 1}}
do_test func-13.5 {
execsql {
    SELECT test_auxdata('hello world', a) FROM t4;
}
} {{0 0} {1 0}}
do_test func-13.6 {
execsql {
    SELECT test_auxdata('hello||'world', a) FROM t4;
}
} {{0 0} {1 0}}

# Test that auxiliary data is preserved between calls for SQL variables.
do_test func-13.7 {
set DB [sqlite3_connection_pointer db]
set sql "SELECT test_auxdata( ?, a ) FROM t4;"
set STMT [sqlite3_prepare $DB $sql -1 TAIL]
sqlite3_bind_text $STMT 1 hello\000 -1
set res [list]
while { "SQLITE_ROW"==[sqlite3_step $STMT] } {
    lappend res [sqlite3_column_text $STMT 0]
}
lappend res [sqlite3_finalize $STMT]
} {{0 0} {1 0} SQLITE_OK}

# Make sure that a function with a very long name is rejected
do_test func-14.1 {
catch {
    db function [string repeat X 254] {return "hello"}
}
} {0}
do_test func-14.2 {
catch {
    db function [string repeat X 256] {return "hello"}
}
} {1}

do_test func-15.1 {
catchsql {select test_error(NULL)}
} {1 {}}
do_test func-15.2 {
catchsql {select test_error('this is the error message')}
} {1 {this is the error message}}
do_test func-15.3 {
catchsql {select test_error('this is the error message',12)}
} {1 {this is the error message}}
do_test func-15.4 {

```

```

db errorcode
} {12}

# Test the quote function for BLOB and NULL values.
do_test func-16.1 {
execsql {
    CREATE TABLE tbl2(a, b);
}
set STMT [sqlite3_prepare $::DB "INSERT INTO tbl2 VALUES(?, ?)" -1 TAIL]
sqlite3_bind_blob $::STMT 1 abc 3
sqlite3_step $::STMT
sqlite3_finalize $::STMT
execsql {
    SELECT quote(a), quote(b) FROM tbl2;
}
} {X'616263' NULL}

# Correctly handle function error messages that include %. Ticket #1354
#
do_test func-17.1 {
proc testfunc1 args {error "Error %d with %s percents %p"}
db function testfunc1 ::testfunc1
catchsql {
    SELECT testfunc1(1,2,3);
}
} {1 {Error %d with %s percents %p}}

# The SUM function should return integer results when all inputs are integer.
#
do_test func-18.1 {
execsql {
    CREATE TABLE t5(x);
    INSERT INTO t5 VALUES(1);
    INSERT INTO t5 VALUES(-99);
    INSERT INTO t5 VALUES(10000);
    SELECT sum(x) FROM t5;
}
} {9902}
ifcapable floatingpoint {
do_test func-18.2 {
execsql {
    INSERT INTO t5 VALUES(0.0);
    SELECT sum(x) FROM t5;
}
} {9902.0}
}

# The sum of nothing is NULL. But the sum of all NULLs is NULL.

```

```

#
# The TOTAL of nothing is 0.0.
#
do_test func-18.3 {
  execsql {
    DELETE FROM t5;
    SELECT sum(x), total(x) FROM t5;
  }
} {{} 0.0}
do_test func-18.4 {
  execsql {
    INSERT INTO t5 VALUES(NULL);
    SELECT sum(x), total(x) FROM t5
  }
} {{} 0.0}
do_test func-18.5 {
  execsql {
    INSERT INTO t5 VALUES(NULL);
    SELECT sum(x), total(x) FROM t5
  }
} {{} 0.0}
do_test func-18.6 {
  execsql {
    INSERT INTO t5 VALUES(123);
    SELECT sum(x), total(x) FROM t5
  }
} {123 123.0}

# Ticket #1664, #1669, #1670, #1674: An integer overflow on SUM causes
# an error. The non-standard TOTAL() function continues to give a helpful
# result.
#
do_test func-18.10 {
  execsql {
    CREATE TABLE t6(x INTEGER);
    INSERT INTO t6 VALUES(1);
    INSERT INTO t6 VALUES(1<<62);
    SELECT sum(x) - ((1<<62)+1) from t6;
  }
} 0
do_test func-18.11 {
  execsql {
    SELECT typeof(sum(x)) FROM t6
  }
} integer
ifcapable floatingpoint {
  do_test func-18.12 {
    catchsql {

```

```

INSERT INTO t6 VALUES(1<<62);
SELECT sum(x) - ((1<<62)*2.0+1) from t6;
}
} {1 {integer overflow}}
do_test func-18.13 {
  execsql {
    SELECT total(x) - ((1<<62)*2.0+1) FROM t6
  }
} 0.0
}
ifcapable !floatingpoint {
do_test func-18.12 {
  catchsql {
    INSERT INTO t6 VALUES(1<<62);
    SELECT sum(x) - ((1<<62)*2+1) from t6;
  }
} {1 {integer overflow}}
do_test func-18.13 {
  execsql {
    SELECT total(x) - ((1<<62)*2+1) FROM t6
  }
} 0.0
}
if {[working_64bit_int]} {
do_test func-18.14 {
  execsql {
    SELECT sum(-9223372036854775805);
  }
} -9223372036854775805
}
ifcapable compound&&subquery {

do_test func-18.15 {
  catchsql {
    SELECT sum(x) FROM
      (SELECT 9223372036854775807 AS x UNION ALL
       SELECT 10 AS x);
  }
} {1 {integer overflow}}
if {[working_64bit_int]} {
do_test func-18.16 {
  catchsql {
    SELECT sum(x) FROM
      (SELECT 9223372036854775807 AS x UNION ALL
       SELECT -10 AS x);
  }
} {0 9223372036854775797}
do_test func-18.17 {

```



```

catchsql {
  SELECT sum(x) FROM
    (SELECT -9223372036854775807 AS x UNION ALL
     SELECT 10 AS x);
}
} {0 -9223372036854775797}
}
do_test func-18.18 {
catchsql {
  SELECT sum(x) FROM
    (SELECT -9223372036854775807 AS x UNION ALL
     SELECT -10 AS x);
}
} {1 {integer overflow}}
do_test func-18.19 {
catchsql {
  SELECT sum(x) FROM (SELECT 9 AS x UNION ALL SELECT -10 AS x);
}
} {0 -1}
do_test func-18.20 {
catchsql {
  SELECT sum(x) FROM (SELECT -9 AS x UNION ALL SELECT 10 AS x);
}
} {0 1}
do_test func-18.21 {
catchsql {
  SELECT sum(x) FROM (SELECT -10 AS x UNION ALL SELECT 9 AS x);
}
} {0 -1}
do_test func-18.22 {
catchsql {
  SELECT sum(x) FROM (SELECT 10 AS x UNION ALL SELECT -9 AS x);
}
} {0 1}

} ;# ifcapable compound&&subquery

# Integer overflow on abs()
#
if {[working_64bit_int]} {
do_test func-18.31 {
  catchsql {
    SELECT abs(-9223372036854775807);
  }
} {0 9223372036854775807}
}
do_test func-18.32 {
  catchsql {

```

```

SELECT abs(-9223372036854775807-1);
}
} {1 {integer overflow}}

# The MATCH function exists but is only a stub and always throws an error.
#
do_test func-19.1 {
execsql {
    SELECT match(a,b) FROM t1 WHERE 0;
}
} {}
do_test func-19.2 {
catchsql {
    SELECT 'abc' MATCH 'xyz';
}
} {1 {unable to use function MATCH in the requested context}}
do_test func-19.3 {
catchsql {
    SELECT 'abc' NOT MATCH 'xyz';
}
} {1 {unable to use function MATCH in the requested context}}
do_test func-19.4 {
catchsql {
    SELECT match(1,2,3);
}
} {1 {wrong number of arguments to function match()}}

# Soundex tests.
#
if {[catch {db eval {SELECT soundex('hello')}}]} {
set i 0
foreach {name sdx} {
    euler    E460
    EULER    E460
    Euler    E460
    ellery   E460
    gauss    G200
    ghosh    G200
    hilbert  H416
    Heilbronn H416
    knuth    K530
    kant     K530
    Lloyd    L300
    LADD     L300
    Lukasiewicz L222
    Lissajous L222
    A        A000
    12345    ?000

```

```

} {
  incr i
  do_test func-20.$i {
    execsql {SELECT soundex($name)}
  } $sdX
}
}

# Tests of the REPLACE function.
#
do_test func-21.1 {
  catchsql {
    SELECT replace(1,2);
  }
} {1 {wrong number of arguments to function replace()}}
do_test func-21.2 {
  catchsql {
    SELECT replace(1,2,3,4);
  }
} {1 {wrong number of arguments to function replace()}}
do_test func-21.3 {
  execsql {
    SELECT typeof(replace("This is the main test string", NULL, "ALT"));
  }
} {null}
do_test func-21.4 {
  execsql {
    SELECT typeof(replace(NULL, "main", "ALT"));
  }
} {null}
do_test func-21.5 {
  execsql {
    SELECT typeof(replace("This is the main test string", "main", NULL));
  }
} {null}
do_test func-21.6 {
  execsql {
    SELECT replace("This is the main test string", "main", "ALT");
  }
} {{This is the ALT test string}}
do_test func-21.7 {
  execsql {
    SELECT replace("This is the main test string", "main", "larger-main");
  }
} {{This is the larger-main test string}}
do_test func-21.8 {
  execsql {
    SELECT replace("aaaaaa", "a", "0123456789");
  }
}

```

```
}  
} {0123456789012345678901234567890123456789012345678901234567890123456789}
```

```
ifcapable tclvar {  
do_test func-21.9 {  
    # Attempt to exploit a buffer-overflow that at one time existed  
    # in the REPLACE function.  
    set ::str "[string repeat A 29998]CC[string repeat A 35537]"  
    set ::rep [string repeat B 65536]  
    execsql {  
        SELECT LENGTH(REPLACE($::str, 'C', $::rep));  
    }  
} [expr 29998 + 2*65536 + 35537]  
}
```

```
# Tests for the TRIM, LTRIM and RTRIM functions.
```

```
#  
do_test func-22.1 {  
    catchsql {SELECT trim(1,2,3)}  
} {1 {wrong number of arguments to function trim()}}  
do_test func-22.2 {  
    catchsql {SELECT ltrim(1,2,3)}  
} {1 {wrong number of arguments to function ltrim()}}  
do_test func-22.3 {  
    catchsql {SELECT rtrim(1,2,3)}  
} {1 {wrong number of arguments to function rtrim()}}  
do_test func-22.4 {  
    execsql {SELECT trim(' hi ');}  
} {hi}  
do_test func-22.5 {  
    execsql {SELECT ltrim(' hi ');}  
} {{hi }}  
do_test func-22.6 {  
    execsql {SELECT rtrim(' hi ');}  
} {{ hi }}  
do_test func-22.7 {  
    execsql {SELECT trim(' hi ','xyz');}  
} {{ hi }}  
do_test func-22.8 {  
    execsql {SELECT ltrim(' hi ','xyz');}  
} {{ hi }}  
do_test func-22.9 {  
    execsql {SELECT rtrim(' hi ','xyz');}  
} {{ hi }}  
do_test func-22.10 {  
    execsql {SELECT trim('xyxzy hi zzy','xyz');}  
} {{ hi }}  
do_test func-22.11 {
```

```

execsql {SELECT ltrim('xyxzy hi zzy','xyz');}
} {{ hi zzy}}
do_test func-22.12 {
execsql {SELECT rtrim('xyxzy hi zzy','xyz');}
} {{xyxzy hi }}
do_test func-22.13 {
execsql {SELECT trim(' hi ');}
} {{ hi }}
if {[db one {PRAGMA encoding}]=="UTF-8"} {
do_test func-22.14 {
execsql {SELECT hex(trim(x'c280e1bfbff48fbfbf6869',x'6162e1bfbfc280'))}
} {F48FBFBF6869}
do_test func-22.15 {
execsql {SELECT hex(trim(x'6869c280e1bfbff48fbfbf61',
x'6162e1bfbfc280f48fbfbf'))}
} {6869}
do_test func-22.16 {
execsql {SELECT hex(trim(x'ceb1ceb2ceb3',x'ceb1'));}
} {CEB2CEB3}
}
do_test func-22.20 {
execsql {SELECT typeof(trim(NULL));}
} {null}
do_test func-22.21 {
execsql {SELECT typeof(trim(NULL,'xyz'));}
} {null}
do_test func-22.22 {
execsql {SELECT typeof(trim('hello',NULL));}
} {null}

# This is to test the deprecated sqlite3_aggregate_count() API.
#
ifcapable deprecated {
do_test func-23.1 {
sqlite3_create_aggregate db
execsql {
SELECT legacy_count() FROM t6;
}
} {3}
}

# The group_concat() function.
#
do_test func-24.1 {
execsql {
SELECT group_concat(t1) FROM tbl1
}
} {this,program,is,free,software}

```

```

do_test func-24.2 {
    execsql {
        SELECT group_concat(t1,'') FROM tbl1
    }
} {{this program is free software}}
do_test func-24.3 {
    execsql {
        SELECT group_concat(t1,' ' || rowid || ' ') FROM tbl1
    }
} {{this 2 program 3 is 4 free 5 software}}
do_test func-24.4 {
    execsql {
        SELECT group_concat(NULL,t1) FROM tbl1
    }
} {{}}
do_test func-24.5 {
    execsql {
        SELECT group_concat(t1,NULL) FROM tbl1
    }
} {thisprogramisfree software}
do_test func-24.6 {
    execsql {
        SELECT 'BEGIN-'||group_concat(t1) FROM tbl1
    }
} {BEGIN-this,program,is,free,software}

# Ticket #3179: Make sure aggregate functions can take many arguments.
# None of the built-in aggregates do this, so use the md5sum() from the
# test extensions.
#
unset -nocomplain midargs
set midargs {}
unset -nocomplain midres
set midres {}
unset -nocomplain result
for {set i 1} {$i<[sqlite3_limit db SQLITE_LIMIT_FUNCTION_ARG -1]} {incr i} {
    append midargs ,/$i'
    append midres /$i
    set result [md5 \
        "this${midres}program${midres}is${midres}free${midres}software${midres}"]
    set sql "SELECT md5sum(t1$midargs) FROM tbl1"
    do_test func-24.7.$i {
        db eval $::sql
    } $result
}

```

```

# Ticket #3806. If the initial string in a group_concat is an empty
# string, the separator that follows should still be present.

```

```

#
do_test func-24.8 {
    execsql {
        SELECT group_concat(CASE t1 WHEN 'this' THEN " ELSE t1 END) FROM tbl1
    }
} {,program,is,free,software}
do_test func-24.9 {
    execsql {
        SELECT group_concat(CASE WHEN t1!='software' THEN " ELSE t1 END) FROM tbl1
    }
} {,,,,software}

# Ticket #3923. Initial empty strings have a separator. But initial
# NULLs do not.
#
do_test func-24.10 {
    execsql {
        SELECT group_concat(CASE t1 WHEN 'this' THEN null ELSE t1 END) FROM tbl1
    }
} {program,is,free,software}
do_test func-24.11 {
    execsql {
        SELECT group_concat(CASE WHEN t1!='software' THEN null ELSE t1 END) FROM tbl1
    }
} {software}
do_test func-24.12 {
    execsql {
        SELECT group_concat(CASE t1 WHEN 'this' THEN "
            WHEN 'program' THEN null ELSE t1 END) FROM tbl1
    }
} {,is,free,software}

# Use the test_isolation function to make sure that type conversions
# on function arguments do not effect subsequent arguments.
#
do_test func-25.1 {
    execsql {SELECT test_isolation(t1,t1) FROM tbl1}
} {this program is free software}

# Try to misuse the sqlite3_create_function() interface. Verify that
# errors are returned.
#
do_test func-26.1 {
    abuse_create_function db
} {}

# The previous test (func-26.1) registered a function with a very long

```



```

INSERT INTO t29 VALUES(1, 2, 3), (2, NULL, 4), (3, 4.5, 5);
INSERT INTO t29 VALUES(4, randomblob(1000000), 6);
INSERT INTO t29 VALUES(5, "hello", 7);
}
db close
sqlite3 db test.db
sqlite3_db_status db CACHE_MISS 1
db eval {SELECT typeof(x), length(x), typeof(y) FROM t29 ORDER BY id}
} {integer 1 integer null { } integer real 3 integer blob 1000000 integer text 5 integer}
do_test func-29.2 {
set x [lindex [sqlite3_db_status db CACHE_MISS 1] 1]
if {$x<5} {set x 1}
set x
} {1}
do_test func-29.3 {
db close
sqlite3 db test.db
sqlite3_db_status db CACHE_MISS 1
db eval {SELECT typeof(+x) FROM t29 ORDER BY id}
} {integer null real blob text}
if {[permutation] != "mmap"} {
do_test func-29.4 {
set x [lindex [sqlite3_db_status db CACHE_MISS 1] 1]
if {$x>100} {set x many}
set x
} {many}
}
do_test func-29.5 {
db close
sqlite3 db test.db
sqlite3_db_status db CACHE_MISS 1
db eval {SELECT sum(length(x)) FROM t29}
} {1000009}
do_test func-29.6 {
set x [lindex [sqlite3_db_status db CACHE_MISS 1] 1]
if {$x<5} {set x 1}
set x
} {1}

do_execsql_test func-30.1 {SELECT unicode('$');} 36
do_execsql_test func-30.2 [subst {SELECT unicode("\u00A2");}] 162
do_execsql_test func-30.3 [subst {SELECT unicode("\u20AC");}] 8364
do_execsql_test func-30.4 {SELECT char(36,162,8364);} [subst {$\u00A2\u20AC}]

for {set i 1} {$i<0xd800} {incr i 13} {
do_execsql_test func-30.5.$i {SELECT unicode(char($i))} $i
}
for {set i 57344} {$i<=0xffff} {incr i 17} {

```

```
if {$i==0xfeff} continue
do_execsql_test func-30.5.$i {SELECT unicode(char($i))} $i
}
for {set i 65536} {$i<=0x10ffff} {incr i 139} {
do_execsql_test func-30.5.$i {SELECT unicode(char($i))} $i
}
```

finish_test

Found in path(s):

```
* /opt/cola/permits/1146568937_1616563472.04/0/sqlite-3.7.17-8.el7_7.1-1.src.rpm-cosi-expand-archive-lltKQC5N/sqlite-src-3071700.zip-cosi-expand-archive-cheW8kUH/sqlite-src-3071700/test/func.test
```

No license file was found, but licenses were detected in source scan.

2006 September 14

#

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

#

May you do good and not evil.

May you find forgiveness for yourself and forgive others.

May you share freely, never taking more than you give.

#

This file implements regression tests for SQLite library. The

focus of this script is testing the FTS3 module.

#

\$Id: fts3ac.test,v 1.1 2007/08/20 17:38:42 shess Exp \$

#

```
set testdir [file dirname $argv0]
```

```
source $testdir/tester.tcl
```

If SQLITE_ENABLE_FTS3 is defined, omit this file.

```
ifcapable !fts3 {
```

```
  finish_test
```

```
  return
```

```
}
```

Create a table of sample email data. The data comes from email

archives of Enron executives that was published as part of the

litigation against that company.

#

```
do_test fts3ac-1.1 {
```

```
  db eval {
```

```
    CREATE VIRTUAL TABLE email USING fts3([from],[to],subject,body);
```

```
    BEGIN TRANSACTION;
```

```
    INSERT INTO email([from],[to],subject,body) VALUES('savita.puthigai@enron.com', 'traders.eol@enron.com,
```

traders.eol@enron.com', 'EnronOnline- Change to Autohedge', 'Effective Monday, October 22, 2001 the following changes will be made to the Autohedge functionality on EnronOnline.

The volume on the hedge will now respect the minimum volume and volume increment settings on the parent product. See rules below:

- ? If the transaction volume on the child is less than half of the parent's minimum volume no hedge will occur.
- ? If the transaction volume on the child is more than half the parent's minimum volume but less than half the volume increment on the parent, the hedge will volume will be the parent's minimum volume.
- ? For all other volumes, the same rounding rules will apply based on the volume increment on the parent product.

Please see example below:

Parent's Settings:

Minimum: 5000

Increment: 1000

Volume on Autohedge transaction Volume Hedged

1 - 2499 0

2500 - 5499 5000

5500 - 6499 6000');

INSERT INTO email([from],[to],subject,body) VALUES('dana.davis@enron.com', 'laynie.east@enron.com, lisa.king@enron.com, lisa.best@enron.com,', 'Leaving Early', 'FYI:

If it's ok with everyone's needs, I would like to leave @4pm. If you think you will need my assistance past the 4 o'clock hour just let me know; I'll be more than willing to stay.');

INSERT INTO email([from],[to],subject,body) VALUES('enron_update@concuere workplace.com', 'louise.kitchen@enron.com', '<<Concur Expense Document>> - CC02.06.02', 'The following expense report is ready for approval:

Employee Name: Christopher F. Calger

Status last changed by: Mollie E. Gustafson Ms

Expense Report Name: CC02.06.02

Report Total: \$3,972.93

Amount Due Employee: \$3,972.93

To approve this expense report, click on the following link for Concur Expense.

<http://expensexms.enron.com>');

INSERT INTO email([from],[to],subject,body) VALUES('jeff.duff@enron.com', 'julie.johnson@enron.com', 'Work request', 'Julie,

Could you print off the current work request report by 1:30 today?

Gentlemen,

I'd like to review this today at 1:30 in our office. Also, could you provide me with your activity reports so I can have Julie enter this information.

JD');

INSERT INTO email([from],[to],subject,body) VALUES('v.weldon@enron.com', 'gary.l.carrier@usa.dupont.com, scott.joyce@bankofamerica.com', 'Enron News', 'This could turn into something big....
<http://biz.yahoo.com/rf/010129/n29305829.html>');

INSERT INTO email([from],[to],subject,body) VALUES('mark.haedicke@enron.com', 'paul.simons@enron.com', 'Re: First Polish Deal!', 'Congrats! Things seem to be building rapidly now on the Continent. Mark');

INSERT INTO email([from],[to],subject,body) VALUES('e.carter@enron.com', 't.robinson@enron.com', 'FW: Producers Newsletter 9-24-2001', 'The producer lumber pricing sheet.

The producer lumber pricing sheet.

-----Original Message-----

From: Johnson, Jay

Sent: Tuesday, October 16, 2001 3:42 PM

To: Carter, Karen E.

Subject: FW: Producers Newsletter 9-24-2001

-----Original Message-----

From: Daigre, Sergai

Sent: Friday, September 21, 2001 8:33 PM

Subject: Producers Newsletter 9-24-2001

');

INSERT INTO email([from],[to],subject,body) VALUES('david.delainey@enron.com', 'kenneth.lay@enron.com', 'Greater Houston Partnership', 'Ken, in response to the letter from Mr Miguel San Juan, my suggestion would be to offer up the Falcon for their use; however, given the tight time frame and your recent visit with Mr. Fox that it would be difficult for either you or me to participate.

I spoke to Max and he agrees with this approach.

I hope this meets with your approval.

Regards

Delainey');

INSERT INTO email([from],[to],subject,body) VALUES('lachandra.fenceroy@enron.com', 'lindy.donoho@enron.com', 'FW: Bus Applications Meeting Follow Up', 'Lindy,

Here is the original memo we discussed earlier. Please provide any information that you may have.

Your cooperation is greatly appreciated.

Thanks,

lachandra.fenceroy@enron.com

713.853.3884

877.498.3401 Pager

-----Original Message-----

From: Bisbee, Joanne
Sent: Wednesday, September 26, 2001 7:50 AM
To: Fenceroy, LaChandra
Subject: FW: Bus Applications Meeting Follow Up

Lachandra, Please get with David Duff today and see what this is about. Who are our TW accounting business users?

-----Original Message-----

From: Koh, Wendy
Sent: Tuesday, September 25, 2001 2:41 PM
To: Bisbee, Joanne
Subject: Bus Applications Meeting Follow Up

Lisa brought up a TW change effective Nov 1. It involves eliminating a turnback surcharge. I have no other information, but you might check with the business folks for any system changes required.

Wendy');

INSERT INTO email([from],[to],subject,body) VALUES('danny.mccarty@enron.com', 'fran.fagan@enron.com', 'RE: worksheets', 'Fran,

If Julie's merit needs to be lump sum, just move it over to that column. Also, send me Eric Gadd's sheets as well.

Thanks.

Dan

-----Original Message-----

From: Fagan, Fran
Sent: Thursday, December 20, 2001 11:10 AM
To: McCarty, Danny
Subject: worksheets

As discussed, attached are your sheets for bonus and merit.

Thanks,

Fran Fagan
Sr. HR Rep
713.853.5219

<< File: McCartyMerit.xls >> << File: mccartyBonusCommercial_UnP.xls >>

');

INSERT INTO email([from],[to],subject,body) VALUES('bert.meyers@enron.com', 'shift.dl-portland@enron.com', 'OCTOBER SCHEDULE', 'TEAM,

PLEASE SEND ME ANY REQUESTS THAT YOU HAVE FOR OCTOBER. SO FAR I HAVE THEM FOR

LEAF. I WOULD LIKE TO HAVE IT DONE BY THE 15TH OF THE MONTH. ANY QUESTIONS PLEASE GIVE ME A CALL.

BERT');

INSERT INTO email([from],[to],[subject],[body]) VALUES('errol.mclaughlin@enron.com', 'john.arnold@enron.com, bilal.bajwa@enron.com, john.griffith@enron.com,', 'TRV Notification: (NG - PROPT P/L - 09/27/2001)', 'The report named: NG - PROPT P/L <http://trv.corp.enron.com/linkFromExcel.asp?report_cd=11&report_name=NG+-+PROPT+P/L&category_cd=5&category_name=FINANCIAL&toc_hide=1&sTV1=5&TV1Exp=Y¤t_efct_d ate=09/27/2001>, published as of 09/27/2001 is now available for viewing on the website.');

INSERT INTO email([from],[to],[subject],[body]) VALUES('patrice.mims@enron.com', 'calvin.eakins@enron.com', 'Re: Small business supply assistance', 'Hi Calvin

I spoke with Rickey (boy, is he long-winded!!). Gave him the name of our credit guy, Russell Diamond.

Thank for your help!');

INSERT INTO email([from],[to],[subject],[body]) VALUES('legal <hall@enron.com>', 'stephanie.panus@enron.com', 'Termination update', 'City of Vernon and Salt River Project terminated their contracts. I will fax these notices to you.');

INSERT INTO email([from],[to],[subject],[body]) VALUES('d..steffes@enron.com', 'richard.shapiro@enron.com', 'EES / ENA Government Affairs Staffing & Outside Services', 'Rick --

Here is the information on staffing and outside services. Call if you need anything else.

Jim

');

INSERT INTO email([from],[to],[subject],[body]) VALUES('gelliott@industrialinfo.com', 'pcopello@industrialinfo.com', 'ECAAR (Gavin), WSCC (Diablo Canyon), & NPCC (Seabrook)', 'Dear Power Outage Database Customer,

Attached you will find an excel document. The outages contained within are forced or rescheduled outages. Your daily delivery will still contain these outages.

In addition to the two excel documents, there is a dbf file that is formatted like your daily deliveries you receive nightly. This will enable you to load the data into your regular database. Any questions please let me know. Thanks.

Greg Elliott

IIR, Inc.

713-783-5147 x 3481

outages@industrialinfo.com

THE INFORMATION CONTAINED IN THIS E-MAIL IS LEGALLY PRIVILEGED AND CONFIDENTIAL INFORMATION INTENDED ONLY FOR THE USE OF THE INDIVIDUAL OR ENTITY NAMED ABOVE. YOU ARE HEREBY NOTIFIED THAT ANY DISSEMINATION, DISTRIBUTION, OR COPY OF THIS E-MAIL TO UNAUTHORIZED ENTITIES IS STRICTLY PROHIBITED. IF YOU HAVE RECEIVED THIS E-MAIL IN ERROR, PLEASE DELETE IT.

- OUTAGE.dbf

- 111201R.xls

- 111201.xls ');

INSERT INTO email([from],[to],[subject],[body]) VALUES('enron.announcements@enron.com',

'all_ena_egm_eim@enron.com', 'EWS Brown Bag', 'MARK YOUR LUNCH CALENDARS NOW !

You are invited to attend the EWS Brown Bag Lunch Series

Featuring: RAY BOWEN, COO

Topic: Enron Industrial Markets

Thursday, March 15, 2001

11:30 am - 12:30 pm

EB 5 C2

You bring your lunch, Limited Seating

We provide drinks and dessert. RSVP x 3-9610');

INSERT INTO email([from],[to],subject,body) VALUES('chris.germany@enron.com',

'ingrid.immer@williams.com', 'Re: About St Pauls', 'Sounds good to me. I bet this is next to the Warick?? Hotel.

"Immer, Ingrid" <Ingrid.Immer@Williams.com> on 12/21/2000 11:48:47 AM

To: "'chris.germany@enron.com'" <chris.germany@enron.com>

cc:

Subject: About St Pauls

<<About St Pauls.url>>

?

?http://www.stpaulshouston.org/about.html

Chris,

I like the looks of this place.? What do you think about going here Christmas eve?? They have an 11:00 a.m. service and a candlelight service at 5:00 p.m., among others.

Let me know.?? ii

- About St Pauls.url

');

INSERT INTO email([from],[to],subject,body) VALUES('nas@cpuc.ca.gov', 'skatz@sempratrad.com, kmccrea@sabl.com, thompson@wrightlaw.com', 'Reply Brief filed July 31, 2000', '- CPUC01-#76371-v1- Revised_Reply_Brief__Due_today_7_31_.doc');

INSERT INTO email([from],[to],subject,body) VALUES('gascontrol@aglresources.com', 'dscott4@enron.com,

lcampbel@enron.com', 'Alert Posted 10:00 AM November 20,2000: E-GAS Request Reminder', 'Alert Posted 10:00 AM November 20,2000: E-GAS Request Reminder

As discussed in the Winter Operations Meeting on Sept.29,2000,
E-Gas(Emergency Gas) will not be offered this winter as a service from AGLC.
Marketers and Poolers can receive gas via Peaking and IBSS nominations(daisy chain) from other marketers up to the 6 p.m. Same Day 2 nomination cycle.

');

INSERT INTO email([from],[to],subject,body) VALUES('dutch.quigley@enron.com',
'rwoikwitz@powermerchants.com', ', ')

Here is a goody for you');

INSERT INTO email([from],[to],subject,body) VALUES('ryan.o"rouke@enron.com', 'k..allen@enron.com,
randy.bhatia@enron.com, frank.ermis@enron.com,', 'TRV Notification: (West VaR - 11/07/2001)', 'The report
named: West VaR

<http://trv.corp.enron.com/linkFromExcel.asp?report_cd=36&report_name=West+VaR&category_cd=2&category_name=WEST&toc_hide=1&sTV1=2&TV1Exp=Y¤t_efct_date=11/07/2001>, published as of 11/07/2001 is
now available for viewing on the website.');

INSERT INTO email([from],[to],subject,body) VALUES('mjones7@txu.com', 'cstone1@txu.com,
ggreen2@txu.com, timpowell@txu.com,', 'Enron / HPL Actuals for July 10, 2000', 'Teco Tap 10.000 / Enron ;
110.000 / HPL IFERC

LS HPL LSK IC 30.000 / Enron

');

INSERT INTO email([from],[to],subject,body) VALUES('susan.pereira@enron.com', 'kkw816@aol.com', 'soccer
practice', 'Kathy-

Is it safe to assume that practice is cancelled for tonight??

Susan Pereira');

INSERT INTO email([from],[to],subject,body) VALUES('mark.whitt@enron.com', 'barry.tycholiz@enron.com',
'Huber Internal Memo', 'Please look at this. I didn"t know how deep to go with the desk. Do you think this works.

');

INSERT INTO email([from],[to],subject,body) VALUES('m..forney@enron.com', 'george.phillips@enron.com', ",
'George,

Give me a call and we will further discuss opportunities on the 13st floor.

Thanks,

JMForney

3-7160');

INSERT INTO email([from],[to],subject,body) VALUES('brad.mckay@enron.com', 'angusmcka@aol.com', 'Re: (no
subject)', 'not yet');

INSERT INTO email([from],[to],subject,body) VALUES('adam.bayer@enron.com', 'jonathan.mckay@enron.com',
'FW: Curve Fetch File', 'Here is the curve fetch file sent to me. It has plenty of points in it. If you give me a list of
which ones you need we may be able to construct a secondary worksheet to vlookup the values.

adam

35227

-----Original Message-----

From: Royed, Jeff
Sent: Tuesday, September 25, 2001 11:37 AM
To: Bayer, Adam
Subject: Curve Fetch File

Let me know if it works. It may be required to have a certain version of Oracle for it to work properly.

Jeff Royed

Enron

Energy Operations

Phone: 713-853-5295);

INSERT INTO email([from],[to],subject,body) VALUES('matt.smith@enron.com', 'yan.wang@enron.com', 'Report Formats', 'Yan,

The merged reports look great. I believe the only orientation changes are to "unmerge" the following six reports:

31 Keystone Receipts
15 Questar Pipeline
40 Rockies Production
22 West_2
23 West_3
25 CIG_WIC

The orientation of the individual reports should be correct. Thanks.

Mat

PS. Just a reminder to add the "*" by the title of calculated points.);

INSERT INTO email([from],[to],subject,body) VALUES('michelle.lokay@enron.com', 'jimboman@bigfoot.com', 'Egyptian Festival', '----- Forwarded by Michelle Lokay/ET&S/Enron on 09/07/2000 10:08 AM -----

"Karkour, Randa" <Randa.Karkour@COMPAQ.com> on 09/07/2000 09:01:04 AM

To: ""Agheb (E-mail)" <Agheb@aol.com>, "Leila Mankarious (E-mail)" <Leila_Mankarious@mhhs.org>, ""Marymankarious (E-mail)" <marymankarious@aol.com>, "Michelle lokay (E-mail)" <mlokay@enron.com>, "Ramy Mankarious (E-mail)" <Mankarious@aol.com>
cc:

Subject: Egyptian Festival

<<Egyptian Festival.url>>

<http://www.egyptianfestival.com/>

- Egyptian Festival.url

);

INSERT INTO email([from],[to],subject,body) VALUES('errol.mclaughlin@enron.com',
'sherry.dawson@enron.com', 'Urgent!!! --- New EAST books', 'This has to be done.....')

Thanks

----- Forwarded by Errol McLaughlin/Corp/Enron on 12/20/2000
08:39 AM -----

From: William Kelly @ ECT 12/20/2000 08:31 AM

To: Kam Keiser/HOU/ECT@ECT, Darron C Giron/HOU/ECT@ECT, David
Baumbach/HOU/ECT@ECT, Errol McLaughlin/Corp/Enron@ENRON
cc: Kimat Singla/HOU/ECT@ECT, Kulvinder Fowler/NA/Enron@ENRON, Kyle R
Lilly/HOU/ECT@ECT, Jeff Royed/Corp/Enron@ENRON, Alejandra
Chavez/NA/Enron@ENRON, Crystal Hyde/HOU/ECT@ECT

Subject: New EAST books

We have new book names in TAGG for our intramonth portfolios and it is extremely important that any deal booked to the East is communicated quickly to someone on my team. I know it will take some time for the new names to sink in and I do not want us to miss any positions or P&L.

Thanks for your help on this.

New:

Scott Neal : East Northeast

Dick Jenkins: East Marketeast

WK

);

INSERT INTO email([from],[to],subject,body) VALUES('david.forster@enron.com', 'eol.wide@enron.com',
'Change to Stack Manager', 'Effective immediately, there is a change to the Stack Manager which will
affect any Inactive Child.

An inactive Child with links to Parent products will not have their calculated prices updated until the Child product is Activated.

When the Child Product is activated, the price will be recalculated and

updated BEFORE it is displayed on the web.

This means that if you are inputting a basis price on a Child product, you will not see the final, calculated price until you Activate the product, at which time the customer will also see it.

If you have any questions, please contact the Help Desk on:

Americas: 713 853 4357

Europe: + 44 (0) 20 7783 7783

Asia/Australia: +61 2 9229 2300

Dave');

INSERT INTO email([from],[to],subject,body) VALUES('vince.kaminski@enron.com', 'jhh1@email.msn.com', 'Re: Light reading - see pieces beginning on page 7', 'John,

I saw it. Very interesting.

Vince

"John H Herbert" <jhh1@email.msn.com> on 07/28/2000 08:38:08 AM

To: "Vince J Kaminski" <Vince_J_Kaminski@enron.com>

cc:

Subject: Light reading - see pieces beginning on page 7

Cheers and have a nice weekend,

JHHerbert

- gd000728.pdf

');

INSERT INTO email([from],[to],subject,body) VALUES('matthew.lenhart@enron.com', 'mmmarcantel@equiva.com', 'RE:', 'i will try to line up a pig for you ');

INSERT INTO email([from],[to],subject,body) VALUES('jae.black@enron.com', 'claudette.harvey@enron.com, chaun.roberts@enron.com, judy.martinez@enron.com,', 'Disaster Recovery Equipment', 'As a reminder...there are several pieces of equipment that are set up on the 30th Floor, as well as on our floor, for the Disaster Recovery

Team. PLEASE DO NOT TAKE, BORROW OR USE this equipment. Should you need to use another computer system, other than yours, or make conference calls please work with your Assistant to help find or set up equipment for you to use.

Thanks for your understanding in this matter.

T.Jae Black

East Power Trading

Assistant to Kevin Presto

off. 713-853-5800

fax 713-646-8272

cell 713-539-4760);

INSERT INTO email([from],[to],subject,body) VALUES('eric.bass@enron.com', 'dale.neuner@enron.com', '5 X 24', 'Dale,

Have you heard anything more on the 5 X 24s? We would like to get this product out ASAP.

Thanks,

Eric');

INSERT INTO email([from],[to],subject,body) VALUES('messenger@smartreminders.com', 'm..tholt@enron.com', '10% Coupon - PrintPal Printer Cartridges - 100% Guaranteed', '[IMAGE]

[IMAGE][IMAGE][IMAGE]

Dear SmartReminders Member,

[IMAGE] [IMAGE] [IMAGE] [IMAGE] [IMAGE] [IMAGE] [IMAGE] [IMAGE]

We respect your privacy and are a Certified Participant of the BBBOnLine Privacy Program. To be removed from future offers,click here.

SmartReminders.com is a permission based service. To unsubscribe click here . ');

INSERT INTO email([from],[to],subject,body) VALUES('benjamin.rogers@enron.com', 'mark.bernstein@enron.com', 'The guy you are talking about left CIN under a "cloud of suspicion" sort of speak. He was the one who got into several bad deals and PPA's in California for CIN, thus he left on a bad note. Let me know if you need more detail than that, I felt this was the type of info you were looking for. Thanks!

Ben');

INSERT INTO email([from],[to],subject,body) VALUES('enron_update@concreworkplace.com', 'michelle.cash@enron.com', 'Expense Report Receipts Not Received', 'Employee Name: Michelle Cash Report Name: Houston Cellular 8-11-01

Report Date: 12/13/01

Report ID: 594D37C9ED2111D5B452

Submitted On: 12/13/01

You are only allowed 2 reports with receipts outstanding. Your expense reports will not be paid until you meet this requirement.);

INSERT INTO email([from],[to],subject,body) VALUES('susan.mara@enron.com', 'ray.alvarez@enron.com, mark.palmer@enron.com, karen.denne@enron.com,', 'CAISO Emergency Motion -- to discontinue market-based rates for', 'FYI. the latest broadside against the generators.

Sue Mara

Enron Corp.

Tel: (415) 782-7802

Fax:(415) 782-7854

----- Forwarded by Susan J Mara/NA/Enron on 06/08/2001 12:24 PM -----

"Milner, Marcie" <MMilner@coral-energy.com> 06/08/2001 11:13 AM To: ""smara@enron.com"" <smara@enron.com> cc: Subject: CAISO Emergency Motion

Sue, did you see this emergency motion the CAISO filed today? Apparently they are requesting that FERC discontinue market-based rates immediately and grant refunds plus interest on the difference between cost-based rates and market revenues received back to May 2000. They are requesting the commission act within 14 days. Have you heard anything about what they are doing?

Marcie

<http://www.caiso.com/docs/2001/06/08/200106081005526469.pdf>

');

INSERT INTO email([from],[to],subject,body) VALUES('fletcher.sturm@enron.com', 'eloy.escobar@enron.com', 'Re: General Brinks Position Meeting', 'Eloy,

Who is General Brinks?

Fletch');
INSERT INTO email([from],[to],subject,body) VALUES('nailia.dindarova@enron.com',
'richard.shapiro@enron.com', 'Documents for Mark Frevert (on EU developments and lessons from', 'Rick,

Here are the documents that Peter has prepared for Mark Frevert.

Nailia

----- Forwarded by Nailia Dindarova/LON/ECT on 25/06/2001
16:36 -----

Nailia Dindarova

25/06/2001 15:36

To: Michael Brown/Enron@EUEnronXGate

cc: Ross Sankey/Enron@EUEnronXGate, Eric Shaw/ENRON@EUEnronXGate, Peter
Styles/LON/ECT@ECT

Subject: Documents for Mark Frevert (on EU developments and lessons from
California)

Michael,

These are the documents that Peter promised to give to you for Mark Frevert.
He has now handed them to him in person but asked me to transmit them
electronically to you, as well as Eric and Ross.

Nailia

);
INSERT INTO email([from],[to],subject,body) VALUES('peggy.a.kostial@accenture.com',
'dave.samuels@enron.com', 'EOL-Accenture Deal Sheet', 'Dave -

Attached are our comments and suggested changes. Please call to review.

On the time line for completion, we have four critical steps to complete:

- Finalize market analysis to refine business case, specifically
projected revenue stream
- Complete counterparty surveying, including targeting 3 CPs for letters
of intent
- Review Enron asset base for potential reuse/ licensing
- Contract negotiations

Joe will come back to us with an updated time line, but it is my expectation that we are still on the same schedule (we just begun week three) with possibly a week or so slippage.....contract negotiations will probably be the critical path.

We will send our cut at the actual time line here shortly. Thanks,

Peggy

(See attached file: accenture-dealpoints v2.doc)

- accenture-dealpoints v2.doc ');

INSERT INTO email([from],[to],subject,body) VALUES('thomas.martin@enron.com', 'thomas.martin@enron.com', 'Re: Guadalupe Power Partners LP', '----- Forwarded by Thomas A Martin/HOU/ECT on 03/20/2001 03:49 PM -----

Thomas A Martin

10/11/2000 03:55 PM

To: Patrick Wade/HOU/ECT@ECT

cc:

Subject: Re: Guadalupe Power Partners LP

The deal is physically served at Oasis Waha or Oasis Katy and is priced at either HSC, Waha or Katytailgate GD at buyers option three days prior to NYMEX close.

');

INSERT INTO email([from],[to],subject,body) VALUES('judy.townsend@enron.com', 'dan.junek@enron.com, chris.germany@enron.com', 'Columbia Distribution"s Capacity Available for Release - Sum', '----- Forwarded by Judy Townsend/HOU/ECT on 03/09/2001 11:04 AM -----

agoddard@nsource.com on 03/08/2001 09:16:57 AM

To: " - *Koch, Kent" <kkoch@nsource.com>, " - *Millar, Debra" <dmillar@nsource.com>, " - *Burke, Lynn" <lburke@nsource.com>

cc: " - *Heckathorn, Tom" <theckathorn@nsource.com>

Subject: Columbia Distribution"s Capacity Available for Release - Sum

Attached is Columbia Distribution"s notice of capacity available for release for the summer of 2001 (Apr. 2001 through Oct. 2001).

Please note that the deadline for bids is 3:00pm EST on March 20, 2001.

If you have any questions, feel free to contact any of the representatives

listed
at the bottom of the attachment.

Aaron Goddard

- 2001Summer.doc

);

INSERT INTO email([from],[to],subject,body) VALUES('rhonda.denton@enron.com', 'tim.belden@enron.com, dana.davis@enron.com, genia.fitzgerald@enron.com,', 'Split Rock Energy LLC', 'We have received the executed EEI contract from this CP dated 12/12/2000.

Copies will be distributed to Legal and Credit.');

INSERT INTO email([from],[to],subject,body) VALUES('kerrymcelroy@dwt.com', 'jack.speer@alcoa.com, crow@millernash.com, michaelearly@earthlink.net,', 'Oral Argument Request', ' - Oral Argument Request.doc');

INSERT INTO email([from],[to],subject,body) VALUES('mike.carson@enron.com', 'rlmichaelis@hormel.com', ', 'Did you come in town this wk end..... My new number at our house is :
713-668-3712..... my cell # is 281-381-7332

the kid');

INSERT INTO email([from],[to],subject,body) VALUES('cooper.richey@enron.com', 'trycooper@hotmail.com', 'FW: Contact Info', '

-----Original Message-----

From: Punja, Karim

Sent: Thursday, December 13, 2001 2:35 PM

To: Richey, Cooper

Subject: Contact Info

Cooper,

Its been a real pleasure working with you (even though it was for only a small amount of time)
I hope we can stay in touch.

Home# 234-0249

email: kpunja@hotmail.com

Take Care,

Karim.

);

INSERT INTO email([from],[to],subject,body) VALUES('bjm30@earthlink.net', 'mcguinn.k@enron.com, mcguinn.ian@enron.com, mcguinn.stephen@enron.com,', 'email address change', 'Hello all.

I haven't talked to many of you via email recently but I do want to give you
my new address for your email file:

bjm30@earthlink.net

I hope all is well.

Brian McGuinn');

INSERT INTO email([from],[to],subject,body) VALUES('shelley.corman@enron.com', 'steve.hotte@enron.com', 'Flat Panels', 'Can you please advise what is going on with the flat panels that we had planned to distribute to our gas logistics team. It was in the budget and we had the okay, but now I'm hearing there is some hold-up & the units are stored on 44.

Shelley');

INSERT INTO email([from],[to],subject,body) VALUES('sara.davidson@enron.com', 'john.schwartzenburg@enron.com, scott.dieball@enron.com, recipients@enron.com,', '2001 Enron Law Conference (Distribution List 2)', ' Enron Law Conference

San Antonio, Texas May 2-4, 2001 Westin Riverwalk

See attached memo for more details!!

? Registration for the law conference this year will be handled through an Online RSVP Form on the Enron Law Conference Website at <http://lawconference.corp.enron.com>. The website is still under construction and will not be available until Thursday, March 15, 2001.

? We will send you another e-mail to confirm when the Law Conference Website is operational.

? Please complete the Online RSVP Form as soon as it is available and submit it no later than Friday, March 30th.

');

INSERT INTO email([from],[to],subject,body) VALUES('tori.kuykendall@enron.com', 'heath.b.taylor@accenture.com', 'Re:', 'hey - thats funny about john - he definitely remembers him - i'll call pat and let him know - we are coming on saturday - i just havent had a chance to call you guys back -- looking forward to it -- i probably need the directions again though');

INSERT INTO email([from],[to],subject,body) VALUES('darron.giron@enron.com', 'bryce.baxter@enron.com', 'Re: Feedback for Audrey Cook', 'Bryce,

I'll get it done today.

DG 3-9573

From: Bryce Baxter

06/12/2000 07:15 PM

To: Darron C Giron/HOU/ECT@ECT

cc:

Subject: Feedback for Audrey Cook

You were identified as a reviewer for Audrey Cook. If possible, could you complete her feedback by end of business Wednesday? It will really help me in the PRC process to have your input. Thanks.

);

```
INSERT INTO email([from],[to],subject,body) VALUES('casey.evans@enron.com', 'stephanie.sever@enron.com', 'Gas EOL ID', 'Stephanie,
```

In conjunction with the recent movement of several power traders, they are changing the names of their gas books as well. The names of the new gas books and traders are as follows:

PWR-NG-LT-SPP: Mike Carson

PWR-NG-LT-SERC: Jeff King

If you need to know their power desk to map their ID to their gas books, those desks are as follows:

EPMI-LT-SPP: Mike Carson

EPMI-LT-SERC: Jeff King

I will be in training this afternoon, but will be back when class is over. Let me know if you have any questions.

Thanks for your help!

Casey);

```
INSERT INTO email([from],[to],subject,body) VALUES('darrell.schoolcraft@enron.com', 'david.roensch@enron.com, kimberly.watson@enron.com, michelle.lokay@enron.com,', 'Postings', 'Please see the attached.
```

ds

);

```
INSERT INTO email([from],[to],subject,body) VALUES('mcominsky@aol.com', 'cpatman@bracepatt.com, james_derrick@enron.com', 'Jurisprudence Luncheon', 'Carrin & Jim --
```

It was an honor and a pleasure to meet both of you yesterday. I know we will have fun working together on this very special event.

Jeff left the jurisprudence luncheon lists for me before he left on vacation. I wasn't sure whether he transmitted them to you as well. Would you please advise me if you would like them sent to you? I can email the MS Excel files or I can fax the hard copies to you. Please advise what is most convenient.

I plan to be in town through the holidays and can be reached by phone, email, or cell phone at any time. My cell phone number is 713/705-4829.

Thanks again for your interest in the ADL's work. Martin.

Martin B. Cominsky
Director, Southwest Region
Anti-Defamation League
713/627-3490, ext. 122
713/627-2011 (fax)
MCominsky@aol.com);

INSERT INTO email([from],[to],subject,body) VALUES('phillip.love@enron.com', 'todagost@utmb.edu, gbsonnta@utmb.edu', 'New President', 'I had a little bird put a word in my ear. Is there any possibility for Ben Raimer to be Bush's secretary of HHS? Just curious about that infamous UTMB rumor mill. Hope things are well, happy holidays.

PL');

INSERT INTO email([from],[to],subject,body) VALUES('marie.heard@enron.com', 'ehamilton@fna.com', 'ISDA Master Agreement', 'Erin:

Pursuant to your request, attached are the Schedule to the ISDA Master Agreement, together with Paragraph 13 to the ISDA Credit Support Annex. Please let me know if you need anything else. We look forward to hearing your comments.

Marie

Marie Heard
Senior Legal Specialist
Enron North America Corp.
Phone: (713) 853-3907
Fax: (713) 646-3490
marie.heard@enron.com

');

INSERT INTO email([from],[to],subject,body) VALUES('andrea.ring@enron.com', 'beverly.beaty@enron.com', 'Re: Tennessee Buy - Louis Dreyfus', 'Beverly - once again thanks so much for your help on this.

');

INSERT INTO email([from],[to],subject,body) VALUES('karolyn.criado@enron.com', 'j.bonin@enron.com,

felicia.case@enron.com, b.clapp@enron.com,', 'Price List week of Oct. 8-9, 2001', '

Please contact me if you have any questions regarding last weeks prices.

Thank you,
Karolyn Criado
3-9441

');

INSERT INTO email([from],[to],subject,body) VALUES('kevin.presto@enron.com',
'edward.baughman@enron.com, billy.braddock@enron.com', 'Associated', 'Please begin working on filling our
Associated short position in 02. I would like to take this risk off the books.

In addition, please find out what a buy-out of VEPCO would cost us. With Rogers transitioning to run our retail
risk management, I would like to clean up our customer positions.

We also need to continue to explore a JEA buy-out.

Thanks.');

INSERT INTO email([from],[to],subject,body) VALUES('stacy.dickson@enron.com', 'gregg.penman@enron.com',
'RE: Constellation TC 5-7-01', 'Gregg,

I am at home with a sick baby. (Lots of fun!) I will call you about this
tomorrow.

Stacy');

INSERT INTO email([from],[to],subject,body) VALUES('joe.quenet@enron.com', 'dfincher@utilicorp.com', ", 'hey
big guy.....check this out.....

w ww.gorelieberman-2000.com/');

INSERT INTO email([from],[to],subject,body) VALUES('k..allen@enron.com', 'jacqestc@aol.com', ", 'Jacques,

I sent you a fax of Kevin Kolb's comments on the release. The payoff on the note would be \$36,248
(\$36090(principal) + \$158 (accrued interest)).

This is assuming we wrap this up on Tuesday.

Please email to confirm that their changes are ok so I can set up a meeting on Tuesday to reach closure.

Phillip');

INSERT INTO email([from],[to],subject,body) VALUES('kourtney.nelson@enron.com',
'mike.swerzbin@enron.com', 'Adjusted L/R Balance', 'Mike,

I placed the adjusted L/R Balance on the Enronwest site. It is under the "Staff/Kourtney Nelson". There are two
links:

1) "Adj L_R" is the same data/format from the weekly strategy meeting.

2) "New Gen 2001_2002" link has all of the supply side info that is used to calculate the L/R balance
-Please note the Data Flag column, a value of "3" indicates the project was cancelled, on hold, etc and is not included in the calc.

Both of these sheets are interactive Excel spreadsheets and thus you can play around with the data as you please. Also, James Bruce is working to get his gen report on the web. That will help with your access to information on new gen.

Please let me know if you have any questions or feedback,

Kourtney

Kourtney Nelson

Fundamental Analysis

Enron North America

(503) 464-8280

kourtney.nelson@enron.com);

INSERT INTO email([from],[to],subject,body) VALUES('d..thomas@enron.com', 'naveed.ahmed@enron.com', 'FW: Current Enron TCC Portfolio', '

-----Original Message-----

From: Grace, Rebecca M.

Sent: Monday, December 17, 2001 9:44 AM

To: Thomas, Paul D.

Cc: Cashion, Jim; Allen, Thresa A.; May, Tom

Subject: RE: Current Enron TCC Portfolio

Paul,

I reviewed NY's list. I agree with all of their contracts numbers and mw amounts.

Call if you have any more questions.

Rebecca

-----Original Message-----

From: Thomas, Paul D.

Sent: Monday, December 17, 2001 9:08 AM

To: Grace, Rebecca M.

Subject: FW: Current Enron TCC Portfolio

<< File: enrontccs.xls >>

Rebecca,

Let me know if you see any differences.

Paul

X 3-0403

-----Original Message-----

From: Thomas, Paul D.

Sent: Monday, December 17, 2001 9:04 AM

To: Ahmed, Naveed

Subject: FW: Current Enron TCC Portfolio

-----Original Message-----

From: Thomas, Paul D.

Sent: Thursday, December 13, 2001 10:01 AM

To: Baughman, Edward D.

Subject: Current Enron TCC Portfolio

');

INSERT INTO email([from],[to],subject,body) VALUES('stephanie.panus@enron.com',
'william.bradford@enron.com, debbie.brackett@enron.com,', 'Coastal Merchant Energy/El Paso Merchant Energy',
'Coastal Merchant Energy, L.P. merged with and into El Paso Merchant Energy,
L.P., effective February 1, 2001, with the surviving entity being El Paso
Merchant Energy, L.P. We currently have ISDA Master Agreements with both
counterparties. Please see the attached memo regarding the existing Masters
and let us know which agreement should be terminated.

Thanks,

Stephanie

');

INSERT INTO email([from],[to],subject,body) VALUES('kam.keiser@enron.com', 'c..kenne@enron.com', 'RE:
What about this too???' , '

-----Original Message-----

From: Kenne, Dawn C.

Sent: Wednesday, February 06, 2002 11:50 AM

To: Keiser, Kam

Subject: What about this too???

<< File: Netco Trader Matrix.xls >>

');

INSERT INTO email([from],[to],subject,body) VALUES('chris.meyer@enron.com', 'joe.parks@enron.com',
'Centana', 'Talked to Chip. We do need Cash Committe approval given the netting feature of your deal, which
means Batch Funding Request. Please update per my previous e-mail and forward.

Thanks

chris

x31666);

INSERT INTO email([from],[to],subject,body) VALUES('debra.perlingiere@enron.com',
'jworman@academyofhealth.com', '', 'Have a great weekend! Happy Fathers Day!')

Debra Perlingiere

Enron North America Corp.

1400 Smith Street, EB 3885

Houston, Texas 77002

dperlin@enron.com

Phone 713-853-7658

Fax 713-646-3490);

INSERT INTO email([from],[to],subject,body) VALUES('outlook.team@enron.com', '', 'Demo by Martha Janousek
of Dashboard & Pipeline Profile / Julia &', 'CALENDAR ENTRY: APPOINTMENT')

Description:

Demo by Martha Janousek of Dashboard & Pipeline Profile / Julia & Dir Rpts. - 4102

Date: 1/5/2001

Time: 9:00 AM - 10:00 AM (Central Standard Time)

Chairperson: Outlook Migration Team

Detailed Description:);

INSERT INTO email([from],[to],subject,body) VALUES('diana.seifert@enron.com', 'mark.taylor@enron.com',
'Guest access Chile', 'Hello Mark,

Justin Boyd told me that your can help me with questions regarding Chile.

We got a request for guest access through MG.

The company is called Escondida and is a subsidiary of BHP Australia.

Please advise if I can set up a guest account or not.

F.Y.I.: MG is planning to put a "in w/h Chile" contract for Copper on-line as
soon as Enron has done the due diligence for this country.

Thanks !

Best regards

Diana Seifert

EOL PCG);

INSERT INTO email([from],[to],subject,body) VALUES('enron_update@concreworkplace.com',
'mark.whitt@enron.com', '<<Concur Expense Document>> - 121001', 'The Approval status has changed on the
following report:

Status last changed by: Barry L. Tycholiz

Expense Report Name: 121001

Report Total: \$198.98

Amount Due Employee: \$198.98

Amount Approved: \$198.98

Amount Paid: \$0.00

Approval Status: Approved

Payment Status: Pending

To review this expense report, click on the following link for Concur Expense.

<http://expensecms.enron.com>');

INSERT INTO email([from],[to],subject,body) VALUES('kevin.hyatt@enron.com', ' ', 'Technical Support', 'Outside the U.S., please refer to the list below:

Australia:

1800 678-515

support@palm-au.com

Canada:

1905 305-6530

support@palm.com

New Zealand:

0800 446-398

support@palm-nz.com

U.K.:

0171 867 0108

eurosupport@palm.3com.com

Please refer to the Worldwide Customer Support card for a complete technical support contact list.');

INSERT INTO email([from],[to],subject,body) VALUES('geoff.storey@enron.com', 'dutch.quigley@enron.com', 'RE:', 'duke contact?'

-----Original Message-----

From: Quigley, Dutch

Sent: Wednesday, October 31, 2001 10:14 AM

To: Storey, Geoff

Subject: RE:

bp corp Albert LaMore 281-366-4962

running the reports now

-----Original Message-----

From: Storey, Geoff

Sent: Wednesday, October 31, 2001 10:10 AM

To: Quigley, Dutch

Subject: RE:

give me a contact over there too

BP

-----Original Message-----

From: Quigley, Dutch

Sent: Wednesday, October 31, 2001 9:42 AM

To: Storey, Geoff

Subject:

Coral Jeff Whitnah 713-767-5374

Relaint Steve McGinn 713-207-4000);

INSERT INTO email([from],[to],subject,body) VALUES('pete.davis@enron.com', 'pete.davis@enron.com', 'Start Date: 4/22/01; HourAhead hour: 3; <CODESITE>', 'Start Date: 4/22/01; HourAhead hour: 3; No ancillary schedules awarded.

Variances detected.

Variances detected in Load schedule.

LOG MESSAGES:

PARSING FILE -->> O:\Portland\WestDesk\California Scheduling\ISO Final Schedules\2001042203.txt

---- Load Schedule ----

\$\$\$ Variance found in table tblLoads.

Details: (Hour: 3 / Preferred: 1.92 / Final: 1.89)

TRANS_TYPE: FINAL

LOAD_ID: PGE4

MKT_TYPE: 2

TRANS_DATE: 4/22/01

SC_ID: EPMI

');

INSERT INTO email([from],[to],subject,body) VALUES('john.postlethwaite@enron.com', 'john.zufferli@enron.com', 'Reference', 'John, hope things are going well up there for you. The big day is almost here for you and Jessica. I was wondering if I could use your name as a job reference if need be. I am just trying to get everything in order just in case something happens.

John');

INSERT INTO email([from],[to],subject,body) VALUES('jeffrey.shankman@enron.com', 'Ischiffm@jonesday.com', 'Re:', 'I saw you called on the cell this a.m. Sorry I missed you. (I was in the shower). I have had a shitty week--I suspect my silence (not only to you, but others) after our phone call is a result of the week. I'm seeing Glen at 11:15....talk to you');

INSERT INTO email([from],[to],subject,body) VALUES('litebytz@enron.com', ', 'Lite Bytz RSVP', '
This week's Lite Bytz presentation will feature the following TOOLZ speaker:

Richard McDougall
Solaris 8
Thursday, June 7, 2001

If you have not already signed up, please RSVP via email to litebytz@enron.com by the end of the day Tuesday, June 5, 2001.

*Remember: this is now a Brown Bag Event--so bring your lunch and we will provide cookies and drinks.

Click below for more details.

```
http://home.enron.com:84/messaging/litebytztoolzprint.jpg');  
  COMMIT;  
}  
} {}
```

```
#####  
# Everything above just builds an interesting test database. The actual  
# tests come after this comment.  
#####
```

```
do_test fts3ac-1.2 {  
  execsql {  
    SELECT rowid FROM email WHERE email MATCH 'mark'  
  }  
} {6 17 25 38 40 42 73 74}  
do_test fts3ac-1.3 {  
  execsql {  
    SELECT rowid FROM email WHERE email MATCH 'susan'  
  }  
} {24 40}  
do_test fts3ac-1.4 {  
  execsql {  
    SELECT rowid FROM email WHERE email MATCH 'mark susan'  
  }  
} {40}  
do_test fts3ac-1.5 {  
  execsql {  
    SELECT rowid FROM email WHERE email MATCH 'susan mark'  
  }  
} {40}  
do_test fts3ac-1.6 {  
  execsql {  
    SELECT rowid FROM email WHERE email MATCH "'mark susan'"  
  }  
}
```

```

} {}
do_test fts3ac-1.7 {
  execsql {
    SELECT rowid FROM email WHERE email MATCH 'mark -susan'
  }
} {6 17 25 38 42 73 74}
do_test fts3ac-1.8 {
  execsql {
    SELECT rowid FROM email WHERE email MATCH '-mark susan'
  }
} {24}
do_test fts3ac-1.9 {
  execsql {
    SELECT rowid FROM email WHERE email MATCH 'mark OR susan'
  }
} {6 17 24 25 38 40 42 73 74}

# Some simple tests of the automatic "offsets(email)" column. In the sample
# data set above, only one message, number 20, contains the words
# "gas" and "reminder" in both body and subject.
#
do_test fts3ac-2.1 {
  execsql {
    SELECT rowid, offsets(email) FROM email
    WHERE email MATCH 'gas reminder'
  }
} {20 {2 0 42 3 2 1 54 8 3 0 42 3 3 1 54 8 3 0 129 3 3 0 143 3 3 0 240 3}}
do_test fts3ac-2.2 {
  execsql {
    SELECT rowid, offsets(email) FROM email
    WHERE email MATCH 'subject:gas reminder'
  }
} {20 {2 0 42 3 2 1 54 8 3 1 54 8}}
do_test fts3ac-2.3 {
  execsql {
    SELECT rowid, offsets(email) FROM email
    WHERE email MATCH 'body:gas reminder'
  }
} {20 {2 1 54 8 3 0 42 3 3 1 54 8 3 0 129 3 3 0 143 3 3 0 240 3}}
do_test fts3ac-2.4 {
  execsql {
    SELECT rowid, offsets(email) FROM email
    WHERE subject MATCH 'gas reminder'
  }
} {20 {2 0 42 3 2 1 54 8}}
do_test fts3ac-2.5 {
  execsql {
    SELECT rowid, offsets(email) FROM email

```

```

WHERE body MATCH 'gas reminder'
}
} {20 {3 0 42 3 3 1 54 8 3 0 129 3 3 0 143 3 3 0 240 3}}

# Document 32 contains 5 instances of the world "child". But only
# 3 of them are paired with "product". Make sure only those instances
# that match the phrase appear in the offsets(email) list.
#
do_test fts3ac-3.1 {
execsql {
SELECT rowid, offsets(email) FROM email
WHERE body MATCH 'child product' AND +rowid=32
}
} {32 {3 0 94 5 3 0 114 5 3 0 207 5 3 1 213 7 3 0 245 5 3 1 251 7 3 0 409 5 3 1 415 7 3 1 493 7}}
do_test fts3ac-3.2 {
execsql {
SELECT rowid, offsets(email) FROM email
WHERE body MATCH "child product"
}
} {32 {3 0 207 5 3 1 213 7 3 0 245 5 3 1 251 7 3 0 409 5 3 1 415 7}}

# Snippet generator tests
#
do_test fts3ac-4.1 {
execsql {
SELECT snippet(email) FROM email
WHERE email MATCH 'subject:gas reminder'
}
} {{Alert Posted 10:00 AM November 20,2000: E-<b>GAS</b> Request <b>Reminder</b>}}
do_test fts3ac-4.2 {
execsql {
SELECT snippet(email) FROM email
WHERE email MATCH 'christmas candlelight'
}
} {{<b>...</b>here <b>Christmas</b>
eve?? They have an 11:00 a.m. service and a <b>candlelight</b> service<b>...</b>}}

do_test fts3ac-4.3 {
execsql {
SELECT snippet(email) FROM email
WHERE email MATCH 'deal sheet potential reuse'
}
} {{EOL-Accenture <b>Deal</b> <b>Sheet</b><b>...</b>asset base for <b>potential</b> <b>reuse</b>/ licensing
Contract negotiations<b>...</b>}}
do_test fts3ac-4.4 {
execsql {
SELECT snippet(email,'<<<','>>>',') FROM email
WHERE email MATCH 'deal sheet potential reuse'
}
}

```

```

}
} {{EOL-Accenture <<<Deal>>> <<<Sheet>>> asset base for <<<potential>>> <<<reuse>>>/ licensing
  Contract negotiations }}
do_test fts3ac-4.5 {
  execsql {
    SELECT snippet(email,'<<<,>>>',') FROM email
    WHERE email MATCH 'first things'
  }
} {{Re: <<<First>>> Polish Deal! Congrats! <<<Things>>> seem to be building rapidly now }}
do_test fts3ac-4.6 {
  execsql {
    SELECT snippet(email) FROM email
    WHERE email MATCH 'chris is here'
  }
} {{<b>...</b><b>chris</b>.germany@enron.com" <b>chris</b><b>...</b>bet this <b>is</b> next
to<b>...</b>about going <b>here</b> Christmas
eve<b>...</b>}}
do_test fts3ac-4.7 {
  execsql {
    SELECT snippet(email) FROM email
    WHERE email MATCH "'pursuant to'"
  }
} {{Erin:

<b>Pursuant</b> <b>to</b> your request, attached are the Schedule to the ISDA Master Agreement,
together<b>...</b>}}
do_test fts3ac-4.8 {
  execsql {
    SELECT snippet(email) FROM email
    WHERE email MATCH 'ancillary load davis'
  }
} {{pete.<b>davis</b>@enron.com<b>...</b>3; No <b>ancillary</b> schedules awarded<b>...</b>detected in
<b>Load</b> schedule.

  LOG<b>...</b>}}

# Combinations of AND and OR operators:
#
do_test fts3ac-5.1 {
  execsql {
    SELECT snippet(email) FROM email
    WHERE email MATCH 'questar enron OR com'
  }
} {{matt.smith@<b>enron</b>.<b>com</b><b>...</b>31 Keystone Receipts
15 <b>Questar</b> Pipeline
40 Rockies<b>...</b>}}

do_test fts3ac-5.2 {

```

```

execsql {
  SELECT snippet(email) FROM email
  WHERE email MATCH 'enron OR com questar'
}
} {{matt.smith@<b>enron</b>.<b>com</b><b>...</b>31 Keystone Receipts
15 <b>Questar</b> Pipeline
40 Rockies<b>...</b>}}

```

#-----

Test a problem reported on the mailing list.

#

```

do_test fts3ac-6.1 {
  execsql {
    CREATE VIRTUAL TABLE ft USING fts3(one, two);
    INSERT INTO ft VALUES(", 'foo');
    INSERT INTO ft VALUES('foo', 'foo');
    SELECT offsets(ft) FROM ft WHERE ft MATCH 'foo';
  }
} {{1 0 0 3} {0 0 0 3 1 0 0 3}}

```

```

do_test fts3ac-6.2 {
  execsql {
    DELETE FROM ft WHERE one = 'foo';
    SELECT offsets(ft) FROM ft WHERE ft MATCH 'foo';
  }
} {{1 0 0 3}}

```

finish_test

Found in path(s):

* /opt/cola/permits/1146568937_1616563472.04/0/sqlite-3.7.17-8.el7_7.1-1.src.rpm-cosi-expand-archive-lltKQC5N/sqlite-src-3071700.zip-cosi-expand-archive-cheW8kUH/sqlite-src-3071700/test/fts3ac.test
No license file was found, but licenses were detected in source scan.

%%Copyright: Copyright(C)2000-2006 Adobe Systems, Inc. All Rights Reserved.

%%Copyright: Copyright(C)1997-2007 Adobe Systems, Inc. All Rights Reserved.

%%BeginResource: procset Adobe_CoolType_Core 2.31 0

Found in path(s):

* /opt/cola/permits/1146568937_1616563472.04/0/sqlite-3.7.17-8.el7_7.1-1.src.rpm-cosi-expand-archive-lltKQC5N/sqlite-src-3071700.zip-cosi-expand-archive-cheW8kUH/sqlite-src-3071700/art/sqlite370.eps
No license file was found, but licenses were detected in source scan.

SQLite is open source, and is available in the public domain

Found in path(s):

* /opt/cola/permits/1146568937_1616563472.04/0/sqlite-3.7.17-8.el7_7.1-1.src.rpm-cosi-expand-archive-lltKQC5N/sqlite-doc-3071700.zip-cosi-expand-archive-r9EckcaZ/sqlite-doc-3071700/books.html

No license file was found, but licenses were detected in source scan.

application is free to use the same [database connection](..c3ref/sqlite3.html) or the

Found in path(s):

* /opt/cola/permits/1146568937_1616563472.04/0/sqlite-3.7.17-8.el7_7.1-1.src.rpm-cosi-expand-archive-lltKQC5N/sqlite-doc-3071700.zip-cosi-expand-archive-r9EckcaZ/sqlite-doc-3071700/c3ref/c_config_covering_index_scan.html

No license file was found, but licenses were detected in source scan.

)putinterval

Found in path(s):

* 1 index 0(BadFont)

No license file was found, but licenses were detected in source scan.

SQLite is high-quality, public domain software. The goal of members can also request their own private, proprietary extensions

Found in path(s):

* /opt/cola/permits/1146568937_1616563472.04/0/sqlite-3.7.17-8.el7_7.1-1.src.rpm-cosi-expand-archive-lltKQC5N/sqlite-doc-3071700.zip-cosi-expand-archive-r9EckcaZ/sqlite-doc-3071700/consortium.html

No license file was found, but licenses were detected in source scan.

[Public Domain](http://en.wikipedia.org/wiki/Public_Domain)

[public domain](http://en.wikipedia.org/wiki/Public_Domain)

the public domain and originals of

author, and all of those authors have public domain dedications

Even though SQLite is in the public domain and does not require

the public domain.

their contributions to the public domain.

in this code to the public domain. We make this dedication for the benefit

Found in path(s):

* /opt/cola/permits/1146568937_1616563472.04/0/sqlite-3.7.17-8.el7_7.1-1.src.rpm-cosi-expand-archive-lltKQC5N/sqlite-doc-3071700.zip-cosi-expand-archive-r9EckcaZ/sqlite-doc-3071700/copyright.html

No license file was found, but licenses were detected in source scan.

is free to use SQLite from multiple threads, but it must make sure

Found in path(s):

* /opt/cola/permits/1146568937_1616563472.04/0/sqlite-3.7.17-8.el7_7.1-1.src.rpm-cosi-expand-archive-lltKQC5N/sqlite-doc-3071700.zip-cosi-expand-archive-r9EckcaZ/sqlite-doc-3071700/custombuild.html

No license file was found, but licenses were detected in source scan.

Sources are in the [public domain](copyright.html).

Rather than using fopen() to write XML or some proprietary format into

Found in path(s):

* /opt/cola/permits/1146568937_1616563472.04/0/sqlite-3.7.17-8.el7_7.1-1.src.rpm-cosi-expand-archive-lltKQC5N/sqlite-doc-3071700.zip-cosi-expand-archive-r9EckcaZ/sqlite-doc-3071700/features.html

No license file was found, but licenses were detected in source scan.

/*

** The "printf" code that follows dates from the 1980's. It is in
** the public domain. The original comments are included here for
** completeness. They are very out-of-date but might be useful as
** an historical reference. Most of the "enhancements" have been backed
** out so that the functionality is now the same as standard printf().

**

**

** This file contains code for a set of "printf"-like routines. These
** routines format strings much like the printf() from the standard C
** library, though the implementation here has enhancements to support
** SQLite.

*/

Found in path(s):

* /opt/cola/permits/1146568937_1616563472.04/0/sqlite-3.7.17-8.el7_7.1-1.src.rpm-cosi-expand-archive-lltKQC5N/sqlite-src-3071700.zip-cosi-expand-archive-cheW8kUH/sqlite-src-3071700/src/printf.c

No license file was found, but licenses were detected in source scan.

Copyright 1997-2006 Adobe Systems Incorporated. All Rights Reserved.

Copyright 1987-2006 Adobe Systems Incorporated.

Copyright 1987-2004 Adobe Systems Incorporated.

Copyright 1987-2001 Adobe Systems Incorporated.

Found in path(s):

* %%Copyright

No license file was found, but licenses were detected in source scan.

/*

** 2004 May 22

**

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

**

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

**

**

** This file contains the VFS implementation for unix-like operating systems
** include Linux, MacOSX, *BSD, QNX, VxWorks, AIX, HPUX, and others.

```

**
** There are actually several different VFS implementations in this file.
** The differences are in the way that file locking is done. The default
** implementation uses Posix Advisory Locks. Alternative implementations
** use flock(), dot-files, various proprietary locking schemas, or simply
** skip locking all together.
**
** This source file is organized into divisions where the logic for various
** subfunctions is contained within the appropriate division. PLEASE
** KEEP THE STRUCTURE OF THIS FILE INTACT. New code should be placed
** in the correct division and should be clearly labeled.
**
** The layout of divisions is as follows:
**
** * General-purpose declarations and utility functions.
** * Unique file ID logic used by VxWorks.
** * Various locking primitive implementations (all except proxy locking):
**   + for Posix Advisory Locks
**   + for no-op locks
**   + for dot-file locks
**   + for flock() locking
**   + for named semaphore locks (VxWorks only)
**   + for AFP filesystem locks (MacOSX only)
** * sqlite3_file methods not associated with locking.
** * Definitions of sqlite3_io_methods objects for all locking
**   methods plus "finder" functions for each locking method.
** * sqlite3_vfs method implementations.
** * Locking primitives for the proxy uber-locking-method. (MacOSX only)
** * Definitions of sqlite3_vfs objects for all locking methods
**   plus implementations of sqlite3_os_init() and sqlite3_os_end().
**
*/

```

Found in path(s):

```

* /opt/cola/permits/1146568937_1616563472.04/0/sqlite-3.7.17-8.el7_7.1-1.src.rpm-cosi-expand-archive-
lltKQC5N/sqlite-src-3071700.zip-cosi-expand-archive-cheW8kUH/sqlite-src-3071700/src/os_unix.c

```

No license file was found, but licenses were detected in source scan.

```

%define name sqlite
%define version SQLITE_VERSION
%define release 1

```

Name: %{ name }

Summary: SQLite is a C library that implements an embeddable SQL database engine

Version: %{ version }

Release: %{ release }

Source: %{ name }-%{ version }.tar.gz

Group: System/Libraries

URL: <http://www.sqlite.org/>

License: Public Domain

BuildRoot: % {_tmppath}/% {name}-% {version}-root

%description

SQLite is a software library that implements a self-contained, serverless, zero-configuration, transactional SQL database engine.

Programs that link with the SQLite library can have SQL database access without running a separate RDBMS process. The distribution comes with a standalone command-line access program (sqlite) that can be used to administer an SQLite database and which serves as an example of how to use the SQLite library.

%package -n % {name}-devel

Summary: Header files and libraries for developing apps which will use sqlite

Group: Development/C

Requires: % {name} = % {version}-% {release}

%description -n % {name}-devel

The sqlite-devel package contains the header files and libraries needed to develop programs that use the SQLite database library.

%prep

%setup -q -n % {name}

%build

CFLAGS="%optflags -DNDEBUG=1" CXXFLAGS="%optflags -DNDEBUG=1" ./configure --prefix=% {_prefix}

make

make doc

%install

install -d \$RPM_BUILD_ROOT/% {_prefix}

install -d \$RPM_BUILD_ROOT/% {_prefix}/bin

install -d \$RPM_BUILD_ROOT/% {_prefix}/include

install -d \$RPM_BUILD_ROOT/% {_prefix}/lib

make install prefix=\$RPM_BUILD_ROOT/% {_prefix}

%post -p /sbin/ldconfig

%postun -p /sbin/ldconfig

%clean

rm -fr \$RPM_BUILD_ROOT

%files

%defattr(-, root, root)

% {_libdir}/*.so*

% {_bindir}/*

```
%files -n % {name}-devel
%defattr(-, root, root)
%{_libdir}/pkgconfig/sqlite3.pc
%{_libdir}/*.a
%{_libdir}/*.la
%{_includedir}/*
%doc doc/*
```

Found in path(s):

```
* /opt/cola/permits/1146568937_1616563472.04/0/sqlite-3.7.17-8.el7_7.1-1.src.rpm-cosi-expand-archive-
lltKQC5N/sqlite-src-3071700.zip-cosi-expand-archive-cheW8kUH/sqlite-src-3071700/spec.template
No license file was found, but licenses were detected in source scan.
```

```
# 2006 October 1
```

```
#
```

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

```
#
```

```
# May you do good and not evil.
```

```
# May you find forgiveness for yourself and forgive others.
```

```
# May you share freely, never taking more than you give.
```

```
#
```

```
*****
```

```
# This file implements regression tests for SQLite library. The
# focus of this script is testing the FTS1 module, and in particular
# the Porter stemmer.
```

```
#
```

```
# $Id: fts1porter.test,v 1.5 2006/10/03 19:37:37 drh Exp $
```

```
#
```

```
set testdir [file dirname $argv0]
```

```
source $testdir/tester.tcl
```

```
# If SQLITE_ENABLE_FTS1 is defined, omit this file.
```

```
ifcapable !fts1 {
```

```
    finish_test
```

```
    return
```

```
}
```

```
# Test data for the Porter stemmer. The first word of each line
```

```
# is the input. The second word is the desired output.
```

```
#
```

```
# This test data is taken from http://www.tartarus.org/martin/PorterStemmer/
```

```
# There is no claim of copyright made on that page, but you should
```

```
# probably contact the author (Martin Porter - the inventor of the
```

```
# Porter Stemmer algorithm) if you want to use this test data in a
```

```
# commercial product of some kind. The stemmer code in FTS1 is a
```

complete rewrite from scratch based on the algorithm specification

and does not contain any code under copyright.

#

```
set porter_test_data {
  a      a
  aaron  aaron
  abaissiez  abaissiez
  abandon  abandon
  abandoned  abandon
  abase    abas
  abash    abash
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astraea	astraea
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asunder	asund
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atalanta	atalanta
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athversary	athversari
athwart	athwart
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auricular	auricular
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auspicious	auspici
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austerity	auster
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author	author
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authors	author
autolycus	autolycu
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autumn	autumn
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avarice	avaric
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backwardly	backwardli
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balms	balm
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balsam	balsam
balsamum	balsamum

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banbury	banburi
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banding	band
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banditti	banditti
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bar	bar
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barbarous	barbar

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barbason	barbason
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barber	barber
barbermonger	barbermong
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barefoot	barefoot
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barley	barlei
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barnacles	barnacl
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basan	basan
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batters	batter
battery	batteri
battle	battl
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bays	bai
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beatrice	beatric
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beaufort	beaufort
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beauteous	beauteou
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beaver	beaver
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became	becam
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becoming	becom
becomings	becom
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bedash	bedash
bedaub	bedaub
bedazzled	bedazzl
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bedclothes	bedcloth
bedded	bed
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bedfellows	bedfellow
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beehives	beehiv
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beeves	beev
befall	befal
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befor	before
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beforehand	beforehand
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behaviors	behavior
behaviour	behaviour
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behooffull	behoofful
behooves	behoov
behove	behov
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behows	behowl
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bel	bel
belarius	belariu
belch	belch
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beldame	beldam
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belee	bele
belgia	belgia
belie	beli
belied	beli
belief	belief
beliest	beliest
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belike	belik
bell	bell
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belle	bell
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bellman	bellman
bellona	bellona
bellow	bellow
bellowed	bellow

bellowing	bellow
bellows	bellow
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bellyful	belly
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belmont	belmont
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belong	belong
belonging	belong
belongings	belong
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beloved	belov
beloving	belov
below	below
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beneath	beneath
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benevolence	benevol

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beray	berai
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between	between
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bewray	bewrai
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bianco	bianco
bias	bia
bibble	bibbl

bickerings	bicker
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bidly	bidli
bide	bide
bides	bide
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bilbo	bilbo
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birdlime	birdlim
birds	bird
birnam	birnam
birth	birth
birthday	birthdai
birthdom	birthdom
birthplace	birthplac
birthright	birthright

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births	birth
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biscuit	biscuit
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bitch	bitch
bite	bite
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biting	bite
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bitterness	bitter
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blackberries	blackberri
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blasphemy	blasphemi
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blent	blent
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blessedly	blessedli
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blindly	blindli
blindness	blind
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blocks	block
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blooded	blood
bloodhound	bloodhound
bloodied	bloodi
bloodier	bloodier
bloodiest	bloodiest
bloodily	bloodili
bloodless	bloodless
bloods	blood
bloodshed	bloodsh
bloodshedding	bloodshed
bloodstained	bloodstain
bloody	bloodi
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blossoming	blossom
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blotting	blot
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blowed	blow
blowers	blower
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blowing	blow
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blows	blow
blowse	blows
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blubber	blubber
blubbering	blubber
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bluecaps	bluecap
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blunter	blunter
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bluntly	bluntli
bluntness	blunt
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blusterer	bluster
blusters	bluster
bo	bo
boar	boar
board	board
boarded	board
boarding	board
boards	board
boarish	boarish
boars	boar
boast	boast
boasted	boast
boastful	boast
boasting	boast
boasts	boast
boat	boat
boats	boat

boatswain	boatswain
bob	bob
bobb	bobb
boblibindo	boblibindo
bobtail	bobtail
bocchus	bocchu
bode	bode
boded	bode
bodements	bodement
bodes	bode
bodg	bodg
bodied	bodi
bodies	bodi
bodiless	bodiless
bodily	bodili
boding	bode
bodkin	bodkin
body	bodi
bodykins	bodykin
bog	bog
boggle	boggl
boggler	boggler
bogs	bog
bohemia	bohemia
bohemian	bohemian
bohun	bohun
boil	boil
boiling	boil
boils	boil
boist	boist
boisterous	boister
boisterously	boister
boitier	boitier
bold	bold
bolden	bolden
bolder	bolder
boldest	boldest
boldly	boldli
boldness	bold
bolds	bold
bolingbroke	bolingbrok
bolster	bolster
bolt	bolt
bolted	bolt
bolter	bolter
bolters	bolter
bolting	bolt
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bombard	bombard
bombards	bombard
bombast	bombast
bon	bon
bona	bona
bond	bond
bondage	bondag
bonded	bond
bondmaid	bondmaid
bondman	bondman
bondmen	bondmen
bonds	bond
bondslave	bondslav
bone	bone
boneless	boneless
bones	bone
bonfire	bonfir
bonfires	bonfir
bonjour	bonjour
bonne	bonn
bonnet	bonnet
bonneted	bonnet
bonny	bonni
bonos	bono
bonto	bonto
bonville	bonvil
bood	bood
book	book
bookish	bookish
books	book
boon	boon
boor	boor
boorish	boorish
boors	boor
boot	boot
booted	boot
booties	booti
bootless	bootless
boots	boot
booty	booti
bor	bor
bora	bora
borachio	borachio
bordeaux	bordeaux
border	border
bordered	border
borderers	border
borders	border

bore	bore
boreas	borea
bores	bore
boring	bore
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borough	borough
boroughs	borough
borrow	borrow
borrowed	borrow
borrower	borrow
borrowing	borrow
borrows	borrow
bosko	bosko
boskos	bosko
bosky	boski
bosom	bosom
bosoms	bosom
boson	boson
boss	boss
bosworth	bosworth
botch	botch
botcher	botcher
botches	botch
botchy	botchi
both	both
bots	bot
bottle	bottl
bottled	bottl
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bottom	bottom
bottomless	bottomless
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bouge	boug
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boughs	bough
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bounce	bounc
bouncing	bounc
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bounded	bound
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boundless	boundless
bounds	bound
bounteous	bounteou

bounteously	bounteous
bounties	bounti
bountiful	bounti
bountifully	bountifulli
bounty	bounti
bourbier	bourbier
bourbon	bourbon
bourchier	bourchier
bourdeaux	bourdeaux
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bout	bout
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bow	bow
bowcase	bowcas
bowed	bow
bowels	bowel
bower	bower
bowing	bow
bowl	bowl
bowler	bowler
bowling	bowl
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bowsprit	bowsprit
bowstring	bowstr
box	box
boxes	box
boy	boi
boyet	boyet
boyish	boyish
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brabant	brabant
brabantio	brabantio
brabble	brabbl
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brace	brace
bracelet	bracelet
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braggards	braggard
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brained	brain
brainford	brainford
brainish	brainish
brainless	brainless
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brainsick	brainsick
brainsickly	brainsickli
brake	brake
brakenbury	brakenburi
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brambles	brambl
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branchless	branchless
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brandish	brandish
brandon	brandon
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braver	braver
bravery	braveri
braves	brave
bravest	bravest
braving	brave
brawl	brawl
brawler	brawler
brawling	brawl
brawls	brawl
brawn	brawn
brawns	brawn
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braying	brai
braz	braz
brazen	brazen
brazier	brazier
breach	breach
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bread	bread
breadth	breadth
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breaker	breaker
breakfast	breakfast
breaking	break
breaks	break
breast	breast
breasted	breast
breasting	breast
breastplate	breastplat
breasts	breast
breath	breath
breathe	breath
breathed	breath
breather	breather
breathers	breather
breathes	breath
breathest	breathest
breathing	breath
breathless	breathless
breaths	breath
brecknock	brecknock
bred	bred
breech	breech
breeches	breech
breeching	breech
breed	breed
breeder	breeder
breeders	breeder
breeding	breed
breeds	breed
breese	brees
breeze	breez
breff	breff
bretagne	bretagn
brethen	brethen
bretheren	bretheren
brethren	brethren
brevis	brevi
brevity	breviti
brew	brew

brewage	brewag
brewer	brewer
brewers	brewer
brewing	brew
brews	brew
briareus	briareu
briars	briar
brib	brib
bribe	bribe
briber	briber
bribes	bribe
brick	brick
bricklayer	bricklay
bricks	brick
bridal	bridal
bride	bride
bridegroom	bridegroom
bridegrooms	bridegroom
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bridge	bridg
bridgenorth	bridgenorth
bridges	bridg
bridget	bridget
bridle	bridl
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brief	brief
brieger	brieger
briefest	briefest
briefly	briefli
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brier	brier
briers	brier
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bright	bright
brighten	brighten
brightest	brightest
brightly	brightli
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brittany	brittani
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broach	broach
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broader	broader
broadsides	broadsid
brocas	broca
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brogues	brogu
broil	broil
broiling	broil
broils	broil
broke	broke
broken	broken
brokenly	brokenli
broker	broker
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brooches	brooch
brood	brood
brooded	brood
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brook	brook
brooks	brook
broom	broom
broomstaff	broomstaff
broth	broth
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brother	brother
brotherhood	brotherhood
brotherhoods	brotherhood
brotherly	brotherli
brothers	brother
broths	broth
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browner	browner
brownist	brownist
browny	browni
brows	brow
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browsing	brows
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bruising	bruise
bruit	bruit
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bubble	bubbl
bubbles	bubbl
bubbling	bubbl
bubukles	bubukl
buck	buck
bucket	bucket
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bucking	buck
buckingham	buckingham
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bucklers	buckler
bucklersbury	bucklersburi
buckles	buckl
buckram	buckram
bucks	buck
bud	bud
budded	bud

budding	bud
budge	budg
budger	budger
budget	budget
buds	bud
buff	buff
buffet	buffet
buffeting	buffet
buffets	buffet
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bugbear	bugbear
bugle	bugl
bugs	bug
build	build
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buildeth	buildeth
building	build
buildings	build
builds	build
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bulks	bulk
bull	bull
bullcalf	bullcalf
bullen	bullen
bullens	bullen
bullet	bullet
bullets	bullet
bullocks	bullock
bulls	bull
bully	bulli
bulmer	bulmer
bulwark	bulwark
bulwarks	bulwark
bum	bum
bumbast	bumbast
bump	bump
bumper	bumper
bums	bum
bunch	bunch
bunches	bunch
bundle	bundl
bung	bung
bunghole	bunghol
bungle	bungl
bunting	bunt
buoy	buoi
bur	bur

burbolt	burbolt
burd	burd
burden	burden
burdened	burden
burdening	burden
burdenous	burden
burdens	burden
burgh	burgh
burgher	burgher
burghers	burgher
burglary	burglari
burgomasters	burgomast
burgonet	burgonet
burgundy	burgundi
burial	burial
buried	huri
burier	burier
buriest	buriest
burly	burli
burn	burn
burned	burn
burnet	burnet
burneth	burneth
burning	burn
burnish	burnish
burns	burn
burnt	burnt
burr	burr
burrows	burrow
burs	bur
burst	burst
bursting	burst
bursts	burst
burthen	burthen
burthens	burthen
burton	burton
bury	huri
burying	huri
bush	bush
bushels	bushel
bushes	bush
bushy	bushi
busied	busi
busily	busili
business	busin
business	busi
businesses	busi
buskin	buskin

busky	buski
buss	buss
busses	buss
bussing	buss
bustle	bustl
bustling	bustl
busy	busi
but	but
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butcheries	butcheri
butcherly	butcherli
butchers	butcher
butchery	butcheri
butler	butler
butt	butt
butter	butter
battered	butter
butterflies	butterfli
butterfly	butterfli
butterwoman	butterwoman
buttery	butteri
buttock	buttock
buttocks	buttock
button	button
buttonhole	buttonhol
buttons	button
butress	butress
buttry	buttri
butts	butt
buxom	buxom
buy	bui
buyer	buyer
buying	bui
buys	bui
buzz	buzz
buzzard	buzzard
buzzards	buzzard
buzzers	buzzer
buzzing	buzz
by	by
bye	bye
byzantium	byzantium
c	c
ca	ca
cabbage	cabbag
cabileros	cabilero

cabin	cabin
cabins	cabin
cable	cabl
cables	cabl
cackling	cackl
cacodemon	cacodemon
caddis	caddi
caddisses	caddiss
cade	cade
cadence	cadenc
cadent	cadent
caedes	cade
cadmus	cadmu
caduceus	caduceu
cadwal	cadwal
cadwallader	cadwallad
caelius	caeliu
caelo	caelo
caesar	caesar
caesarion	caesarion
caesars	caesar
cage	cage
caged	cage
cagion	cagion
cain	cain
caithness	caith
caitiff	caitiff
caitiffs	caitiff
caius	caiu
cak	cak
cake	cake
cakes	cake
calaber	calab
calais	calai
calamities	calam
calamity	calam
calchas	calcha
calculate	calcul
calen	calen
calendar	calendar
calendars	calendar
calf	calf
caliban	caliban
calibans	caliban
calipolis	calipoli
cality	caliti
caliver	caliv
call	call

callat	callat
called	call
callet	callet
calling	call
calls	call
calm	calm
calmest	calmest
calmly	calmli
calmness	calm
calms	calm
calpurnia	calpurnia
calumniate	calumni
calumniating	calumni
calumnious	calumni
calumny	calumni
calve	calv
calved	calv
calves	calv
calveskins	calveskin
calydon	calydon
cam	cam
cambio	cambio
cambria	cambria
cambric	cambric
cambrics	cambric
cambridge	cambridg
cambyses	cambys
came	came
camel	camel
camelot	camelot
camels	camel
camest	camest
camillo	camillo
camlet	camlet
camomile	camomil
camp	camp
campeius	campeiu
camping	camp
camps	camp
can	can
canakin	canakin
canaries	canari
canary	canari
cancel	cancel
cancell	cancel
cancelled	cancel
cancelling	cancel
cancels	cancel

cancer	cancer
candidatus	candidatu
candied	candi
candle	candl
candles	candl
candlesticks	candlestick
candy	candi
canidius	canidiu
cank	cank
canker	canker
cankerblossom	cankerblossom
cankers	canker
cannibally	cannib
cannibals	cannib
cannon	cannon
cannoneer	cannon
cannons	cannon
cannot	cannot
canon	canon
canoniz	canoniz
canonize	canon
canonized	canon
canons	canon
canopied	canopi
canopies	canopi
canopy	canopi
canst	canst
canstick	canstick
canterbury	canterburi
cantle	cantl
cantons	canton
canus	canu
canvas	canva
canvass	canvass
canzonet	canzonet
cap	cap
capability	capabl
capable	capabl
capacities	capac
capacity	capac
caparison	caparison
capdv	capdv
cape	cape
capel	capel
capels	capel
caper	caper
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caphis	caphi
capilet	capilet
capitaine	capitain
capital	capit
capite	capit
capitol	capitol
capitulate	capitul
capocchia	capocchia
capon	capon
capons	capon
capp	capp
cappadocia	cappadocia
capriccio	capriccio
capricious	caprici
caps	cap
capt	capt
captain	captain
captains	captain
captainship	captainship
captious	captiou
captivate	captiv
captivated	captiv
captivates	captiv
captive	captiv
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captivity	captiv
captum	captum
capucius	capuciu
capulet	capulet
capulets	capulet
car	car
carack	carack
caracks	carack
carat	carat
caraways	carawai
carbonado	carbonado
carbuncle	carbuncl
carbuncled	carbuncl
carbuncles	carbuncl
carcanet	carcanet
carcase	carcas
carcases	carcas
carcass	carcass
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card	card
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carders	carder

cardinal	cardin
cardinally	cardin
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cardmaker	cardmak
cards	card
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care	care
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career	career
careers	career
careful	care
carefully	carefulli
careless	careless
carelessly	carelessli
carelessness	careless
cares	care
caret	caret
cargo	cargo
carl	carl
carlisle	carlisl
carlot	carlot
carman	carman
carmen	carmen
carnal	carnal
carnally	carnal
carnarvonshire	carnarvonshir
carnation	carnat
carnations	carnat
carol	carol
carous	carou
carouse	carous
caroused	carous
carouses	carous
carousing	carous
carp	carp
carpenter	carpent
carper	carper
carpet	carpet
carpets	carpet
carping	carp
carriage	carriag
carriages	carriag
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cart	cart
carters	carter
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cas	ca
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casca	casca
case	case
casement	casement
casements	casement
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cash	cash
cashier	cashier
casing	case
cask	cask
casket	casket
casketed	casket
caskets	casket
casque	casqu
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cassado	cassado
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cassibelan	cassibelan
cassio	cassio
cassius	cassiu
cassocks	cassock
cast	cast
castalion	castalion
castaway	castawai
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caster	caster
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castles	castl
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casual	casual
casually	casual
casualties	casualti
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cat	cat
cataian	cataian
catalogue	catalogu
cataplasm	cataplasm
cataracts	cataract
catarrhs	catarrh
catastrophe	catastroph
catch	catch
catcher	catcher
catches	catch
catching	catch
cate	cate
catechising	catechis
catechism	catech
catechize	catech
cater	cater
caterpillars	caterpillar
caters	cater
caterwauling	caterwaul
cates	cate
catesby	catesbi
cathedral	cathedr
catlike	catlik
catling	catl
catlings	catl
cato	cato
cats	cat
cattle	cattl
caucasus	caucasu
caudle	caudl
cauf	cauf
caught	caught
cauldron	cauldron
caus	cau
cause	caus
caused	caus
causeless	causeless
causer	causer
causes	caus
causest	causest
causeth	causeth
cautel	cautel

cautelous	cautel
cautels	cautel
cauterizing	cauter
caution	caution
cautions	caution
cavaleiro	cavaleiro
cavalery	cavaleri
cavaliers	cavali
cave	cave
cavern	cavern
caverns	cavern
caves	cave
caveto	caveto
caviary	caviari
cavil	cavil
cavilling	cavil
cawdor	cawdor
cawdron	cawdron
cawing	caw
ce	ce
ceas	cea
cease	ceas
ceases	ceas
ceaseth	ceaseth
cedar	cedar
cedars	cedar
cedius	cediu
celebrate	celebr
celebrated	celebr
celebrates	celebr
celebration	celebr
celerity	celer
celestial	celesti
celia	celia
cell	cell
cellar	cellar
cellarage	cellarag
celsa	celsa
cement	cement
censer	censer
ensor	ensor
ensorinus	ensorinu
censur	censur
censure	censur
censured	censur
censurers	censur
censures	censur
censuring	censur

centaur	centaur
centaurs	centaur
centre	centr
cents	cent
centuries	centuri
centurion	centurion
centurions	centurion
century	centuri
cerberus	cerberu
cerecloth	cerecloth
cerements	cerement
ceremonial	ceremoni
ceremonies	ceremoni
ceremonious	ceremoni
ceremoniously	ceremoni
ceremony	ceremoni
ceres	cere
cerns	cern
certain	certain
certainer	certain
certainly	certainli
certainties	certainti
certainty	certainti
certes	cert
certificate	certif
certified	certifi
certifies	certifi
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ces	ce
cesario	cesario
cess	cess
cesse	cess
cestern	cestern
cetera	cetera
cette	cett
chaces	chace
chaf	chaf
chafe	chafe
chafed	chafe
chafes	chafe
chaff	chaff
chaffless	chaffless
chafing	chafe
chain	chain
chains	chain
chair	chair
chairs	chair
chalic	chalic

chalice	chalic
chalices	chalic
chalk	chalk
chalks	chalk
chalky	chalki
challeng	challeng
challenge	challeng
challenged	challeng
challenger	challeng
challengers	challeng
challenges	challeng
cham	cham
chamber	chamber
chamberers	chamber
chamberlain	chamberlain
chamberlains	chamberlain
chambermaid	chambermaid
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chambers	chamber
chameleon	chameleon
champ	champ
champagne	champagn
champain	champain
champains	champain
champion	champion
champions	champion
chanc	chanc
chance	chanc
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chancellor	chancellor
chances	chanc
chandler	chandler
chang	chang
change	chang
changeable	changeabl
changed	chang
changeful	chang
changeling	changel
changelings	changel
changer	changer
changes	chang
changest	changest
changing	chang
channel	channel
channels	channel
chanson	chanson
chant	chant
chanticleer	chanticl

chanting	chant
chantries	chantri
chantry	chantri
chants	chant
chaos	chao
chap	chap
chape	chape
chapel	chapel
chapeless	chapeless
chapels	chapel
chaplain	chaplain
chaplains	chaplain
chapless	chapless
chaplet	chaplet
chapmen	chapmen
chaps	chap
chapter	chapter
character	charact
charactered	charact
characterless	characterless
characters	charact
characterly	characteri
characts	charact
charbon	charbon
chare	chare
chares	chare
charg	charg
charge	charg
charged	charg
chargeful	charg
charges	charg
chargeth	chargeth
charging	charg
chariest	chariest
chariness	chari
charing	chare
chariot	chariot
chariots	chariot
charitable	charit
charitably	charit
charities	chariti
charity	chariti
charlemain	charlemain
charles	charl
charm	charm
charmed	charm
charmer	charmer
charmeth	charmeth

charmian	charmian
charming	charm
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convey	convei
conveyance	convey
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copatain	copatain

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coragio	coragio
coral	coral
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corambus	corambu
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cordelia	cordelia
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corinth	corinth
corinthian	corinthian
coriolanus	coriolanu
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cornerstone	cornerston
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corollary	corollari
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cydnus	cydnu
cygnet	cygnet
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daffodils	daffodil
dagger	dagger
daggers	dagger
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daily	daili
daintier	daintier
dainties	dainti
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dale	dale
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dalmatians	dalmatian
dam	dam
damage	damag
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dangerous	danger
dangerously	danger
dangers	danger

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daniel	daniel
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dauphin	dauphin
daventry	daventri
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eleanor	eleanor
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favourite	favourit
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favout	favout
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fernseed	fernse
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ferrers	ferrer
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ferryman	ferryman
fertile	fertil
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fewest	fewest
fewness	few
fickle	fickl
fickleness	fickl
fico	fico
fiction	fiction
fiddle	fiddl
fiddler	fiddler
fiddlestick	fiddlestick
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firmament	firmament
firmly	firml
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first	first
firstlings	firstl
fish	fish
fisher	fisher
fishermen	fishermen
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fishified	fishifi
fishmonger	fishmong
fishpond	fishpond
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fistula	fistula
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fluster	fluster
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foamy	foami
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foe	foe
foeman	foeman
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fog	fog
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foh	foh
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follies	folli
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follows	follow
folly	folli
fond	fond
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fondly	fondli
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font	font
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fool	fool
fooleries	fooleri
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foolhardy	foolhardi
fooling	fool
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fools	fool
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football	footbal
footboy	footboi
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forfeiters	forfeit
forfeiting	forfeit
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forsook	forsook
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freedom	freedom
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fretful	fret
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fruitful	fruit
fruitfully	fruitfulli
fruitfulness	fruit
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fruitless	fruitless
fruits	fruit

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frustrate	frustrat
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fry	fry
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fuel	fuel
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fulfils	fulfil
full	full
fullam	fullam
fuller	fuller
fullers	fuller
fullest	fullest
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fully	fulli
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fumble	fumbl
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furies	furi
furious	furiou
furlongs	furlong
furnace	furnac
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furnished	furnish
furnishings	furnish
furniture	furnitur

furnival	furniv
furor	furor
furr	furr
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gallantry	gallantri
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galliasses	galliass
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gallons	gallon
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gaoler	gaoler

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gaul	gaul
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gaunt	gaunt
gauntlet	gauntlet
gauntlets	gauntlet
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gay	gai
gayness	gay
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gaze	gaze
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gazers	gazer
gazes	gaze
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gems	gem
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gender	gender
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generous	gener
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genitivo	genitivo
genius	geniu
gennets	gennet
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genoux	genoux
gens	gen
gent	gent
gentilhomme	gentilhomm
gentility	gentil
gentle	gentl
gentlefolks	gentlefolk
gentleman	gentleman
gentlemanlike	gentlemanlik
gentlemen	gentlemen
gentleness	gentl
gentler	gentler
gentles	gentl
gentlest	gentlest
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gentlewomen	gentlewomen
gently	gentli
gentry	gentri
george	georg
gerard	gerard
germaines	germain
germains	germain
german	german
germane	german
germans	german
germany	germani
gertrude	gertrud
gest	gest
gests	gest
gesture	gestur

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get	get
getrude	getrud
gets	get
getter	getter
getting	get
ghastly	ghastli
ghost	ghost
ghosted	ghost
ghostly	ghostli
ghosts	ghost
gi	gi
giant	giant
giantess	giantess
giantlike	giantlik
giants	giant
gib	gib
gibber	gibber
gibbet	gibbet
gibbets	gibbet
gibe	gibe
giber	giber
gibes	gibe
gibing	gibe
gibingly	gibingli
giddily	giddili
giddiness	gididi
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gift	gift
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giglets	giglet
giglot	giglot
gilbert	gilbert
gild	gild
gilded	gild
gilding	gild
gilliams	gilliam
gillian	gillian
gills	gill
gillyvors	gillyvor
gilt	gilt
gimmel	gimmel
gimmers	gimmer
gin	gin
ging	ging
ginger	ginger
gingerbread	gingerbread

gingerly	gingerli
ginn	ginn
gins	gin
gioucestershire	gioucestershir
gipes	gipe
gipsies	gipsi
gipsy	gipsi
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girdle	girdl
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girdling	girdl
girl	girl
girls	girl
girt	girt
girth	girth
gis	gi
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give	give
given	given
giver	giver
givers	giver
gives	give
givest	givest
giveth	giveth
giving	give
givings	give
glad	glad
gladded	glad
gladding	glad
gladly	gladli
gladness	glad
glamis	glami
glanc	glanc
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glancing	glanc
glanders	glander
glansdale	glansdal
glare	glare
glares	glare
glass	glass
glasses	glass
glassy	glassi
glaz	glaz
glazed	glaze

gleams	gleam
glean	glean
gleaned	glean
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gleeful	gleeful
gleek	gleek
gleeking	gleek
gleeks	gleek
glend	glend
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glided	glide
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glideth	glideth
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glimmering	glimmer
glimmers	glimmer
glimpse	glimps
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glist	glist
glistening	glisten
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glittering	glitter
globe	globe
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glories	glori
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glorious	gloriou
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glosses	gloss
glou	glou
glouceste	gloucest
gloucester	gloucest
gloucestershire	gloucestershir
glove	glove
glover	glover
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glow	glow
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glowworm	glowworm
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gnaws	gnaw
go	go
goad	goad
goaded	goad
goads	goad
goal	goal
goat	goat
goatish	goatish
goats	goat
gobbets	gobbet
gobbo	gobbo
goblet	goblet
goblets	goblet
goblin	goblin
goblins	goblin
god	god
godded	god
godden	godden
goddess	goddess
goddesses	goddess
goddild	goddild
godfather	godfath
godfathers	godfath
godhead	godhead

godlike	godlik
godliness	godli
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godmother	godmoth
gods	god
godson	godson
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goest	goest
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goffe	goff
gogs	gog
going	go
gold	gold
golden	golden
goldenly	goldenli
goldsmith	goldsmith
goldsmiths	goldsmith
golgotha	golgotha
goliases	goliias
goliath	goliath
gon	gon
gondola	gondola
gondolier	gondoli
gone	gone
goneril	goneril
gong	gong
gonzago	gonzago
gonzalo	gonzalo
good	good
goodfellow	goodfellow
goodlier	goodlier
goodliest	goodliest
goodly	goodli
goodman	goodman
goodness	good
goodnight	goodnight
goodrig	goodrig
goods	good
goodwife	goodwif
goodwill	goodwil
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goose	goos
gooseberry	gooseberri

goosequills	goosequil
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gor	gor
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gosling	gosl
gospel	gospel
gospels	gospel
goss	goss
gossamer	gossam
gossip	gossip
gossiping	gossip
gossiplate	gossiplate
gossips	gossip
got	got
goth	goth
goths	goth
gotten	gotten
gourd	gourd
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govern	govern
governance	govern
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governor	governor
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gower	gower
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graceful	grace
gracefully	gracefulli
graceless	graceless
graces	grace
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gracious	graciou
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grained	grain
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gramercies	gramerci
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grammar	grammar
grand	grand
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grandame	grandam
grandchild	grandchild
grande	grand
grandeur	grandeur
grandfather	grandfath
grandjurors	grandjuror
grandmother	grandmoth
grandpre	grandpr
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grass	grass
grasshoppers	grasshopp
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gratiano	gratiano
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grav	grav
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gravediggers	gravedigg
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graves	grave
gravest	gravest
gravestone	graveston
gravities	graviti
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gravy	gravi
gray	grai
graymalkin	graymalkin
graz	graz
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grease	greas
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greasily	greasili
greasy	greasi
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greater	greater
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greens	green
greensleeves	greensleev
greenwich	greenwich
greenwood	greenwood
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greeting	greet
greetings	greet
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greg	greg
gregory	gregori
gremio	gremio
grew	grew
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greybeard	greybeard
greybeards	greybeard
greyhound	greyhound
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grief	grief
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grievingly	grievingli
grievous	grievou
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griffin	griffin
griffith	griffith
grim	grim
grime	grime
grimly	grimli
grin	grin
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grinding	grind
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grip	grip
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grisly	grisli
grissel	grissel
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grizzle	grizzl
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groan	groan
groaning	groan
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gros	gro
gross	gross
grosser	grosser
grossly	grossli
grossness	gross
ground	ground
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groundlings	groundl
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grove	grove
grovel	grovel
grovelling	grovel
groves	grove
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grub	grub
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grubs	grub
grudge	grudg
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gruel	gruel
grumble	grumbl
grumblest	grumblest
grumbling	grumbl
grumbings	grumbl
grumio	grumio
grund	grund
grunt	grunt
gualtier	gualtier
guard	guard
guardage	guardag
guardant	guardant
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guardian	guardian
guardians	guardian
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guardsman	guardsman
gud	gud
gudgeon	gudgeon
guerdon	guerdon
guerra	guerra
guess	guess
guesses	guess
guessingly	guessingli
guest	guest
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guiana	guiana
guichard	guichard
guide	guid
guided	guid
guider	guider
guiderius	guideriu
guides	guid
guiding	guid
guidon	guidon
guienne	guienn
guil	guil
guildenstern	guildenstern
guilders	guilder
guildford	guildford
guildhall	guildhal
guile	guil
guiled	guil
guileful	guil
guilfords	guilford
guilt	guilt
guiltian	guiltian

guiltier	guiltier
guiltily	guiltili
guiltiness	guilti
guiltless	guiltless
guilts	guilt
guilty	guilti
guinea	guinea
guinever	guinev
guise	guis
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gules	gule
gulf	gulf
gulfs	gulf
gull	gull
gulls	gull
gum	gum
gumm	gumm
gums	gum
gun	gun
gunner	gunner
gunpowder	gunpowd
guns	gun
gurnet	gurnet
gurney	gurnei
gust	gust
gusts	gust
gusty	gusti
guts	gut
gutter	gutter
guy	gui
guynes	guyn
guysors	guysor
gypsy	gypsi
gyve	gyve
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gyves	gyve
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haberdasher	haberdash
habiliment	habili
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habit	habit
habitation	habit
habited	habit
habits	habit
habitude	habitud
hack	hack
hacket	hacket

hackney	hacknei
hacks	hack
had	had
hadst	hadst
haec	haec
haeres	haer
hag	hag
hagar	hagar
haggard	haggard
haggards	haggard
haggish	haggish
haggled	haggl
hags	hag
hail	hail
hailed	hail
hailstone	hailston
hailstones	hailston
hair	hair
hairless	hairless
hairs	hair
hairy	hairi
hal	hal
halberd	halberd
halberds	halberd
halcyon	halcyon
hale	hale
haled	hale
hales	hale
half	half
halfcan	halfcan
halfpence	halfpenc
halfpenny	halfpenni
halfpennyworth	halfpennyworth
halfway	halfwai
halidom	halidom
hall	hall
halloa	halloa
halloing	hallo
hallond	hallond
halloo	halloo
halloing	halloo
hallow	hallow
hallowed	hallow
hallowmas	hallowma
hallown	hallown
hals	hal
halt	halt
halter	halter

halters	halter
halting	halt
halts	halt
halves	halv
ham	ham
hames	hame
hamlet	hamlet
hammer	hammer
hammered	hammer
hammering	hammer
hammers	hammer
hamper	hamper
hampton	hampton
hams	ham
hamstring	hamstr
hand	hand
handed	hand
handful	hand
handicraft	handicraft
handicraftsmen	handicraftsmen
handing	hand
handiwork	handiwork
handkercher	handkerch
handkerchers	handkerch
handkerchief	handkerchief
handle	handl
handled	handl
handles	handl
handless	handless
handlest	handlest
handling	handl
handmaid	handmaid
handmaids	handmaid
hands	hand
handsaw	handsaw
handsome	handsom
handsomely	handsom
handsomeness	handsom
handwriting	handwrit
handy	handi
hang	hang
hanged	hang
hangers	hanger
hangeth	hangeth
hanging	hang
hangings	hang
hangman	hangman
hangmen	hangmen

hangs	hang
hannibal	hannib
hap	hap
hapless	hapless
haply	hapli
happ	happ
happen	happen
happened	happen
happier	happier
happies	happi
happiest	happiest
happily	happili
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happy	happi
haps	hap
harbinger	harbing
harbingers	harbing
harbor	harbor
harbour	harbour
harbourage	harbourag
harbouring	harbour
harbours	harbour
harcourt	harcourt
hard	hard
harder	harder
hardest	hardest
hardiest	hardiest
hardiment	hardiment
hardiness	hardi
hardly	hardli
hardness	hard
hardocks	hardock
hardy	hardi
hare	hare
harelip	harelip
hares	hare
harfleur	harfleur
hark	hark
harlot	harlot
harlotry	harlotri
harlots	harlot
harm	harm
harmed	harm
harmful	harm
harming	harm
harmless	harmless
harmonious	harmoni
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harms	harm
harness	har
harp	harp
harper	harper
harpier	harpier
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harpy	harpi
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harrow	harrow
harrows	harrow
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harsh	harsh
harshly	harshli
harshness	harsh
hart	hart
harts	hart
harum	harum
harvest	harvest
has	ha
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hastings	hast
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hateful	hate
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hatfield	hatfield
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hats	hat
haud	haud
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haught	haught
haughtiness	haughti
haughty	haughti
haunch	haunch
haunches	haunch
haunt	haunt
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haunting	haunt
haunts	haunt
hautboy	hautboi
hautboys	hautboi
have	have
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havens	haven
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having	have
havings	have
havior	havior
haviour	haviour
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hawk	hawk
hawking	hawk
hawks	hawk
hawthorn	hawthorn
hawthorns	hawthorn
hay	hai
hazard	hazard
hazarded	hazard
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head	head
headborough	headborough
headed	head
headier	headier
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headland	headland
headless	headless
headlong	headlong
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headsman	headsman
headstrong	headstrong
heady	headi
heal	heal
healed	heal
healing	heal
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health	health
healthful	health
healths	health
healthsome	healthsom
healthy	healthi
heap	heap
heaping	heap
heaps	heap
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hearers	hearer
hearest	hearest
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hearings	hear
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hearse	hears
hearsed	hears
hearst	hearst
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heartache	heartach
heartbreak	heartbreak
heartbreaking	heartbreak
hearted	heart
hearten	hearten
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hearths	hearth
heartily	heartili
heartiness	hearti
heartless	heartless
heartlings	heartl
heartly	heartli
hearts	heart
heartsick	heartsick
heartstrings	heartstr
heartly	hearti
heat	heat
heated	heat
heath	heath
heathen	heathen
heathenish	heathenish
heating	heat
heats	heat

heauties	heauti
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heaven	heaven
heavenly	heavenli
heavens	heaven
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heavier	heavier
heaviest	heaviest
heavily	heavili
heaviness	heavi
heaving	heav
hevings	heav
heavy	heavi
hebona	hebona
hebrew	hebrew
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hectic	hectic
hector	hector
hectors	hector
hecuba	hecuba
hedg	hedg
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hedgehog	hedgehog
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heedful	heed
heedfull	heedful
heedfully	heedfulli
heedless	heedless
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heifer	heifer
heifers	heifer
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height	height
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heinous	heinou
heinously	heinous
heir	heir
heiress	heiress
heirless	heirless
heirs	heir

held	held
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helena	helena
helenus	helenu
helias	helia
helicons	helicon
hell	hell
hellespont	hellespont
hellfire	hellfir
hellish	hellish
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helping	help
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hempen	hempen
hems	hem
hen	hen
hence	henc
henceforth	henceforth
henceforward	henceforward
henchman	henchman
henri	henri
henricus	henricu
henry	henri
hens	hen
hent	hent
henton	henton
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herald	herald
heraldry	heraldri
heralds	herald
herb	herb
herbert	herbert
herblets	herblet

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herculean	herculean
hercules	hercul
herd	herd
herds	herd
herdsman	herdsman
herdsmen	herdsmen
here	here
hereabout	hereabout
hereabouts	hereabout
hereafter	hereaft
hereby	herebi
hereditary	hereditari
hereford	hereford
herefordshire	herefordshir
herein	herein
hereof	hereof
heresies	heresi
heresy	heresi
heretic	heret
heretics	heret
hereto	hereto
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heritage	heritag
heritier	heriti
hermes	herm
hermia	hermia
hermione	hermion
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hermits	hermit
herne	hern
hero	hero
herod	herod
herods	herod
heroes	hero
heroic	heroic
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herring	her
herrings	her
hers	her
herself	herself
hesperides	hesperid
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hest	hest
hests	hest
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hewgh	hewgh
hewing	hew
hewn	hewn
hews	hew
hey	hei
heyday	heydai
hibocrates	hibocr
hic	hic
hiccups	hiccup
hick	hick
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hideous	hideou
hideously	hideous
hideousness	hideous
hides	hide
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hiems	hiem
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highest	highest
highly	highli
highmost	highmost
highness	high
hight	hight
highway	highwai
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hildings	hild
hill	hill
hillo	hillo
hilloa	hilloa
hills	hill
hilt	hilt
hilts	hilt
hily	hili
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himself	himself
hinc	hinc
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hind	hind

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hinders	hinder
hindmost	hindmost
hinds	hind
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hinge	hing
hinges	hing
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hipparchus	hipparchu
hippolyta	hippolyta
hips	hip
hir	hir
hire	hire
hired	hire
hiren	hiren
hirtius	hirtiu
his	hi
hisperia	hisperia
hiss	hiss
hisses	hiss
hissing	hiss
hist	hist
historical	histor
history	histori
hit	hit
hither	hither
hitherto	hitherto
hitherward	hitherward
hitherwards	hitherward
hits	hit
hitting	hit
hive	hive
hives	hive
hizzing	hizz
ho	ho
hoa	hoa
hoar	hoar
hoard	hoard
hoarded	hoard
hoarding	hoard
hoars	hoar
hoarse	hoars
hoary	hoari
hob	hob
hobbididance	hobbidid

hobby	hobby
hobbyhorse	hobbyhorse
hobgoblin	hobgoblin
hobnails	hobnail
hoc	hoc
hod	hod
hodge	hodge
hog	hog
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january	januari
janus	janu
japhet	japhet
jaquenetta	jaquenetta
jaques	jaqu
jar	jar
jarring	jar
jars	jar
jarteer	jarteer
jasons	jason
jaunce	jaunc
jauncing	jaunc
jaundice	jaundic
jaundies	jaundi
jaw	jaw
jawbone	jawbon
jaws	jaw
jay	jai
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jc	jc
je	je
jealous	jealou
jealousies	jealou
jealousy	jealou
jeer	jeer
jeering	jeer
jelly	jelli
jenny	jenni
jeopardy	jeopardi
jephtha	jephtha
jephthah	jephthah
jerkin	jerkin
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jerks	jerk

jeronimy	jeronimi
jerusalem	jerusalem
jeshu	jeshu
jesses	jess
jessica	jessica
jest	jest
jested	jest
jester	jester
jesters	jester
jesting	jest
jestes	jest
jesu	jesu
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jet	jet
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jew	jew
jewel	jewel
jeweller	jewel
jewels	jewel
jewess	jewess
jewish	jewish
jewry	jewri
jews	jew
jezebel	jezebel
jig	jig
jigging	jig
jill	jill
jills	jill
jingling	jingl
joan	joan
job	job
jockey	jockei
jocund	jocund
jog	jog
jogging	jog
john	john
johns	john
join	join
joinder	joinder
joined	join
joiner	joiner
joineth	joineth
joins	join
joint	joint
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jointing	joint
jointly	jointli
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joints	joint
jointure	jointur
jollity	jolliti
jolly	jolli
jolt	jolt
joltheads	jolthead
jordan	jordan
joseph	joseph
joshua	joshua
jot	jot
jour	jour
jourdain	jourdain
journal	journal
journey	journei
journeying	journei
journeyman	journeyman
journeymen	journeymen
journeys	journei
jove	jove
jovem	jovem
jovial	jovial
jowl	jowl
jowls	jowl
joy	joi
joyed	joi
joyful	joy
joyfully	joyfulli
joyless	joyless
joyous	joyou
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jud	jud
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judgments	judgment
judicious	judici
jug	jug
juggle	juggl
juggled	juggl

juggler	juggler
jugglers	juggler
juggling	juggl
jugs	jug
juice	juic
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jul	jul
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julia	julia
juliet	juliet
julietta	julietta
julio	julio
julius	juliu
july	juli
jump	jump
jumpeth	jumpeth
jumping	jump
jumps	jump
june	june
junes	june
junior	junior
junius	juniu
junkets	junket
juno	juno
jupiter	jupit
jure	jure
jurement	jurement
jurisdiction	jurisdict
juror	juror
jurors	juror
jury	juri
jurymen	jurymen
just	just
justeius	justeiu
justest	justest
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justification	justif
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justs	just
jutting	jut
jutty	jutti
juvenal	juven
kam	kam
kate	kate
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katharine	katharin
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katherine	katherin
kecksies	kecksi
keech	keech
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keen	keen
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kerely	kere
kern	kern
kernal	kernal
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kerns	kern
kersey	kersei
kettle	kettl
kettledrum	kettledrum
kettledrums	kettledrum
key	kei
keys	kei
kibe	kibe
kibes	kibe

kick	kick
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kickshaws	kickshaw
kickshawses	kickshaws
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kid	kid
kidney	kidnei
kikely	kike
kildare	kildar
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killed	kill
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killeth	killeth
killling	kill
killlingworth	killlingworth
kills	kill
kiln	kiln
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kindest	kindest
kindle	kindl
kindled	kindl
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kindlier	kindlier
kindling	kindl
kindly	kindli
kindness	kind
kindnesses	kind
kindred	kindr
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kine	kine
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kingdom	kingdom
kingdoms	kingdom
kingly	kingli
kings	king
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kins	kin
kinsman	kinsman
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kinswoman	kinswoman
kirtle	kirtl
kirtles	kirtl
kiss	kiss
kissed	kiss

kisses	kiss
kissing	kiss
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kites	kite
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kj	kj
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klll	klll
knack	knack
knacks	knack
knapp	knapp
knav	knav
knave	knave
knaveries	knaveri
knavery	knaveri
knaves	knave
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knighted	knight
knighthood	knighthood
knighthoods	knighthood
knightly	knightli
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knits	knit
knitters	knitter
knitteth	knitteth
knives	knive
knobs	knob
knock	knock
knocking	knock
knocks	knock
knog	knog
knoll	knoll

knot	knot
knots	knot
knotted	knot
knotty	knotti
know	know
knower	knower
knowest	knowest
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knowingly	knowingli
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knowledge	knowledg
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laban	laban
label	label
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labienus	labienu
labio	labio
labor	labor
laboring	labor
labors	labor
labour	labour
laboured	labour
labourer	labour
labourers	labour
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laboursome	laboursom
labras	labra
labyrinth	labyrinth
lac	lac
lace	lace
laced	lace
lacedaemon	lacedaemon
laces	lace
lacies	laci
lack	lack
lackbeard	lackbeard
lacked	lack
lackey	lackei
lackeying	lackei
lackeys	lackei
lacking	lack
lacks	lack
lad	lad
ladder	ladder

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ladies	ladi
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lady	ladi
ladybird	ladybird
ladyship	ladyship
ladyships	ladyship
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laertes	laert
lafeu	lafeu
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lakes	lake
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lam	lam
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lambert	lambert
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lambs	lamb
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lamentably	lament
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lammas	lamma
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land	land
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landing	land
landless	landless
landlord	landlord
landmen	landmen
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langley	langlei
langton	langton
language	languag
languageless	languageless
languages	languag
langues	langu
languish	languish
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languishes	languish
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lanterns	lantern
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lapis	lapi
lapland	lapland
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lapse	laps
lapsed	laps
lapsing	laps
lapwing	lapw
laquais	laquai
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larder	larder
larding	lard
lards	lard
large	larg
largely	larg

largeness	larg
larger	larger
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larks	lark
larron	larron
lartius	lartiu
larum	larum
larums	larum
las	la
lascivious	lascivi
lash	lash
lass	lass
lasses	lass
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lasted	last
lasting	last
lastly	lastli
lasts	last
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latches	latch
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lated	late
lately	late
later	later
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lattice	lattic
laud	laud
laudable	laudabl
laudis	laudi
laugh	laugh
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laughed	laugh
laugher	laugher
laughtest	laughtest
laughing	laugh
laughs	laugh
laughter	laughter
launce	launc
launcelot	launcelot
launces	launc
launch	launch
laund	laund

laundress	laundress
laundry	laundri
laur	laur
laura	laura
laurel	laurel
laurels	laurel
laurence	laurenc
laus	lau
lavache	lavach
lave	lave
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lavender	lavend
lavina	lavina
lavinia	lavinia
lavish	lavish
lavishly	lavishli
lavolt	lavolt
lavoltas	lavolta
law	law
lawful	law
lawfully	lawfulli
lawless	lawless
lawlessly	lawlessli
lawn	lawn
lawns	lawn
lawrence	lawrenc
laws	law
lawyer	lawyer
lawyers	lawyer
lay	lai
layer	layer
layest	layest
laying	lai
lays	lai
lazar	lazar
lazars	lazar
lazarus	lazaru
lazy	lazi
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ld	ld
ldst	ldst
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lead	lead
leaden	leaden
leader	leader
leaders	leader
leadest	leadest
leading	lead

leads	lead
leaf	leaf
leagu	leagu
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leagued	leagu
leaguer	leaguer
leagues	leagu
leah	leah
leak	leak
leaky	leaki
lean	lean
leander	leander
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leaning	lean
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leans	lean
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leaps	leap
leapt	leapt
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learn	learn
learned	learn
learnedly	learnedli
learning	learn
learnings	learn
learns	learn
learnt	learnt
leas	lea
lease	leas
leases	leas
leash	leash
leasing	leas
least	least
leather	leather
leathern	leathern
leav	leav
leave	leav
leaven	leaven
leavening	leaven
leaver	leaver
leaves	leav
leaving	leav
leavy	leavi
lecher	lecher
lecherous	lecher
lechers	lecher

lechery	lecheri
lecon	lecon
lecture	lectur
lectures	lectur
led	led
leda	leda
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leeches	leech
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leeks	leek
leer	leer
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leese	lees
leet	leet
leets	leet
left	left
leg	leg
legacies	legaci
legacy	legaci
legate	legat
legatine	legatin
lege	lege
legerity	leger
leges	lege
legg	legg
legion	legion
legions	legion
legitimate	legitim
legitimation	legitim
legs	leg
leicester	leicest
leicestershire	leicestershir
leiger	leiger
leigers	leiger
leisure	leisur
leisurely	leisur
leisures	leisur
leman	leman
lemon	lemon
lena	lena
lend	lend
lender	lender
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lendings	lend
lends	lend
length	length
lengthen	lengthen

lengthens	lengthen
lengths	length
lenity	leniti
lennox	lennox
lent	lent
lenten	lenten
lentus	lentu
leo	leo
leon	leon
leonardo	leonardo
leonati	leonati
leonato	leonato
leonatus	leonatu
leontes	leont
leopard	leopard
leopards	leopard
leper	leper
leperous	leper
lepidus	lepidu
leprosy	leprosi
lequel	lequel
lers	ler
les	le
less	less
lessen	lessen
lessens	lessen
lesser	lesser
lesson	lesson
lessoned	lesson
lessons	lesson
lest	lest
lestrake	lestrak
let	let
lethargied	lethargi
lethargies	lethargi
lethargy	lethargi
lethe	leth
lets	let
lett	lett
letter	letter
letters	letter
letting	let
lettuce	lettuc
leur	leur
leve	leve
level	level
levell	level
levelled	level

levels	level
leven	leven
levers	lever
leviathan	leviathan
leviathans	leviathan
levied	levi
levies	levi
levity	leviti
levy	levi
levying	levi
lewd	lewd
lewdly	lewdli
lewdness	lewd
lewdsters	lewdster
lewis	lewi
liable	liabl
liar	liar
liars	liar
libbard	libbard
libelling	libel
libels	libel
liberal	liber
liberality	liber
liberte	libert
liberties	liberti
libertine	libertin
libertines	libertin
liberty	liberti
library	librari
libya	libya
licence	licenc
licens	licen
license	licens
licentious	licenti
lichas	licha
licio	licio
lick	lick
licked	lick
licker	licker
lictors	lictor
lid	lid
lids	lid
lie	lie
lied	li
lief	lief
liefest	liefest
liege	lieg
liegeman	liegeman

liegemen	liegemen
lien	lien
lies	li
liest	liest
lieth	lieth
lieu	lieu
lieutenant	lieuten
lieutenantry	lieutenantri
lieutenants	lieuten
lieve	liev
life	life
lifeblood	lifeblood
lifeless	lifeless
lifelings	lifel
lift	lift
lifted	lift
lifter	lifter
lifteth	lifteth
lifting	lift
lifts	lift
lig	lig
ligarius	ligariu
liggins	liggen
light	light
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lighter	lighter
lightest	lightest
lightly	lightli
lightness	light
lightning	lightn
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lights	light
lik	lik
like	like
liked	like
likeliest	likeliest
likelihood	likelihood
likelihoods	likelihood
likely	like
likeness	like
liker	liker
likes	like
likest	likest
likewise	likewis
liking	like
likings	like

lilies	lili
lily	lili
lim	lim
limander	limand
limb	limb
limbeck	limbeck
limbecks	limbeck
limber	limber
limbo	limbo
limbs	limb
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limed	lime
limehouse	limehous
limekilns	limekiln
limit	limit
limitation	limit
limited	limit
limits	limit
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limp	limp
limping	limp
limps	limp
lin	lin
lincoln	lincoln
lincolnshire	lincolnshir
line	line
lineal	lineal
lineally	lineal
lineament	lineament
lineaments	lineament
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linen	linen
linens	linen
lines	line
ling	ling
lingare	lingar
linger	linger
lingered	linger
lingers	linger
linguist	linguist
lining	line
link	link
links	link
linsey	linsei
linstock	linstock
linta	linta
lion	lion
lionel	lionel

lioness	lioness
lions	lion
lip	lip
lipp	lipp
lips	lip
lipsbury	lipsburi
liquid	liquid
liquor	liquor
liquorish	liquorish
liquors	liquor
lirra	lirra
lisbon	lisbon
lisp	lisp
lispig	lisp
list	list
listen	listen
listening	listen
lists	list
literatured	literatur
lither	lither
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littlest	littlest
liv	liv
live	live
lived	live
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livelihood	livelihood
livelong	livelong
lively	live
liver	liver
liveries	liveri
livers	liver
livery	liveri
lives	live
livest	livest
liveth	liveth
livia	livia
living	live
livings	live
lizard	lizard
lizards	lizard
ll	ll
lll	lll
llous	llou
lnd	lnd
lo	lo
loa	loa

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loaden	loaden
loading	load
loads	load
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loathly	loathli
loathness	loath
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loathsomest	loathsomest
loaves	loav
lob	lob
lobbies	lobbi
lobby	lobbi
local	local
lochaber	lochab
lock	lock
locked	lock
locking	lock
lockram	lockram
locks	lock
locusts	locust
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lodgers	lodger
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lofty	lofti
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logger	logger
loggerhead	loggerhead
loggerheads	loggerhead
loggets	logget
logic	logic

logs	log
loins	loin
loiter	loiter
loiterer	loiter
loiterers	loiter
loitering	loiter
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lolls	loll
lombardy	lombardi
london	london
londoners	london
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lonely	lone
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longaville	longavil
longboat	longboat
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longer	longer
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longeth	longeth
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longings	long
longly	longli
longs	long
longtail	longtail
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loof	loof
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looker	looker
lookers	looker
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looks	look
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loose	loos
loosed	loos
loosely	loos
loosen	loosen
loosing	loos
lop	lop
lopp	lopp
loquitur	loquitur
lord	lord
lorded	lord

lording	lord
lordings	lord
lordliness	lordli
lordly	lordli
lords	lord
lordship	lordship
lordships	lordship
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lorn	lorn
lorraine	lorrain
lorship	lorship
los	lo
lose	lose
loser	loser
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loses	lose
losest	losest
loseth	loseth
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loss	loss
losses	loss
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lots	lot
lott	lott
lottery	lotteri
loud	loud
louder	louder
loudly	loudli
lour	lour
loureth	loureth
louring	lour
louse	lous
louses	lous
lousy	lousi
lout	lout
louted	lout
louts	lout
louvre	louvr
lov	lov
love	love
loved	love
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lovel	lovel
lovelier	loveli
loveliness	loveli
lovell	lovel
lovely	love

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lovingly	lovingli
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lowing	low
lowliness	lowli
lowly	lowli
lown	lown
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loyal	loyal
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loyalties	loyalti
loyalty	loyalti
lozel	lozel
It	It
lubber	lubber
lubberly	lubberli
luc	luc
luccicos	luccico
luce	luce
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lucis	luce
lucetta	lucetta
luciana	luciana
lucianus	lucianu
lucifer	lucif
lucifier	lucifi
lucilius	luciliu
lucina	lucina
lucio	lucio
lucius	luciu
luck	luck
luckier	luckier
luckiest	luckiest
luckily	luckili
luckless	luckless
lucky	lucki
lucre	lucr
lucrece	lucrec
lucretia	lucretia

lucullius	luculliu
lucullus	lucullu
lucy	luci
lud	lud
ludlow	ludlow
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lugg	lugg
luggage	luggag
luke	luke
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lunacies	lunaci
lunacy	lunaci
lunatic	lunat
lunatics	lunat
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lungs	lung
lupercal	luperc
lurch	lurch
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lurketh	lurketh
lurking	lurk
lurks	lurk
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lust	lust
lusted	lust
luster	luster
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lustier	lustier
lustiest	lustiest
lustig	lustig
lustihood	lustihood
lustily	lustili
lustre	lustr
lustrous	lustrou
lusts	lust
lusty	lusti
lute	lute
lutes	lute

lutestring	lutestr
lutheran	lutheran
luxurious	luxuri
luxuriously	luxuri
luxury	luxuri
ly	ly
lycaonia	lycaonia
lycurguses	lycurgus
lydia	lydia
lye	lye
lyen	lyen
lying	ly
lym	lym
lymoges	lymog
lynn	lynn
lysander	lysand
m	m
ma	ma
maan	maan
mab	mab
macbeth	macbeth
maccabaeus	maccabaeu
macdonwald	macdonwald
macduff	macduff
mace	mace
macedon	macedon
maces	mace
machiavel	machiavel
machination	machin
machinations	machin
machine	machin
mack	mack
macmorris	macmorri
maculate	macul
maculation	macul
mad	mad
madam	madam
madame	madam
madams	madam
madcap	madcap
madded	mad
madding	mad
made	made
madeira	madeira
madly	madli
madman	madman
madmen	madmen
madness	mad

madonna	madonna
madrigals	madrig
mads	mad
maecenas	maecena
maggot	maggot
maggots	maggot
magic	magic
magical	magic
magician	magician
magistrate	magistr
magistrates	magistr
magnanimity	magnanim
magnanimous	magnanim
magni	magni
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magnificence	magnific
magnificent	magnific
magnifico	magnifico
magnificoes	magnifico
magnus	magnu
mahomet	mahomet
mahu	mahu
maid	maid
maiden	maiden
maidenhead	maidenhead
maidenheads	maidenhead
maidenhood	maidenhood
maidenhoods	maidenhood
maidenliest	maidenliest
maidenly	maidenli
maidens	maiden
maidhood	maidhood
maids	maid
mail	mail
mailed	mail
mails	mail
maim	maim
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maims	maim
main	main
maincourse	maincours
maine	main
mainly	mainli
mainmast	mainmast
mains	main
maintain	maintain
maintained	maintain
maintains	maintain

maintenance	mainten
mais	mai
maison	maison
majestas	majesta
majestee	majeste
majestic	majest
majestical	majest
majestically	majest
majesties	majesti
majesty	majesti
major	major
majority	major
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make	make
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mal	mal
mala	mala
maladies	maladi
malady	maladi
malapert	malapert
malcolm	malcolm
malcontent	malcont
malcontents	malcont
male	male
maledictions	maledict
malefactions	malefact
malefactor	malefactor
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malevolence	malevol
malevolent	malevol
malhecho	malhecho
malice	malic
malicious	malici
maliciously	malici
malign	malign
malignancy	malign
malignant	malign
malignantly	malignantli
malkin	malkin
mall	mall

mallard	mallard
mallet	mallet
mallows	mallow
malmsey	malmsei
malt	malt
maltworms	maltworm
malvolio	malvolio
mamillius	mamilliu
mammering	mammer
mammet	mammet
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mammock	mammock
man	man
manacle	manacl
manacles	manacl
manage	manag
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manager	manag
managing	manag
manakin	manakin
manchus	manchu
mandate	mandat
mandragora	mandragora
mandrake	mandrak
mandrakes	mandrak
mane	mane
manent	manent
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manfully	manfulli
mangle	mangl
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mangy	mangi
manhood	manhood
manhoods	manhood
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manifested	manifest
manifests	manifest
manifold	manifold
manifoldly	manifoldli
manka	manka
mankind	mankind
manlike	manlik
manly	manli
mann	mann
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manner	manner
mannerly	mannerli
manners	manner
manningtree	manningtre
mannish	mannish
manor	manor
manors	manor
mans	man
mansion	mansion
mansionry	mansionri
mansions	mansion
manslaughter	manslaught
mantle	mantl
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mantua	mantua
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manual	manual
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map	map
mapp	mapp
maps	map
mar	mar
marble	marbl
marbled	marbl
marcade	marcad
marcellus	marcellu
march	march
marches	march
marcheth	marcheth
marching	march
marchioness	marchio
marchpane	marchpan
marcians	marcian
marcius	marciu
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mardian	mardian
mare	mare
mares	mare
marg	marg
margarelon	margarelon
margaret	margaret
marge	marg
margent	margent
margery	margeri

maria	maria
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mariana	mariana
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marigold	marigold
mariner	marin
mariners	marin
maritime	maritim
marjoram	marjoram
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marketable	market
marketplace	marketplac
markets	market
marking	mark
markman	markman
marks	mark
marl	marl
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marmoset	marmoset
marquess	marquess
marquis	marqui
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marriage	marriag
marriages	marriag
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marrow	marrow
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marry	marri
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mars	mar
marseilles	marseil
marsh	marsh
marshal	marshal
marshalsea	marshalsea
marshalship	marshalship
mart	mart
marted	mart
martem	martem
martext	martext
martial	martial
martin	martin
martino	martino
martius	martiu

martlemas	martlema
martlet	martlet
marts	mart
martyr	martyr
martyrs	martyr
marullus	marullu
marv	marv
marvel	marvel
marvell	marvel
marvellous	marvel
marvellously	marvel
marvels	marvel
mary	mari
mas	ma
masculine	masculin
masham	masham
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masks	mask
mason	mason
masonry	masonri
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massacre	massacr
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mast	mast
master	master
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masterdom	masterdom
masterest	masterest
masterless	masterless
masterly	masterli
masterpiece	masterpiec
masters	master
mastership	mastership
mastic	mastic
mastiff	mastiff
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masts	mast

match	match
matches	match
matcheth	matcheth
matching	match
matchless	matchless
mate	mate
mated	mate
mater	mater
material	materi
mates	mate
mathematics	mathemat
matin	matin
matron	matron
matrons	matron
matter	matter
matters	matter
matthew	matthew
mattock	mattock
mattress	mattress
mature	matur
maturity	matur
maud	maud
maudlin	maudlin
maugre	maugr
maul	maul
maund	maund
mauri	mauri
mauritania	mauritania
mauvais	mauvai
maw	maw
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maxim	maxim
may	mai
mayday	maydai
mayest	mayest
mayor	mayor
maypole	maypol
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mazzard	mazzard
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mechanic	mechan
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mechante	mechant
med	med
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meddler	meddler
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mede	mede
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mediation	mediat
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medice	medic
medicinal	medicin
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mediterraneum	mediterraneum
medlar	medlar
medlars	medlar
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meekly	meekli
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meet	meet
meeter	meeter
meetest	meetest
meeting	meet
meetings	meet
meetly	meetli
meetness	meet
meets	meet
meg	meg
mehercle	mehercl
meilleur	meilleur
meiny	meini
meisen	meisen
melancholies	melancholi
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melford	melford
mell	mell
mellifluous	melliflu
mellow	mellow
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melody	melodi
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melun	melun
member	member
members	member
memento	memento
memorable	memor
memorandums	memorandum
memorial	memori
memorials	memori
memories	memori

memoriz	memoriz
memorize	memor
memory	memori
memphis	memphi
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menac	menac
menace	menac
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menaphon	menaphon
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menecrates	menecr
menelaus	menelau
menenius	meneniu
mental	mental
menteith	menteith
mention	mention
mentis	menti
menton	menton
mephostophilus	mephostophilu
mer	mer
mercatante	mercatant
mercatio	mercatio
mercenaries	mercenari
mercenary	mercenari
mercer	mercer
merchandise	merchandis
merchandized	merchand
merchant	merchant
merchants	merchant
mercies	merci
merciful	merci
mercifully	mercifulli
merciless	merciless
mercurial	mercuri
mercuries	mercuri
mercury	mercuri
mercutio	mercutio
mercy	merci
mere	mere
mered	mere
merely	mere
merest	merest
meridian	meridian

merit	merit
merited	merit
meritorious	meritori
merits	merit
merlin	merlin
mermaid	mermaid
mermaids	mermaid
merops	merop
merrier	merrier
merriest	merriest
merrily	merrili
merriman	merriman
merriment	merriment
merriments	merriment
merriness	merri
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mervailous	mervail
mes	me
mesh	mesh
meshes	mesh
mesopotamia	mesopotamia
mess	mess
message	messag
messages	messag
messala	messala
messaline	messalin
messenger	messeng
messengers	messeng
messes	mess
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metal	metal
metals	metal
metamorphis	metamorphi
metamorphoses	metamorphos
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metaphysical	metaphys
metaphysics	metaphys
mete	mete
metellus	metellu
meteor	meteor
meteors	meteor
meteyard	meteyard
metheglin	metheglin
metheglins	metheglin
methink	methink
methinks	methink
method	method

methods	method
methought	methought
methoughts	methought
metre	metr
metres	metr
metropolis	metropoli
mette	mett
mettle	mettl
mettled	mettl
meus	meu
mew	mew
mewed	mew
mewling	mewl
mexico	mexico
mi	mi
mice	mice
michael	michael
michaelmas	michaelma
micher	micher
miching	mich
mickle	mickl
microcosm	microcosm
mid	mid
midas	mida
middest	middest
middle	middl
middleham	middleham
midnight	midnight
midriff	midriff
midst	midst
midsummer	midsumm
midway	midwai
midwife	midwif
midwives	midwiv
mienne	mienn
might	might
mightful	might
mightier	mightier
mightiest	mightiest
mightily	mightili
mightiness	mighti
mightst	mightst
mighty	mighti
milan	milan
milch	milch
mild	mild
milder	milder
mildest	mildest

mildew	mildew
mildews	mildew
mildly	mildli
mildness	mild
mile	mile
miles	mile
milford	milford
militarist	militarist
military	militari
milk	milk
milking	milk
milkmaid	milkmaid
milks	milk
milksops	milksop
milky	milki
mill	mill
mille	mill
miller	miller
milliner	millin
million	million
millioned	million
millions	million
mills	mill
millstones	millston
milo	milo
mimic	mimic
minc	minc
mince	minc
minces	minc
mincing	minc
mind	mind
minded	mind
mindin	mind
mindless	mindless
minds	mind
mine	mine
mineral	miner
minerals	miner
minerva	minerva
mines	mine
mingle	mingl
mingled	mingl
mingling	mingl
minikin	minikin
minim	minim
minime	minim
minimo	minimo
minimus	minimu

mining	mine
minion	minion
minions	minion
minist	minist
minister	minist
ministers	minist
ministration	ministr
minnow	minnow
minnows	minnow
minola	minola
minority	minor
minos	mino
minotaurs	minotaur
minstrel	minstrel
minstrels	minstrel
minstrelsy	minstrelsi
mint	mint
mints	mint
minute	minut
minutely	minut
minutes	minut
minx	minx
mio	mio
mir	mir
mirable	mirabl
miracle	miracl
miracles	miracl
miraculous	miracul
miranda	miranda
mire	mire
mirror	mirror
mirrors	mirror
mirth	mirth
mirthful	mirth
miry	miri
mis	mi
misadventur	misadventur
misadventure	misadventur
misanthropos	misanthropo
misapplied	misappli
misbecame	misbecam
misbecom	misbecom
misbecome	misbecom
misbegot	misbegot
misbegotten	misbegotten
misbeliever	misbeliev
misbelieving	misbeliev
misbhav	misbhav

miscall	miscal
miscalled	miscal
miscarried	miscarri
miscarries	miscarri
miscarry	miscarri
miscarrying	miscarri
mischance	mischanc
mischances	mischanc
mischief	mischief
mischiefs	mischief
mischievous	mischiev
misconceived	misconceiv
misconst	misconst
misconster	misconst
misconstruction	misconstruct
misconstrued	misconstru
misconstrues	misconstru
miscreant	miscreant
miscreate	miscreat
misdeed	misde
misdeeds	misde
misdemean	misdemean
misdemeanours	misdemeanour
misdoubt	misdoubt
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miser	miser
miserable	miser
miserably	miser
misericorde	misericord
miseries	miseri
misers	miser
misery	miseri
misfortune	misfortun
misfortunes	misfortun
misgive	misgiv
misgives	misgiv
misgiving	misgiv
misgoverned	misgovern
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misguide	misguid
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mishaps	mishap
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mislead	mislead

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misplaces	misplac
mispris	mispri
misprised	mispris
misprision	mispris
misprizing	mispriz
misproud	misproud
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misreport	misreport
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misses	miss
misshap	misshap
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missheathed	missheath
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missingly	missingli
missions	mission
missive	missiv
missives	missiv
misspoke	misspok
mist	mist
mista	mista
mistak	mistak
mistake	mistak
mistaken	mistaken
mistakes	mistak
mistaketh	mistaketh
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mistakings	mistak
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mistful	mist
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misthought	misthought
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mistreadings	mistread
mistress	mistress
mistresses	mistress

mistresss	mistresss
mistriship	mistriship
mistrust	mistrust
mistrusted	mistrust
mistrustful	mistrust
mistrusting	mistrust
mists	mist
misty	misti
misus	misu
misuse	misus
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mites	mite
mithridates	mithrid
mitigate	mitig
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mix	mix
mixed	mix
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mocker	mocker
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mockers	mocker
mockery	mockeri
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mockwater	mockwat
model	model
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moderately	moder
moderation	moder
modern	modern
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modesties	modesti
modestly	modestli
modesty	modesti
modicums	modicum

modo	modo
module	modul
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moiety	moieti
moist	moist
moisten	moisten
moisture	moistur
moldwarp	moldwarp
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moles	mole
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mollification	mollif
mollis	molli
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molto	molto
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monarchies	monarchi
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monarchs	monarch
monarchy	monarchi
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monde	mond
money	monei
moneys	monei
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mongers	monger
monging	mong
mongrel	mongrel
mongrels	mongrel
mongst	mongst
monk	monk
monkey	monkei
monkeys	monkei
monks	monk

monmouth	monmouth
monopoly	monopoli
mons	mon
monsieur	monsieur
monsieurs	monsieur
monster	monster
monsters	monster
monstrous	monstrou
monstrously	monstrous
monstrousness	monstrous
monstruosity	monstruos
montacute	montacut
montage	montag
montague	montagu
montagues	montagu
montano	montano
montant	montant
montez	montez
montferrat	montferrat
montgomery	montgomeri
month	month
monthly	monthli
months	month
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monument	monument
monumental	monument
monuments	monument
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moods	mood
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moon	moon
moonbeams	moonbeam
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moonlight	moonlight
moons	moon
moonshine	moonshin
moonshines	moonshin
moor	moor
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moors	moor
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mope	mope
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mopsa	mopsa
moral	moral
moraler	moral

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mordake	mordak
more	more
moreover	moreov
mores	more
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morn	morn
morning	morn
mornings	morn
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morrow	morrow
morrows	morrow
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morsels	morsel
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mortality	mortal
mortally	mortal
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mortified	mortifi
mortifying	mortifi
mortimer	mortim
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mortis	morti
mortise	mortis
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moss	moss
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mothers	mother
moths	moth
motion	motion
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motions	motion
motive	motiv
motives	motiv
motley	motlei
mots	mot

mought	mought
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mouldeth	mouldeth
moulds	mould
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moulten	moulten
mouch	mouch
mounseur	mounseur
mounsieur	mounsieur
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mountain	mountain
mountaineer	mountain
mountaineers	mountain
mountainous	mountain
mountains	mountain
mountant	mountant
mountanto	mountanto
mountebank	mountebank
mountebanks	mountebank
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mounting	mount
mounts	mount
mourn	mourn
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mourner	mourner
mourners	mourner
mournful	mourn
mournfully	mournfulli
mourning	mourn
mourningly	mourningli
mournings	mourn
mourns	mourn
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mouse	mous
mousetrap	mousetrap
mousing	mous
mouth	mouth
mouthed	mouth
mouths	mouth
mov	mov
movables	movabl
move	move
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moved	move

mover	mover
movers	mover
moves	move
moveth	moveth
moving	move
movingly	movingli
movousus	movousu
mow	mow
mowbray	mowbrai
mower	mower
mowing	mow
mows	mow
moy	moi
moys	moi
moyses	moys
mrs	mr
much	much
muck	muck
mud	mud
mudded	mud
muddied	muddi
muddy	muddi
muffins	muffin
muffl	muffl
muffle	muffl
muffled	muffl
muffler	muffler
muffling	muffl
mugger	mugger
mugs	mug
mulberries	mulberri
mulberry	mulberri
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mules	mule
muleteers	mulet
mulier	mulier
mulieres	mulier
muliteus	muliteu
mull	mull
mulmutius	mulmutiu
multiplied	multipli
multiply	multipli
multiplying	multipli
multipotent	multipot
multitude	multitud
multitudes	multitud
multitudinous	multitudin
mum	mum

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mumbling	mumbl
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pancake	pancak
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paper	paper
papers	paper
paphlagonia	paphlagonia
paphos	papho
papist	papist
paps	pap
par	par
parable	parabl
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paradise	paradis
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peflur	peflur
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percy	perci
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perdition	perdit
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pewterer	pewter
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phaeton	phaeton
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pharaoh	pharaoh
pharsalia	pharsalia

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pheebus	pheebu
pheeze	pheez
phibbus	phibbu
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philario	philario
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philippan	philippan
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philotus	philotu
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phoebus	phoebu
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photinus	photinu
phrase	phrase
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pickthanks	pickthank
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pilate	pilat
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pilchers	pilcher

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pinion	pinion
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poorest	poorest
poorly	poorli
pop	pop
pope	pope
popedom	popedom

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praetors	praetor

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prawns	prawn
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recks	reck
reclaim	reclaim

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reclusive	reclus
recognizance	recogniz
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recoil	recoil
recoiling	recoil
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scorched	scorch
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symbols	symbol
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synagogue	synagogu
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syria	syria
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throughfare	throughfar
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throughout	throughout
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toby	tobi
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today	today
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together	togeth
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ton	ton
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topple	toppl

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trippingly	trippingli
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troilus	troilu
troiluses	troilus

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trojans	trojan
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tromperies	tromperi
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troyan	troyan
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truant	truant
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trudge	trudg
true	true
trueborn	trueborn
truepenny	truepenni
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tully	tulli
tumble	tumbl
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tuns	tun
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turd	turd
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wrecked	wreck
wrecks	wreck
wren	wren
wrench	wrench
wrenching	wrench
wrens	wren
wrest	wrest
wrested	wrest
wresting	wrest
wrestle	wrestl
wrestled	wrestl
wrestler	wrestler
wrestling	wrestl
wretch	wretch
wretched	wretched
wretchedness	wretched
wretches	wretch
wring	wring
wringer	wringer
wringing	wring
wrings	wring
wrinkle	wrinkl
wrinkled	wrinkl
wrinkles	wrinkl
wrist	wrist
wrists	wrist
writ	writ
write	write
writer	writer
writers	writer
writes	write
withled	withl
writing	write
writings	write
writs	writ
written	written
wrong	wrong
wronged	wrong
wronger	wronger
wrongful	wrong
wrongfully	wrongfulli
wronging	wrong
wrongly	wrongli
wrongs	wrong
wronk	wronk
wrote	wrote
wroth	wroth

wrought	wrought
wrung	wrung
wry	wry
wrying	wry
wt	wt
wul	wul
wye	wye
x	x
xanthippe	xanthipp
xi	xi
xii	xii
xiii	xiii
xiv	xiv
xv	xv
y	y
yard	yard
yards	yard
yare	yare
yarely	yare
yarn	yarn
yaughan	yaughan
yaw	yaw
yawn	yawn
yawning	yawn
ycleped	yclepe
ycliped	yclipe
ye	ye
yea	yea
yead	yead
year	year
yearly	yearli
yearn	yearn
yearns	yearn
years	year
yeas	yea
yeast	yeast
yedward	yedward
yell	yell
yellow	yellow
yellowed	yellow
yellowing	yellow
yellowness	yellow
yellowes	yellow
yells	yell
yelping	yelp
yeoman	yeoman
yeomen	yeomen
yerk	yerk

yes	ye
yesterday	yesterdai
yesterdays	yesterdai
yesternight	yesternight
yesty	yesti
yet	yet
yew	yew
yield	yield
yield	yield
yielded	yield
yielder	yielder
yielders	yielder
yielding	yield
yields	yield
yok	yok
yoke	yoke
yoked	yoke
yokefellow	yokefellow
yokes	yoke
yoketh	yoketh
yon	yon
yond	yond
yonder	yonder
yongrey	yongrei
yore	yore
yorick	yorick
york	york
yorkists	yorkist
yorks	york
yorkshire	yorkshir
you	you
young	young
younger	younger
youngest	youngest
youngling	youngl
younglings	youngl
youngly	youngli
younger	younger
your	your
yours	your
yourself	yourself
yourselves	yourself
youth	youth
youthful	youth
youths	youth
youtli	youtli
zanies	zani
zany	zani

```

zeal      zeal
zealous   zealou
zeals     zeal
zed       zed
zenelophon zenelophon
zenith    zenith
zephyrs   zephyr
zir       zir
zo        zo
zodiac    zodiac
zodiacs   zodiac
zone      zone
zounds    zound
zwagger   zwagger
}

```

```

# Create a full-text index to use for testing the stemmer.
#
db close
sqlite3 db :memory:
db eval {
CREATE VIRTUAL TABLE t1 USING fts1(word, tokenize Porter);
}

```

```

foreach {pfrom pto} $porter_test_data {
do_test fts1porter-$pfrom {
execsql {
DELETE FROM t1_term;
DELETE FROM t1_content;
INSERT INTO t1(word) VALUES($pfrom);
SELECT term FROM t1_term;
}
} $pto
}

```

finish_test

Found in path(s):

```

* /opt/cola/permits/1146568937_1616563472.04/0/sqlite-3.7.17-8.el7_7.1-1.src.rpm-cosi-expand-archive-
lltKQC5N/sqlite-src-3071700.zip-cosi-expand-archive-cheW8kUH/sqlite-src-3071700/test/fts1porter.test
No license file was found, but licenses were detected in source scan.

```

<dd><p>The psow query parameter works with the default windows and unix VFSEs but might be a no-op for other proprietary or non-standard VFSEs.

Found in path(s):

```

* /opt/cola/permits/1146568937_1616563472.04/0/sqlite-3.7.17-8.el7_7.1-1.src.rpm-cosi-expand-archive-
lltKQC5N/sqlite-doc-3071700.zip-cosi-expand-archive-r9EckcaZ/sqlite-doc-3071700/requirements.html

```

No license file was found, but licenses were detected in source scan.

```
<html>
<head>
<title>SQLite Consortium Agreement</title>
</head>
<body bgcolor="white">
<h1 align="center">
SQLite Consortium Agreement
</h1>

<p>This SQLite Consortium Agreement ("Agreement") is made and
entered into as of the ____ day of _____, 2007 ("Effective Date")
by and between _____ (the "Company"), and
Hipp, Wyrick & Company, Inc., a Georgia Corporation with
headquarters at 6200 Maple Cove Lane, Charlotte, NC ("Hwaci").</p>

<p>WHEREAS, Hwaci is the developer of a serverless, embeddable, public
domain SQL database engine available at
<a href="http://www.sqlite.org/">http://www.sqlite.org/</a>
("SQLite"); and</p>

<p>WHEREAS, Company wishes to support the independent development of
the SQLite database engine to insure the continuing reliability,
vitality, and independence of SQLite, and in connection therewith,
Company wishes to provide funds for ongoing research, development,
and maintenance of the SQLite code base, operation of the SQLite
website, protection and maintenance of the SQLite
trademark, as well as for promotion of SQLite at conferences and
trade shows; and</p>

<p>WHEREAS, Company wishes to receive benefits in the form of
services from Hwaci in consideration for their support of SQLite; and</b>

<p>WHEREAS, Company and Hwaci each wish SQLite to be supported and
maintained as an independent, community-driven project, and to
ensure the SQLite development team remains independent.</p>

<p>NOW, THEREFORE, in consideration of the mutual promises contained
herein, the parties agree as follows:</p>

<h2>1.0 Definitions</h2>

<h3>1.1 SQLite Developers</h3>
<p>The "SQLite Developers" are the employees or contractors of Hwaci engaged
in the development of SQLite, including without limitation the
SQLite Architect.</p>
```


<h3>1.2 SQLite Architect</h3>

<p>The "SQLite Architect" is the SQLite Developer with ultimate responsibility and authority over changes and maintenance of the SQLite code. The current SQLite Architect is the original designer and developer of SQLite, D. Richard Hipp. Hwaci may change the SQLite Architect from time to time upon approval by Company.</p>

<h3>1.3 Consortium Member</h3>

<p>A "Consortium Member" is a company or organization, including but not limited to Company, which has entered into an agreement with Hwaci which is substantially similar to this Agreement.

</p>

<h2>2.0 Agreement</h2>

<h3>2.1 Responsibilities And Obligations Of SQLite Developers</h3>

<h4>2.1.1 General Support</h4>

<p>The SQLite Developers shall provide, without limit, timely and accurate answers, advice, and instruction in response to questions and comments from Company about SQLite submitted by email or by telephone at any time day or night.

</p>

<h4>2.1.2 Debugging Support</h4>

The SQLite Developers shall at Company's request provide Company with direct assistance in debugging applications that are built upon or use SQLite. The combined time for Debugging Support and Custom Development for Company is limited to 330 hours per year.

</p>

<h4>2.1.3 Custom Development</h4>

<p>The SQLite Developers shall at the request of Company write new extensions or enhancements to SQLite according to Company's specifications. These extensions and enhancements may be proprietary to Company or open source or with the consent of both Company and the SQLite Architect may be folded into the public domain SQLite source tree.

The time devoted to Custom Development for Company is limited 220 hours per year.

</p>

<h4>2.1.4 Custom Builds</h4>

The SQLite Developers shall at Company's request provide Company with specialized builds of SQLite according to Company's specifications.

</p>

<h4>2.1.5 Legacy Support</h4>

<p>The SQLite Developers shall at Company's request provide support and bug-fix patches for any historical version of SQLite.

</p>

<h4>2.1.6 Custom Testing</h4>

<p>The SQLite Developers shall at Company's request set up and run acceptance tests according Company's specifications that are specifically designed to exercise SQLite as configured and used by Company.

These acceptance tests shall be run and shall pass prior to any release of SQLite.

</p>

<h4>2.1.7 Priority Bug Fixes</h4>

<p>The SQLite Developers shall assign highest priority to fixing bugs in SQLite that are reported by Company or in which Company has expressed a specific interest.

</p>

<h4>2.1.8 Code Quality</h4>

<p>The SQLite Developers shall at all times keep the SQLite source code well commented and documented and clearly structured and organized so that an experienced and competent programmer can understand it and support it after no more than a few months of study.

</p>

<h4>2.1.9 Backwards Compatibility</h4>

<p>The SQLite Developers recognize that Company uses SQLite in mission-critical applications and therefore shall work diligently to ensure continuing bug-free correct operation and backwards compatibility with prior releases.

</p>

<h4>2.1.10 Test Coverage</h4>

<p>The SQLite Developers shall maintain the SQLite test suite such that no less than 95% source code coverage is provided.

</p>

<h4>2.1.11 Website</h4>

<p>The SQLite Developers shall maintain the SQLite website at

http://www.sqlite.org

in good working order and all SQLite source code shall

be made freely available at such website.

</p>

<h3>2.2 Responsibilities And Obligations Of The SQLite Architect</h3>

<h4>2.2.1 Private Briefings</h4>

<p>The SQLite Architect shall, at the request of Company, provide Company with private notification and briefings of any new bugs or new features in SQLite that might effect Company's products.

</p>

<h4>2.2.2 Direction</h4>

<p>The SQLite Architect shall coordinate the activities of SQLite Developers and shall publish from time to time a roadmap of proposed future changes and enhancements to SQLite.

</p>

<h4>2.2.3 Oversight</h4>

<p>The SQLite Architect shall personally review all changes to the SQLite Source Code and take responsibility for the quality and correctness of those changes.

</p>

<h4>2.2.4 Continuity</h4>

<p>The initial SQLite Architect shall be the original developer of SQLite, D. Richard Hipp. The role of SQLite Architect shall not be assigned to another during the term of this Agreement except due to the disability of Dr. Hipp and with approval of Company.

</p>

<h3>2.3 Responsibilities And Obligations Of Hwaci</h3>

<h4>2.3.1 Employer</h4>

<p>Hwaci shall act as the employer of the SQLite Developers and SQLite Architect and shall make all tax and legal filings and tax withholding required by employers. Hwaci shall provide Company with W-9 information upon request.

</p>

<h4>2.3.2 Responsible Party</h4>

<p>All obligations of the SQLite Developers set forth in this agreement are deemed obligations of Hwaci. Hwaci shall recruit, employ, and supervise SQLite Developers in such a way that the responsibilities and obligations of the SQLite Developers set forth in this agreement are upheld.</p>

<h4>2.3.3 Multiple Developers</h4>

<p>Hwaci shall recruit and employ as many SQLite Developers for as many hours as can be reasonably achieved using the funds received from Consortium Members under this agreement.

So that support for SQLite will not be interrupted by the disability or withdrawal of any one SQLite Developer, Hwaci will

keep at least two knowledgeable and competent SQLite Developers on staff.</p>

<h4>2.3.4 Mentorship</h4>

<p>Hwaci shall work to encourage independent programmers from around the world to become familiar with SQLite internals so that there will be a pool of talent able to support SQLite in the future.</p>

<h4>2.3.5 Audits</h4>

<p>Hwaci shall keep and maintain complete and accurate records of the use of development funds provided by Company and shall allow Company, or its representative, a certified public accountant mutually acceptable to Hwaci and Company, during office hours and at reasonable intervals, no more than once every 12 months, to inspect and make extracts or copies of such records solely for the purpose of ascertaining Hwaci's compliance with the objectives and requirements of this agreement.</p>

<h4>2.3.6 Disaster Planning</h4>

<p>Hwaci shall maintain backup copies of all SQLite source files and documentation, current and historical, at at least two separate locations separated from each other and from the primary on-line SQLite repository by at least 400 kilometers.</p>

<h4>2.3.7 Trademark</h4>

<p>Hwaci shall maintain ownership of the SQLite trademark and the sqlite.org domain name and shall purchase bandwidth and server space for the http://www.sqlite.org/ website.</p>

<h4>2.3.8 No Take-overs or Buy-outs</h4>

<p>Neither Hwaci nor the SQLite Architect shall relinquish development control of SQLite during the term of this Agreement, by acquisition or merger or by any other means, except with the consent of Company.</p>

<h4>2.3.9 New Consortium Members</h4>

<p>New Consortium Members may be accepted into the consortium from time to time under identical terms as this agreement, or under substantially similar terms that have been approved by existing Consortium Members.</p>

<h4>2.3.10 Adequate Staff</h4>

Hwaci shall recruit and employ a sufficient number of qualified SQLite Developers to easily cover all custom development, debugging, and general support service obligations for all Consortium Members while still providing ample time for the SQLite Developers to engage in general maintenance and extension of SQLite.

</p>

<h4>2.3.11 Use Of Funds</h4>

<p>Hwaci shall use the funds provided hereunder solely for the development and maintenance of SQLite as set forth in this Agreement.

Interest on funds received in advance and held in trust will be reinvested and used for the same purposes as the principal.

</p>

<h3>2.4 Responsibilities And Obligations Of Company</h3>

<h4>2.4.1 Funding</h4>

<p>Company shall provide funding for the ongoing support and maintenance of SQLite as set forth in section 3.0 "Fees".

</p>

<h4>2.4.2 Copyright Disclaimer</h4>

<p>Company acknowledges that SQLite source code and documentation published on the SQLite website is in the public domain and that nothing in this agreement shall change that fact.

</p>

<h2>3.0 Fees</h2>

<p>In consideration of the performance by Hwaci, the SQLite Developers, and the SQLite Architect of the obligations described herein, Company shall pay Hwaci at least US \$75,000 per year in advance either annually, quarterly, or monthly, at Company's discretion.</p>

<h2>4.0 Confidentiality</h2>

<h3>4.1 Definition of Confidential Information</h3>

<p>"Confidential Information" means any Company proprietary information, technical data, trade secrets or know-how, including, but not limited to, research, product plans, products, services, customers, customer lists, markets, software, developments, inventions, processes, formulas,

technology, designs, drawings, engineering, hardware configuration information, marketing, finances or other business information disclosed by Company either directly or indirectly in writing, orally or by drawings or inspection of parts or equipment.</p>

<h3>4.2 Non-Use and Non-Disclosure.</h3>

<p>Hwaci shall not, during or subsequent to the term of this Agreement, use Company's Confidential Information for any purpose whatsoever other than the performance of the Services or disclose Company's Confidential Information to any third party. The parties acknowledge that Confidential Information will remain the sole property of Company. Hwaci shall take all reasonable precautions to prevent any unauthorized disclosure of Confidential Information including, but not limited to, having each employee or consultant of Hwaci, if any, with access to any Confidential Information, execute a nondisclosure agreement containing provisions in Company's favor substantially similar to this Agreement. Confidential Information does not include information that: (i) is known to Hwaci at the time of disclosure to Hwaci by Company as evidenced by written records of Hwaci; (ii) has become publicly known and made generally available through no wrongful act of Hwaci; or (iii) has been received by Hwaci from a third party who is authorized to make such disclosure.</p>

<h4>4.2.1 Disclosure Required by Law</h4>

In the event any Confidential Information is required to be disclosed by Hwaci under the terms of a valid and effective subpoena or order issued by a court of competent jurisdiction, or by a demand or information request from an executive or administrative agency or other governmental authority, Hwaci shall, unless prohibited by the terms of a subpoena, order, or demand, promptly notify Company of the existence, terms and circumstances surrounding such demand or request, shall consult with Company on the advisability of taking legally available steps to resist or narrow such demand or request, and, if disclosure of such Confidential Information is required, shall exercise its reasonable best efforts to narrow the scope of disclosure and obtain an order or other reliable assurance that confidential treatment will be accorded to such Confidential Information. To the extent that Hwaci is prohibited from notifying Company of a subpoena, order or demand, by the terms of same, Hwaci shall exercise its reasonable efforts to narrow the scope of disclosure.</p>

<h3>4.3 Return of Materials.</h3>

<p>Upon the termination of this Agreement, or upon Company's earlier request, Hwaci shall deliver to Company all of Company's property or Confidential Information that Hwaci may have in Hwaci's possession or control.</p>

<h2>5.0 Intellectual Property</h2>

<h3>5.1 No Assignment</h3>

<p>Company acknowledges that all copyrightable material, notes, records, drawings, designs, inventions, improvements, developments, discoveries and trade secrets made, generated, conceived, or reduced to practice by Hwaci related to SQLite will remain the property of Hwaci. Nothing in this Agreement will be construed to transfer any intellectual property right of Hwaci to Company.</p>

<h3>5.2 Availability and Public Domain Dedication</h3>

<p>The SQLite Developers and Hwaci shall, subject to their discretion as to the quality and suitability of the SQLite source code and documentation for public release, make the SQLite source code and documentation publicly available as downloadable files and make a public statement ceding all intellectual property rights, including but not limited to copyright and patent rights, in the SQLite source code and documentation to the public domain. To the extent that the SQLite Developers and Hwaci elect not to release the SQLite source code and documentation publicly, they shall provide copies thereof to Company and hereby grants to Company, under all of the SQLite Developers' and Hwaci's rights including but not limited to copyright and patent rights, in and to the SQLite source code and documentation, perpetual, irrevocable, worldwide, non-exclusive, sublicenseable license to use, copy, prepare derivative works of, publicly perform and display the SQLite source code and documentation and derivative works thereof.</p>

<h3>5.3 Trademark</h3>

<p>Hwaci shall use the name "SQLite" only to apply to the publicly available project known by such name as of the

Effective Date. Hwaci may in its discretion file such trademark applications or registrations as it deems appropriate to protect or record its rights therein, and may set such policies as it deems appropriate for licensing the use of the trademark.</p>

<h2>6.0 Representations And Warranties</h2>

<h3>6.1 Intellectual Property Clearances.</h3>

<p>Hwaci hereby represents and warrants that Hwaci shall enter into agreements with the SQLite Developers sufficient to enable Hwaci to undertake the obligations of Section 5.</p>

<h3>6.2 Disclaimer.</h3>

<p>THE WORK PRODUCT AND ALL MATERIAL PROVIDED BY HWACI AND COMPANY ARE PROVIDED "AS IS." NEITHER PARTY MAKES ANY REPRESENTATIONS OR WARRANTIES OF ANY KIND, WHETHER ORAL OR WRITTEN, WHETHER EXPRESS, IMPLIED, OR ARISING BY STATUTE, CUSTOM, COURSE OF DEALING OR TRADE USAGE, WITH RESPECT TO THE SUBJECT MATTER HEREOF, IN CONNECTION WITH THIS AGREEMENT. EACH PARTY SPECIFICALLY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES OR CONDITIONS OF TITLE, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT.</p>

<h2>7.0 Term And Termination</h2>

<h3>7.1 Term.</h3>

<p>This Agreement will commence on the Effective Date and will continue until 12 months after the Effective Date. Thereafter, the parties may by mutual consent renew this Agreement subject to agreement on fees to be paid by Company for sponsorship for additional periods.</p>

<h3>7.2 Termination.</h3>

<p>If either party materially defaults in the performance of any of its material obligations hereunder and if any such default is not corrected within 30 days after notice in writing, then the non-defaulting party, at its option, may, in addition to any other remedies it may have, thereupon terminate this Agreement by giving written notice of termination to the defaulting party.</p>

<h3>7.3 Survival.</h3>

<p>Upon such termination all rights and duties of the parties toward each other will cease except: Sections 4 (Confidentiality), 5 (Intellectual Property), and 8 (Miscellaneous) will survive termination of this Agreement.</p>

<h2>8. Miscellaneous</h2>

<h3>8.1 Nonassignment/Binding Agreement.</h3>

<p>The parties acknowledge that the unique nature of Hwaci's services are substantial consideration for the parties' entering into this Agreement. Neither this Agreement nor any rights under this Agreement may be assigned or otherwise transferred by Hwaci, in whole or in part, whether voluntarily or by operation of law, without the prior written consent of Company, which consent will not be unreasonably withheld. Subject to the foregoing, this Agreement will be binding upon and will inure to the benefit of the parties and their respective successors and assigns. Any assignment in violation of the foregoing will be null and void.</p>

<h3>8.2 Notices.</h3>

<p>Any notice required or permitted under the terms of this Agreement or required by law must be in writing and must be: (a) delivered in person; (b) sent by first class registered mail, or air mail, as appropriate; or (c) sent by overnight air courier, in each case properly posted and fully prepaid to the appropriate address set forth in the preamble to this Agreement. Either party may change its address for notice by notice to the other party given in accordance with this Section. Notices will be considered to have been given at the time of actual delivery in person, three business days after deposit in the mail as set forth above, or one day after delivery to an overnight air courier service.</p>

<h3>8.3 Waiver.</h3>

<p>Any waiver of the provisions of this Agreement or of a party's rights or remedies under this Agreement must be in writing to be effective. Failure, neglect, or delay by a party to enforce the provisions of this Agreement or its rights or remedies at any time, will not be construed as a waiver of such party's rights under this Agreement and will not in any way affect the validity of the whole or any part of this Agreement

or prejudice such party's right to take subsequent action. No exercise or enforcement by either party of any right or remedy under this Agreement will preclude the enforcement by such party of any other right or remedy under this Agreement or that such party is entitled by law to enforce.</p>

<h3>8.4 Severability.</h3>

<p>If any term, condition, or provision in this Agreement is found to be invalid, unlawful or unenforceable to any extent, the parties shall endeavor in good faith to agree to such amendments that will preserve, as far as possible, the intentions expressed in this Agreement. If the parties fail to agree on such an amendment, such invalid term, condition or provision will be severed from the remaining terms, conditions and provisions, which will continue to be valid and enforceable to the fullest extent permitted by law.</p>

<h3>8.5 Integration.</h3>

<p>This Agreement contains the entire agreement of the parties with respect to the subject matter of this Agreement and supersedes all previous communications, representations, understandings and agreements, either oral or written, between the parties with respect to said subject matter. This Agreement may not be amended, except by a writing signed by both parties.</p>

<h3>8.6 Counterparts.</h3>

<p>This Agreement may be executed in counterparts, each of which so executed will be deemed to be an original and such counterparts together will constitute one and the same agreement.</p>

<h3>8.7 Governing Law.</h3>

<p>This Agreement will be interpreted and construed in accordance with the laws of the State of North Carolina and the United States of America, without regard to conflict of law principles. All disputes arising out of this Agreement will be subject to the exclusive jurisdiction of the state and federal courts located in North Carolina, and each party hereby consents to the personal jurisdiction thereof.</p>

8.8 Independent Contractors.

It is the intention of the parties that Hwaci is an independent contractor. Nothing in this Agreement will in any way be construed to constitute Hwaci or any of its employees as an agent, employee or representative of Company.

9.0 Signatures

The parties have executed this Agreement below to indicate their acceptance of its terms.

--

--	--

HWACI	
-------	--

By:	
-----	--

--	--

Print Name:	
-------------	--

--	--

Title:	
--------	--

--	--

--	--

--	--

COMPANY	
---------	--

By:	
-----	--

--	--

Print Name:	
-------------	--

--	--

Title:	
--------	--

--	--

--	--

Found in path(s):

* /opt/cola/permits/1146568937_1616563472.04/0/sqlite-3.7.17-8.el7_7.1-1.src.rpm-cosi-expand-archive-lltKQC5N/sqlite-doc-3071700.zip-cosi-expand-archive-r9EckcaZ/sqlite-doc-3071700/consortium_agreement-20071201.html

No license file was found, but licenses were detected in source scan.

other proprietary or non-standard VFSes.

Found in path(s):

* /opt/cola/permits/1146568937_1616563472.04/0/sqlite-3.7.17-8.el7_7.1-1.src.rpm-cosi-expand-archive-lltKQC5N/sqlite-doc-3071700.zip-cosi-expand-archive-r9EckcaZ/sqlite-doc-3071700/uri.html

No license file was found, but licenses were detected in source scan.

SQLite Copyright Release Template

```
<body bgcolor="white">
<h1 align="center">
Copyright Release for<br>
Contributions To SQLite
</h1>
```

```
<p>
SQLite is software that implements an embeddable SQL database engine.
SQLite is available for free download from http://www.sqlite.org/.
The principal author and maintainer of SQLite has disclaimed all
copyright interest in his contributions to SQLite
and thus released his contributions into the public domain.
In order to keep the SQLite software unencumbered by copyright
claims, the principal author asks others who may from time to
time contribute changes and enhancements to likewise disclaim
their own individual copyright interest.
</p>
```

```
<p>
Because the SQLite software found at http://www.sqlite.org/ is in the
public domain, anyone is free to download the SQLite software
from that website, make changes to the software, use, distribute,
or sell the modified software, under either the original name or
under some new name, without any need to obtain permission, pay
royalties, acknowledge the original source of the software, or
in any other way compensate, identify, or notify the original authors.
Nobody is in any way compelled to contribute their SQLite changes and
enhancements back to the SQLite website. This document concerns
only changes and enhancements to SQLite that are intentionally and
deliberately contributed back to the SQLite website.
</p>
```

```
<p>
For the purposes of this document, "SQLite software" shall mean any
computer source code, documentation, makefiles, test scripts, or
other information that is published on the SQLite website,
http://www.sqlite.org/. Precompiled binaries are excluded from
the definition of "SQLite software" in this document because the
process of compiling the software may introduce information from
outside sources which is not properly a part of SQLite.
</p>
```

```
<p>
The header comments on the SQLite source files exhort the reader to
share freely and to never take more than one gives.
In the spirit of that exhortation I make the following declarations:
</p>
```


<p>

I dedicate to the public domain

any and all copyright interest in the SQLite software that was publicly available on the SQLite website (<http://www.sqlite.org/>) prior to the date of the signature below and any changes or enhancements to the SQLite software

that I may cause to be published on that website in the future.

I make this dedication for the benefit of the public at large and to the detriment of my heirs and successors. I intend this dedication to be an overt act of relinquishment in perpetuity of all present and future rights to the SQLite software under copyright law.

</p>

<p>

To the best of my knowledge and belief, the changes and enhancements that I have contributed to SQLite are either originally written by me or are derived from prior works which I have verified are also in the public domain and are not subject to claims of copyright by other parties.

</p>

<p>

To the best of my knowledge and belief, no individual, business, organization, government, or other entity has any copyright interest in the SQLite software as it existed on the SQLite website as of the date on the signature line below.

</p>

<p>

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<p>

<table width="100%" cellpadding="0" cellspacing="0">

<tr>

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Signature:

<p> </p>

```
<p>&nbsp;</p>
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</td><td valign="top" align="left">
Date:
</td></tr>
<td colspan=2>
Name (printed):
</td>
</tr>
</table>
</body>
</html>
```

Found in path(s):

```
* /opt/cola/permits/1146568937_1616563472.04/0/sqlite-3.7.17-8.el7_7.1-1.src.rpm-cosi-expand-archive-
lltKQC5N/sqlite-doc-3071700.zip-cosi-expand-archive-r9EckcaZ/sqlite-doc-3071700/copyright-release.html
```

No license file was found, but licenses were detected in source scan.

MMFauxFont.prc

Found in path(s):

```
* %%BeginFile
```

No license file was found, but licenses were detected in source scan.

without a shared lock, other processes are free to modify the database

Found in path(s):

```
* /opt/cola/permits/1146568937_1616563472.04/0/sqlite-3.7.17-8.el7_7.1-1.src.rpm-cosi-expand-archive-
lltKQC5N/sqlite-doc-3071700.zip-cosi-expand-archive-r9EckcaZ/sqlite-doc-3071700/atomiccommit.html
```

No license file was found, but licenses were detected in source scan.

```
# 2010 July 16
```

```
#
```

```
# The author disclaims copyright to this source code. In place of
```

```
# a legal notice, here is a blessing:
```

```
#
```

```
# May you do good and not evil.
```

```
# May you find forgiveness for yourself and forgive others.
```

```
# May you share freely, never taking more than you give.
```

```
#
```

```
*****
```

```
#
```

```
# This file implements tests to verify that the "testable statements" in
```

```
# the lang_select.html document are correct.
```

```
#
```

```
set testdir [file dirname $argv0]
```

```
source $testdir/tester.tcl
```

```

ifcapable !compound {
  finish_test
  return
}

do_execsql_test e_select-1.0 {
  CREATE TABLE t1(a, b);
  INSERT INTO t1 VALUES('a', 'one');
  INSERT INTO t1 VALUES('b', 'two');
  INSERT INTO t1 VALUES('c', 'three');

  CREATE TABLE t2(a, b);
  INSERT INTO t2 VALUES('a', 'I');
  INSERT INTO t2 VALUES('b', 'II');
  INSERT INTO t2 VALUES('c', 'III');

  CREATE TABLE t3(a, c);
  INSERT INTO t3 VALUES('a', 1);
  INSERT INTO t3 VALUES('b', 2);

  CREATE TABLE t4(a, c);
  INSERT INTO t4 VALUES('a', NULL);
  INSERT INTO t4 VALUES('b', 2);
} {}
set t1_cross_t2 [list \
  a one a I a one b II \
  a one c III b two a I \
  b two b II b two c III \
  c three a I c three b II \
  c three c III \
]
set t1_cross_t1 [list \
  a one a one a one b two \
  a one c three b two a one \
  b two b two b two c three \
  c three a one c three b two \
  c three c three \
]

# This proc is a specialized version of [do_execsql_test].
#
# The second argument to this proc must be a SELECT statement that
# features a cross join of some time. Instead of the usual ",",
# "CROSS JOIN" or "INNER JOIN" join-op, the string %JOIN% must be
# substituted.
#

```

```

# This test runs the SELECT three times - once with:
#
# * s/%JOIN%/./
# * s/%JOIN%/JOIN/
# * s/%JOIN%/INNER JOIN/
# * s/%JOIN%/CROSS JOIN/
#
# and checks that each time the results of the SELECT are $res.
#
proc do_join_test {tn select res} {
  foreach {tn2 joinop} [list 1, 2 "CROSS JOIN" 3 "INNER JOIN"] {
    set S [string map [list %JOIN% $joinop] $select]
    uplevel do_execsql_test $tn.$tn2 [list $S] [list $res]
  }
}

#-----
# The following tests check that all paths on the syntax diagrams on
# the lang_select.html page may be taken.
#
# EVIDENCE-OF: R-11353-33501 -- syntax diagram join-constraint
#
do_join_test e_select-0.1.1 {
  SELECT count(*) FROM t1 %JOIN% t2 ON (t1.a=t2.a)
} {3}
do_join_test e_select-0.1.2 {
  SELECT count(*) FROM t1 %JOIN% t2 USING (a)
} {3}
do_join_test e_select-0.1.3 {
  SELECT count(*) FROM t1 %JOIN% t2
} {9}
do_catchsql_test e_select-0.1.4 {
  SELECT count(*) FROM t1, t2 ON (t1.a=t2.a) USING (a)
} {1 {cannot have both ON and USING clauses in the same join}}
do_catchsql_test e_select-0.1.5 {
  SELECT count(*) FROM t1, t2 USING (a) ON (t1.a=t2.a)
} {1 {near "ON": syntax error}}

# EVIDENCE-OF: R-40919-40941 -- syntax diagram select-core
#
# 0: SELECT ...
# 1: SELECT DISTINCT ...
# 2: SELECT ALL ...
#
# 0: No FROM clause
# 1: Has FROM clause
#
# 0: No WHERE clause

```



```

# 1: Has WHERE clause
#
# 0: No GROUP BY clause
# 1: Has GROUP BY clause
# 2: Has GROUP BY and HAVING clauses
#
do_select_tests e_select-0.2 {
0000.1 "SELECT 1, 2, 3 " {1 2 3}
1000.1 "SELECT DISTINCT 1, 2, 3 " {1 2 3}
2000.1 "SELECT ALL 1, 2, 3 " {1 2 3}

0100.1 "SELECT a, b, a||b FROM t1 " {
  a one aone b two btwo c three cthree
}
1100.1 "SELECT DISTINCT a, b, a||b FROM t1 " {
  a one aone b two btwo c three cthree
}
1200.1 "SELECT ALL a, b, a||b FROM t1 " {
  a one aone b two btwo c three cthree
}

0010.1 "SELECT 1, 2, 3 WHERE 1 " {1 2 3}
0010.2 "SELECT 1, 2, 3 WHERE 0 " {}
0010.3 "SELECT 1, 2, 3 WHERE NULL " {}

1010.1 "SELECT DISTINCT 1, 2, 3 WHERE 1 " {1 2 3}

2010.1 "SELECT ALL 1, 2, 3 WHERE 1 " {1 2 3}

0110.1 "SELECT a, b, a||b FROM t1 WHERE a!='x' " {
  a one aone b two btwo c three cthree
}
0110.2 "SELECT a, b, a||b FROM t1 WHERE a=='x'" {}

1110.1 "SELECT DISTINCT a, b, a||b FROM t1 WHERE a!='x' " {
  a one aone b two btwo c three cthree
}

2110.0 "SELECT ALL a, b, a||b FROM t1 WHERE a=='x'" {}

0001.1 "SELECT 1, 2, 3 GROUP BY 2" {1 2 3}
0002.1 "SELECT 1, 2, 3 GROUP BY 2 HAVING count(*)=1" {1 2 3}
0002.2 "SELECT 1, 2, 3 GROUP BY 2 HAVING count(*)>1" {}

1001.1 "SELECT DISTINCT 1, 2, 3 GROUP BY 2" {1 2 3}
1002.1 "SELECT DISTINCT 1, 2, 3 GROUP BY 2 HAVING count(*)=1" {1 2 3}
1002.2 "SELECT DISTINCT 1, 2, 3 GROUP BY 2 HAVING count(*)>1" {}

```

2001.1 "SELECT ALL 1, 2, 3 GROUP BY 2" {1 2 3}

2002.1 "SELECT ALL 1, 2, 3 GROUP BY 2 HAVING count(*)=1" {1 2 3}

2002.2 "SELECT ALL 1, 2, 3 GROUP BY 2 HAVING count(*)>1" {}

0101.1 "SELECT count(*), max(a) FROM t1 GROUP BY b" {1 a 1 c 1 b}

0102.1 "SELECT count(*), max(a) FROM t1 GROUP BY b HAVING count(*)=1" {
1 a 1 c 1 b
}

0102.2 "SELECT count(*), max(a) FROM t1 GROUP BY b HAVING count(*)=2" {}

1101.1 "SELECT DISTINCT count(*), max(a) FROM t1 GROUP BY b" {1 a 1 c 1 b}

1102.1 "SELECT DISTINCT count(*), max(a) FROM t1
GROUP BY b HAVING count(*)=1" {
1 a 1 c 1 b
}

1102.2 "SELECT DISTINCT count(*), max(a) FROM t1
GROUP BY b HAVING count(*)=2" {
}

2101.1 "SELECT ALL count(*), max(a) FROM t1 GROUP BY b" {1 a 1 c 1 b}

2102.1 "SELECT ALL count(*), max(a) FROM t1
GROUP BY b HAVING count(*)=1" {
1 a 1 c 1 b
}

2102.2 "SELECT ALL count(*), max(a) FROM t1
GROUP BY b HAVING count(*)=2" {
}

0011.1 "SELECT 1, 2, 3 WHERE 1 GROUP BY 2" {1 2 3}

0012.1 "SELECT 1, 2, 3 WHERE 0 GROUP BY 2 HAVING count(*)=1" {}

0012.2 "SELECT 1, 2, 3 WHERE 0 GROUP BY 2 HAVING count(*)>1" {}

1011.1 "SELECT DISTINCT 1, 2, 3 WHERE 0 GROUP BY 2" {}

1012.1 "SELECT DISTINCT 1, 2, 3 WHERE 1 GROUP BY 2 HAVING count(*)=1"
{1 2 3}

1012.2 "SELECT DISTINCT 1, 2, 3 WHERE NULL GROUP BY 2 HAVING count(*)>1" {}

2011.1 "SELECT ALL 1, 2, 3 WHERE 1 GROUP BY 2" {1 2 3}

2012.1 "SELECT ALL 1, 2, 3 WHERE 0 GROUP BY 2 HAVING count(*)=1" {}

2012.2 "SELECT ALL 1, 2, 3 WHERE 'abc' GROUP BY 2 HAVING count(*)>1" {}

0111.1 "SELECT count(*), max(a) FROM t1 WHERE a='a' GROUP BY b" {1 a}

0112.1 "SELECT count(*), max(a) FROM t1
WHERE a='c' GROUP BY b HAVING count(*)=1" {1 c}

0112.2 "SELECT count(*), max(a) FROM t1
WHERE 0 GROUP BY b HAVING count(*)=2" {}

1111.1 "SELECT DISTINCT count(*), max(a) FROM t1 WHERE a<'c' GROUP BY b"
{1 a 1 b}

```

1112.1 "SELECT DISTINCT count(*), max(a) FROM t1 WHERE a>'a'
      GROUP BY b HAVING count(*)=1" {
  1 c 1 b
}
1112.2 "SELECT DISTINCT count(*), max(a) FROM t1 WHERE 0
      GROUP BY b HAVING count(*)=2" {
}

2111.1 "SELECT ALL count(*), max(a) FROM t1 WHERE b>'one' GROUP BY b"
      {1 c 1 b}
2112.1 "SELECT ALL count(*), max(a) FROM t1 WHERE a!='b'
      GROUP BY b HAVING count(*)=1" {
  1 a 1 c
}
2112.2 "SELECT ALL count(*), max(a) FROM t1
      WHERE 0 GROUP BY b HAVING count(*)=2" { }
}

```

EVIDENCE-OF: R-41378-26734 -- syntax diagram result-column

```

#
do_select_tests e_select-0.3 {
  1 "SELECT * FROM t1" {a one b two c three}
  2 "SELECT t1.* FROM t1" {a one b two c three}
  3 "SELECT 'x'||a||'x' FROM t1" {xax xbx xc}
  4 "SELECT 'x'||a||'x' alias FROM t1" {xax xbx xc}
  5 "SELECT 'x'||a||'x' AS alias FROM t1" {xax xbx xc}
}

```

EVIDENCE-OF: R-43129-35648 -- syntax diagram join-source

```

#
# EVIDENCE-OF: R-36683-37460 -- syntax diagram join-op
#
do_select_tests e_select-0.4 {
  1 "SELECT t1.rowid FROM t1" {1 2 3}
  2 "SELECT t1.rowid FROM t1,t2" {1 1 1 2 2 2 3 3 3}
  3 "SELECT t1.rowid FROM t1,t2,t3" {1 1 1 1 1 1 2 2 2 2 2 2 3 3 3 3 3 3}

```

```

  4 "SELECT t1.rowid FROM t1" {1 2 3}
  5 "SELECT t1.rowid FROM t1 JOIN t2" {1 1 1 2 2 2 3 3 3}
  6 "SELECT t1.rowid FROM t1 JOIN t2 JOIN t3"
    {1 1 1 1 1 1 2 2 2 2 2 2 3 3 3 3 3 3}

  7 "SELECT t1.rowid FROM t1 NATURAL JOIN t3" {1 2}
  8 "SELECT t1.rowid FROM t1 NATURAL LEFT OUTER JOIN t3" {1 2 3}
  9 "SELECT t1.rowid FROM t1 NATURAL LEFT JOIN t3" {1 2 3}
  10 "SELECT t1.rowid FROM t1 NATURAL INNER JOIN t3" {1 2}
  11 "SELECT t1.rowid FROM t1 NATURAL CROSS JOIN t3" {1 2}

```

```

12 "SELECT t1.rowid FROM t1 JOIN t3" {1 1 2 2 3 3}
13 "SELECT t1.rowid FROM t1 LEFT OUTER JOIN t3" {1 1 2 2 3 3}
14 "SELECT t1.rowid FROM t1 LEFT JOIN t3" {1 1 2 2 3 3}
15 "SELECT t1.rowid FROM t1 INNER JOIN t3" {1 1 2 2 3 3}
16 "SELECT t1.rowid FROM t1 CROSS JOIN t3" {1 1 2 2 3 3}
}

# EVIDENCE-OF: R-28308-37813 -- syntax diagram compound-operator
#
do_select_tests e_select-0.5 {
  1 "SELECT rowid FROM t1 UNION ALL SELECT rowid+2 FROM t4" {1 2 3 3 4}
  2 "SELECT rowid FROM t1 UNION   SELECT rowid+2 FROM t4" {1 2 3 4}
  3 "SELECT rowid FROM t1 INTERSECT SELECT rowid+2 FROM t4" {3}
  4 "SELECT rowid FROM t1 EXCEPT  SELECT rowid+2 FROM t4" {1 2}
}

# EVIDENCE-OF: R-06480-34950 -- syntax diagram ordering-term
#
do_select_tests e_select-0.6 {
  1 "SELECT b||a FROM t1 ORDER BY b||a"           {onea threec twob}
  2 "SELECT b||a FROM t1 ORDER BY (b||a) COLLATE nocase" {onea threec twob}
  3 "SELECT b||a FROM t1 ORDER BY (b||a) ASC"       {onea threec twob}
  4 "SELECT b||a FROM t1 ORDER BY (b||a) DESC"      {twob threec onea}
}

# EVIDENCE-OF: R-23926-36668 -- syntax diagram select-stmt
#
do_select_tests e_select-0.7 {
  1 "SELECT * FROM t1" {a one b two c three}
  2 "SELECT * FROM t1 ORDER BY b" {a one c three b two}
  3 "SELECT * FROM t1 ORDER BY b, a" {a one c three b two}

  4 "SELECT * FROM t1 LIMIT 10" {a one b two c three}
  5 "SELECT * FROM t1 LIMIT 10 OFFSET 5" {}
  6 "SELECT * FROM t1 LIMIT 10, 5" {}

  7 "SELECT * FROM t1 ORDER BY a LIMIT 10" {a one b two c three}
  8 "SELECT * FROM t1 ORDER BY b LIMIT 10 OFFSET 5" {}
  9 "SELECT * FROM t1 ORDER BY a,b LIMIT 10, 5" {}

  10 "SELECT * FROM t1 UNION SELECT b, a FROM t1"
      {a one b two c three one a three c two b}
  11 "SELECT * FROM t1 UNION SELECT b, a FROM t1 ORDER BY b"
      {one a two b three c a one c three b two}
  12 "SELECT * FROM t1 UNION SELECT b, a FROM t1 ORDER BY b, a"
      {one a two b three c a one c three b two}
  13 "SELECT * FROM t1 UNION SELECT b, a FROM t1 LIMIT 10"

```

```

    {a one b two c three one a three c two b}
14 "SELECT * FROM t1 UNION SELECT b, a FROM t1 LIMIT 10 OFFSET 5"
    {two b}
15 "SELECT * FROM t1 UNION SELECT b, a FROM t1 LIMIT 10, 5"
    {}
16 "SELECT * FROM t1 UNION SELECT b, a FROM t1 ORDER BY a LIMIT 10"
    {a one b two c three one a three c two b}
17 "SELECT * FROM t1 UNION SELECT b, a FROM t1 ORDER BY b LIMIT 10 OFFSET 5"
    {b two}
18 "SELECT * FROM t1 UNION SELECT b, a FROM t1 ORDER BY a,b LIMIT 10, 5"
    {}
}

```

```

#-----
# The following tests focus on FROM clause (join) processing.
#

```

```

# EVIDENCE-OF: R-16074-54196 If the FROM clause is omitted from a simple
# SELECT statement, then the input data is implicitly a single row zero
# columns wide
#

```

```

do_select_tests e_select-1.1 {
  1 "SELECT 'abc'"      {abc}
  2 "SELECT 'abc' WHERE NULL" {}
  3 "SELECT NULL"      {{{}}
  4 "SELECT count(*)"  {1}
  5 "SELECT count(*) WHERE 0" {0}
  6 "SELECT count(*) WHERE 1" {1}
}

```

```

# EVIDENCE-OF: R-48114-33255 If there is only a single table in the
# join-source following the FROM clause, then the input data used by the
# SELECT statement is the contents of the named table.
#
# The results of the SELECT queries suggest that they are operating on the
# contents of the table 'xx'.
#

```

```

do_execsql_test e_select-1.2.0 {
  CREATE TABLE xx(x, y);
  INSERT INTO xx VALUES('iJlIPepMuAhU', X'10B00B897A15BAA02E3F98DCE8F2');
  INSERT INTO xx VALUES(NULL, -16.87);
  INSERT INTO xx VALUES(-17.89, 'linguistically');
} {}
do_select_tests e_select-1.2 {
  1 "SELECT quote(x), quote(y) FROM xx" {
    'iJlIPepMuAhU' X'10B00B897A15BAA02E3F98DCE8F2'
    NULL          -16.87
    -17.89        'linguistically'
  }
}

```

```

}

2 "SELECT count(*), count(x), count(y) FROM xx" {3 2 3}
3 "SELECT sum(x), sum(y) FROM xx"      {-17.89 -16.87}
}

# EVIDENCE-OF: R-23593-12456 If there is more than one table specified
# as part of the join-source following the FROM keyword, then the
# contents of each named table are joined into a single dataset for the
# simple SELECT statement to operate on.
#
# There are more detailed tests for subsequent requirements that add
# more detail to this idea. We just add a single test that shows that
# data is coming from each of the three tables following the FROM clause
# here to show that the statement, vague as it is, is not incorrect.
#
do_select_tests e_select-1.3 {
1 "SELECT * FROM t1, t2, t3" {
  a one a I a 1 a one a I b 2 a one b II a 1
  a one b II b 2 a one c III a 1 a one c III b 2
  b two a I a 1 b two a I b 2 b two b II a 1
  b two b II b 2 b two c III a 1 b two c III b 2
  c three a I a 1 c three a I b 2 c three b II a 1
  c three b II b 2 c three c III a 1 c three c III b 2
}
}

#
# The following block of tests - e_select-1.4.* - test that the description
# of cartesian joins in the SELECT documentation is consistent with SQLite.
# In doing so, we test the following three requirements as a side-effect:
#
# EVIDENCE-OF: R-46122-14930 If the join-op is "CROSS JOIN", "INNER
# JOIN", "JOIN" or a comma (",") and there is no ON or USING clause,
# then the result of the join is simply the cartesian product of the
# left and right-hand datasets.
#
# The tests are built on this assertion. Really, they test that the output
# of a CROSS JOIN, JOIN, INNER JOIN or "," join matches the expected result
# of calculating the cartesian product of the left and right-hand datasets.
#
# EVIDENCE-OF: R-46256-57243 There is no difference between the "INNER
# JOIN", "JOIN" and "," join operators.
#
# EVIDENCE-OF: R-07544-24155 The "CROSS JOIN" join operator produces the
# same data as the "INNER JOIN", "JOIN" and "," operators
#
# All tests are run 4 times, with the only difference in each run being

```

```

# which of the 4 equivalent cartesian product join operators are used.
# Since the output data is the same in all cases, we consider that this
# qualifies as testing the two statements above.
#
do_execsql_test e_select-1.4.0 {
CREATE TABLE x1(a, b);
CREATE TABLE x2(c, d, e);
CREATE TABLE x3(f, g, h, i);

-- x1: 3 rows, 2 columns
INSERT INTO x1 VALUES(24, 'converging');
INSERT INTO x1 VALUES(NULL, X'CB71');
INSERT INTO x1 VALUES('blonds', 'proprietary');

-- x2: 2 rows, 3 columns
INSERT INTO x2 VALUES(-60.06, NULL, NULL);
INSERT INTO x2 VALUES(-58, NULL, 1.21);

-- x3: 5 rows, 4 columns
INSERT INTO x3 VALUES(-39.24, NULL, 'encompass', -1);
INSERT INTO x3 VALUES('presenting', 51, 'reformation', 'dignified');
INSERT INTO x3 VALUES('conducting', -87.24, 37.56, NULL);
INSERT INTO x3 VALUES('coldest', -96, 'dramatists', 82.3);
INSERT INTO x3 VALUES('alerting', NULL, -93.79, NULL);
} {}

# EVIDENCE-OF: R-59089-25828 The columns of the cartesian product
# dataset are, in order, all the columns of the left-hand dataset
# followed by all the columns of the right-hand dataset.
#
do_join_test e_select-1.4.1.1 {
SELECT * FROM x1 %JOIN% x2 LIMIT 1
} [concat {24 converging} {-60.06 {} {}}]

do_join_test e_select-1.4.1.2 {
SELECT * FROM x2 %JOIN% x1 LIMIT 1
} [concat {-60.06 {} {}} {24 converging}]

do_join_test e_select-1.4.1.3 {
SELECT * FROM x3 %JOIN% x2 LIMIT 1
} [concat {-39.24 {} encompass -1} {-60.06 {} {}}]

do_join_test e_select-1.4.1.4 {
SELECT * FROM x2 %JOIN% x3 LIMIT 1
} [concat {-60.06 {} {}} {-39.24 {} encompass -1}]

# EVIDENCE-OF: R-44414-54710 There is a row in the cartesian product
# dataset formed by combining each unique combination of a row from the

```

```

# left-hand and right-hand datasets.
#
do_join_test e_select-1.4.2.1 {
  SELECT * FROM x2 %JOIN% x3
} [list -60.06 {} {} -39.24 {} encompass -1 \
  -60.06 {} {} presenting 51 reformation dignified \
  -60.06 {} {} conducting -87.24 37.56 {} \
  -60.06 {} {} coldest -96 dramatists 82.3 \
  -60.06 {} {} alerting {} -93.79 {} \
  -58 {} 1.21 -39.24 {} encompass -1 \
  -58 {} 1.21 presenting 51 reformation dignified \
  -58 {} 1.21 conducting -87.24 37.56 {} \
  -58 {} 1.21 coldest -96 dramatists 82.3 \
  -58 {} 1.21 alerting {} -93.79 {} \
]
# TODO: Come back and add a few more like the above.

# EVIDENCE-OF: R-20659-43267 In other words, if the left-hand dataset
# consists of Nlhs rows of Mlhs columns, and the right-hand dataset of
# Nrhs rows of Mrhs columns, then the cartesian product is a dataset of
# Nlhs.Nrhs rows, each containing Mlhs+Mrhs columns.
#
# x1, x2 (Nlhs=3, Nrhs=2) (Mlhs=2, Mrhs=3)
do_join_test e_select-1.4.3.1 {
  SELECT count(*) FROM x1 %JOIN% x2
} [expr 3*2]
do_test e_select-1.4.3.2 {
  expr {[length [execsql {SELECT * FROM x1, x2}]] / 6}
} [expr 2+3]

# x2, x3 (Nlhs=2, Nrhs=5) (Mlhs=3, Mrhs=4)
do_join_test e_select-1.4.3.3 {
  SELECT count(*) FROM x2 %JOIN% x3
} [expr 2*5]
do_test e_select-1.4.3.4 {
  expr {[length [execsql {SELECT * FROM x2 JOIN x3}]] / 10}
} [expr 3+4]

# x3, x1 (Nlhs=5, Nrhs=3) (Mlhs=4, Mrhs=2)
do_join_test e_select-1.4.3.5 {
  SELECT count(*) FROM x3 %JOIN% x1
} [expr 5*3]
do_test e_select-1.4.3.6 {
  expr {[length [execsql {SELECT * FROM x3 CROSS JOIN x1}]] / 15}
} [expr 4+2]

# x3, x3 (Nlhs=5, Nrhs=5) (Mlhs=4, Mrhs=4)
do_join_test e_select-1.4.3.7 {

```



```

SELECT count(*) FROM x3 %JOIN% x3
} [expr 5*5]
do_test e_select-1.4.3.8 {
  expr {[length [execsql {SELECT * FROM x3 INNER JOIN x3 AS x4}]] / 25}
} [expr 4+4]

# Some extra cartesian product tests using tables t1 and t2.
#
do_execsql_test e_select-1.4.4.1 { SELECT * FROM t1, t2 } $t1_cross_t2
do_execsql_test e_select-1.4.4.2 { SELECT * FROM t1 AS x, t1 AS y } $t1_cross_t1

do_select_tests e_select-1.4.5 [list
  \
  1 { SELECT * FROM t1 CROSS JOIN t2 }      $t1_cross_t2      \
  2 { SELECT * FROM t1 AS y CROSS JOIN t1 AS x } $t1_cross_t1  \
  3 { SELECT * FROM t1 INNER JOIN t2 }      $t1_cross_t2      \
  4 { SELECT * FROM t1 AS y INNER JOIN t1 AS x } $t1_cross_t1  \
]

# EVIDENCE-OF: R-22775-56496 If there is an ON clause specified, then
# the ON expression is evaluated for each row of the cartesian product
# as a boolean expression. All rows for which the expression evaluates
# to false are excluded from the dataset.
#
foreach {tn select res} [list
  \
  1 { SELECT * FROM t1 %JOIN% t2 ON (1) }      $t1_cross_t2      \
  2 { SELECT * FROM t1 %JOIN% t2 ON (0) }      [list]             \
  3 { SELECT * FROM t1 %JOIN% t2 ON (NULL) }   [list]             \
  4 { SELECT * FROM t1 %JOIN% t2 ON ('abc') }  [list]             \
  5 { SELECT * FROM t1 %JOIN% t2 ON ('1ab') }  $t1_cross_t2      \
  6 { SELECT * FROM t1 %JOIN% t2 ON (0.9) }    $t1_cross_t2      \
  7 { SELECT * FROM t1 %JOIN% t2 ON ('0.9') }  $t1_cross_t2      \
  8 { SELECT * FROM t1 %JOIN% t2 ON (0.0) }    [list]             \
  \
  9 { SELECT t1.b, t2.b FROM t1 %JOIN% t2 ON (t1.a = t2.a) }      \
    {one I two II three III}                                     \
  10 { SELECT t1.b, t2.b FROM t1 %JOIN% t2 ON (t1.a = 'a') }      \
    {one I one II one III}                                       \
  11 { SELECT t1.b, t2.b
      FROM t1 %JOIN% t2 ON (CASE WHEN t1.a = 'a' THEN NULL ELSE 1 END) } \
    {two I two II two III three I three II three III}           \
] {
do_join_test e_select-1.3.$tn $select $res
}

```

```

# EVIDENCE-OF: R-63358-54862 If there is a USING clause specified as
# part of the join-constraint, then each of the column names specified
# must exist in the datasets to both the left and right of the join-op.

```

```

#
do_select_tests e_select-1.4 -error {
  cannot join using column %s - column not present in both tables
} {
  1 { SELECT * FROM t1, t3 USING (b) } "b"
  2 { SELECT * FROM t3, t1 USING (c) } "c"
  3 { SELECT * FROM t3, (SELECT a AS b, b AS c FROM t1) USING (a) } "a"
}

# EVIDENCE-OF: R-55987-04584 For each pair of namesake columns, the
# expression "lhs.X = rhs.X" is evaluated for each row of the cartesian
# product as a boolean expression. All rows for which one or more of the
# expressions evaluates to false are excluded from the result set.
#
do_select_tests e_select-1.5 {
  1 { SELECT * FROM t1, t3 USING (a) } {a one 1 b two 2}
  2 { SELECT * FROM t3, t4 USING (a,c) } {b 2}
}

# EVIDENCE-OF: R-54046-48600 When comparing values as a result of a
# USING clause, the normal rules for handling affinities, collation
# sequences and NULL values in comparisons apply.
#
# EVIDENCE-OF: R-35466-18578 The column from the dataset on the
# left-hand side of the join operator is considered to be on the
# left-hand side of the comparison operator (=) for the purposes of
# collation sequence and affinity precedence.
#
do_execsql_test e_select-1.6.0 {
  CREATE TABLE t5(a COLLATE nocase, b COLLATE binary);
  INSERT INTO t5 VALUES('AA', 'cc');
  INSERT INTO t5 VALUES('BB', 'dd');
  INSERT INTO t5 VALUES(NULL, NULL);
  CREATE TABLE t6(a COLLATE binary, b COLLATE nocase);
  INSERT INTO t6 VALUES('aa', 'cc');
  INSERT INTO t6 VALUES('bb', 'DD');
  INSERT INTO t6 VALUES(NULL, NULL);
} {}
foreach {tn select res} {
  1 { SELECT * FROM t5 %JOIN% t6 USING (a) } {AA cc cc BB dd DD}
  2 { SELECT * FROM t6 %JOIN% t5 USING (a) } {}
  3 { SELECT * FROM (SELECT a COLLATE nocase, b FROM t6) %JOIN% t5 USING (a) }
    {aa cc cc bb DD dd}
  4 { SELECT * FROM t5 %JOIN% t6 USING (a,b) } {AA cc}
  5 { SELECT * FROM t6 %JOIN% t5 USING (a,b) } {}
} {
  do_join_test e_select-1.6.$tn $select $res
}

```

```

# EVIDENCE-OF: R-57047-10461 For each pair of columns identified by a
# USING clause, the column from the right-hand dataset is omitted from
# the joined dataset.
#
# EVIDENCE-OF: R-56132-15700 This is the only difference between a USING
# clause and its equivalent ON constraint.
#
foreach {tn select res} {
  1a { SELECT * FROM t1 %JOIN% t2 USING (a) }
    {a one I b two II c three III}
  1b { SELECT * FROM t1 %JOIN% t2 ON (t1.a=t2.a) }
    {a one a I b two b II c three c III}

  2a { SELECT * FROM t3 %JOIN% t4 USING (a) }
    {a 1 {} b 2 2}
  2b { SELECT * FROM t3 %JOIN% t4 ON (t3.a=t4.a) }
    {a 1 a {} b 2 b 2}

  3a { SELECT * FROM t3 %JOIN% t4 USING (a,c) } {b 2}
  3b { SELECT * FROM t3 %JOIN% t4 ON (t3.a=t4.a AND t3.c=t4.c) } {b 2 b 2}

  4a { SELECT * FROM (SELECT a COLLATE nocase, b FROM t6) AS x
    %JOIN% t5 USING (a) }
    {aa cc cc bb DD dd}
  4b { SELECT * FROM (SELECT a COLLATE nocase, b FROM t6) AS x
    %JOIN% t5 ON (x.a=t5.a) }
    {aa cc AA cc bb DD BB dd}
} {
do_join_test e_select-1.7.$tn $select $res
}

# EVIDENCE-OF: R-41434-12448 If the join-op is a "LEFT JOIN" or "LEFT
# OUTER JOIN", then after the ON or USING filtering clauses have been
# applied, an extra row is added to the output for each row in the
# original left-hand input dataset that corresponds to no rows at all in
# the composite dataset (if any).
#
do_execsql_test e_select-1.8.0 {
  CREATE TABLE t7(a, b, c);
  CREATE TABLE t8(a, d, e);

  INSERT INTO t7 VALUES('x', 'ex', 24);
  INSERT INTO t7 VALUES('y', 'why', 25);

  INSERT INTO t8 VALUES('x', 'abc', 24);
  INSERT INTO t8 VALUES('z', 'ghi', 26);
} {}

```

```

do_select_tests e_select-1.8 {
  1a "SELECT count(*) FROM t7 JOIN t8 ON (t7.a=t8.a)" {1}
  1b "SELECT count(*) FROM t7 LEFT JOIN t8 ON (t7.a=t8.a)" {2}
  2a "SELECT count(*) FROM t7 JOIN t8 USING (a)" {1}
  2b "SELECT count(*) FROM t7 LEFT JOIN t8 USING (a)" {2}
}

# EVIDENCE-OF: R-15607-52988 The added rows contain NULL values in the
# columns that would normally contain values copied from the right-hand
# input dataset.
#
do_select_tests e_select-1.9 {
  1a "SELECT * FROM t7 JOIN t8 ON (t7.a=t8.a)" {x ex 24 x abc 24}
  1b "SELECT * FROM t7 LEFT JOIN t8 ON (t7.a=t8.a)"
    {x ex 24 x abc 24 y why 25 {} {} {}}
  2a "SELECT * FROM t7 JOIN t8 USING (a)" {x ex 24 abc 24}
  2b "SELECT * FROM t7 LEFT JOIN t8 USING (a)" {x ex 24 abc 24 y why 25 {} {}}
}

# EVIDENCE-OF: R-01809-52134 If the NATURAL keyword is added to any of
# the join-ops, then an implicit USING clause is added to the
# join-constraints. The implicit USING clause contains each of the
# column names that appear in both the left and right-hand input
# datasets.
#
do_select_tests e_select-1-10 {
  1a "SELECT * FROM t7 JOIN t8 USING (a)"    {x ex 24 abc 24}
  1b "SELECT * FROM t7 NATURAL JOIN t8"    {x ex 24 abc 24}

  2a "SELECT * FROM t8 JOIN t7 USING (a)"    {x abc 24 ex 24}
  2b "SELECT * FROM t8 NATURAL JOIN t7"    {x abc 24 ex 24}

  3a "SELECT * FROM t7 LEFT JOIN t8 USING (a)" {x ex 24 abc 24 y why 25 {} {}}
  3b "SELECT * FROM t7 NATURAL LEFT JOIN t8"  {x ex 24 abc 24 y why 25 {} {}}

  4a "SELECT * FROM t8 LEFT JOIN t7 USING (a)" {x abc 24 ex 24 z ghi 26 {} {}}
  4b "SELECT * FROM t8 NATURAL LEFT JOIN t7"  {x abc 24 ex 24 z ghi 26 {} {}}

  5a "SELECT * FROM t3 JOIN t4 USING (a,c)"  {b 2}
  5b "SELECT * FROM t3 NATURAL JOIN t4"     {b 2}

  6a "SELECT * FROM t3 LEFT JOIN t4 USING (a,c)" {a 1 b 2}
  6b "SELECT * FROM t3 NATURAL LEFT JOIN t4"  {a 1 b 2}
}

# EVIDENCE-OF: R-49566-01570 If the left and right-hand input datasets

```

```

# feature no common column names, then the NATURAL keyword has no effect
# on the results of the join.
#
do_execsql_test e_select-1.11.0 {
CREATE TABLE t10(x, y);
INSERT INTO t10 VALUES(1, 'true');
INSERT INTO t10 VALUES(0, 'false');
} {}
do_select_tests e_select-1-11 {
1a "SELECT a, x FROM t1 CROSS JOIN t10" {a 1 a 0 b 1 b 0 c 1 c 0}
1b "SELECT a, x FROM t1 NATURAL CROSS JOIN t10" {a 1 a 0 b 1 b 0 c 1 c 0}
}

# EVIDENCE-OF: R-39625-59133 A USING or ON clause may not be added to a
# join that specifies the NATURAL keyword.
#
foreach {tn sql} {
1 {SELECT * FROM t1 NATURAL LEFT JOIN t2 USING (a)}
2 {SELECT * FROM t1 NATURAL LEFT JOIN t2 ON (t1.a=t2.a)}
3 {SELECT * FROM t1 NATURAL LEFT JOIN t2 ON (45)}
} {
do_catchsql_test e_select-1.12.$tn "
$sql
" {1 {a NATURAL join may not have an ON or USING clause}}
}

#-----
# The next block of tests - e_select-3.* - concentrate on verifying
# statements made regarding WHERE clause processing.
#
drop_all_tables
do_execsql_test e_select-3.0 {
CREATE TABLE x1(k, x, y, z);
INSERT INTO x1 VALUES(1, 'relinquished', 'aphasia', 78.43);
INSERT INTO x1 VALUES(2, X'A8E8D66F', X'07CF', -81);
INSERT INTO x1 VALUES(3, -22, -27.57, NULL);
INSERT INTO x1 VALUES(4, NULL, 'bygone', 'picky');
INSERT INTO x1 VALUES(5, NULL, 96.28, NULL);
INSERT INTO x1 VALUES(6, 0, 1, 2);

CREATE TABLE x2(k, x, y2);
INSERT INTO x2 VALUES(1, 50, X'B82838');
INSERT INTO x2 VALUES(5, 84.79, 65.88);
INSERT INTO x2 VALUES(3, -22, X'0E1BE452A393');
INSERT INTO x2 VALUES(7, 'mistrusted', 'standardized');
} {}

# EVIDENCE-OF: R-06999-14330 If a WHERE clause is specified, the WHERE

```

```

# expression is evaluated for each row in the input data as a boolean
# expression. All rows for which the WHERE clause expression evaluates
# to false are excluded from the dataset before continuing.
#
do_execsql_test e_select-3.1.1 { SELECT k FROM x1 WHERE x }      {3}
do_execsql_test e_select-3.1.2 { SELECT k FROM x1 WHERE y }      {3 5 6}
do_execsql_test e_select-3.1.3 { SELECT k FROM x1 WHERE z }      {1 2 6}
do_execsql_test e_select-3.1.4 { SELECT k FROM x1 WHERE '1' || z } {1 2 4 6}
do_execsql_test e_select-3.1.5 { SELECT k FROM x1 WHERE x IS NULL } {4 5}
do_execsql_test e_select-3.1.6 { SELECT k FROM x1 WHERE z - 78.43 } {2 4 6}

```

```

do_execsql_test e_select-3.2.1a {
  SELECT k FROM x1 LEFT JOIN x2 USING(k)
} {1 2 3 4 5 6}
do_execsql_test e_select-3.2.1b {
  SELECT k FROM x1 LEFT JOIN x2 USING(k) WHERE x2.k
} {1 3 5}
do_execsql_test e_select-3.2.2 {
  SELECT k FROM x1 LEFT JOIN x2 USING(k) WHERE x2.k IS NULL
} {2 4 6}

```

```

do_execsql_test e_select-3.2.3 {
  SELECT k FROM x1 NATURAL JOIN x2 WHERE x2.k
} {3}
do_execsql_test e_select-3.2.4 {
  SELECT k FROM x1 NATURAL JOIN x2 WHERE x2.k-3
} {}

```

```

#-----
# Tests below this point are focused on verifying the testable statements
# related to calculating the result rows of a simple SELECT statement.
#

```

```

drop_all_tables
do_execsql_test e_select-4.0 {
  CREATE TABLE z1(a, b, c);
  CREATE TABLE z2(d, e);
  CREATE TABLE z3(a, b);

  INSERT INTO z1 VALUES(51.65, -59.58, 'belfries');
  INSERT INTO z1 VALUES(-5, NULL, 75);
  INSERT INTO z1 VALUES(-2.2, -23.18, 'suiters');
  INSERT INTO z1 VALUES(NULL, 67, 'quartets');
  INSERT INTO z1 VALUES(-1.04, -32.3, 'aspen');
  INSERT INTO z1 VALUES(63, 'born', -26);

```

```

  INSERT INTO z2 VALUES(NULL, 21);
  INSERT INTO z2 VALUES(36, 6);

```

```

INSERT INTO z3 VALUES('subsistence', 'gauze');
INSERT INTO z3 VALUES(49.17, -67);
} {}

```

```

# EVIDENCE-OF: R-36327-17224 If a result expression is the special
# expression "*" then all columns in the input data are substituted for
# that one expression.
#

```

```

# EVIDENCE-OF: R-43693-30522 If the expression is the alias of a table
# or subquery in the FROM clause followed by "." then all columns from
# the named table or subquery are substituted for the single expression.
#

```

```

do_select_tests e_select-4.1 {
  1 "SELECT * FROM z1 LIMIT 1"      {51.65 -59.58 belfries}
  2 "SELECT * FROM z1,z2 LIMIT 1"   {51.65 -59.58 belfries {} 21}
  3 "SELECT z1.* FROM z1,z2 LIMIT 1" {51.65 -59.58 belfries}
  4 "SELECT z2.* FROM z1,z2 LIMIT 1" {{} 21}
  5 "SELECT z2.*, z1.* FROM z1,z2 LIMIT 1" {{} 21 51.65 -59.58 belfries}

```

```

  6 "SELECT count(*), * FROM z1"     {6 63 born -26}
  7 "SELECT max(a), * FROM z1"       {63 63 born -26}
  8 "SELECT *, min(a) FROM z1"       {-5 {} 75 -5}

```

```

  9 "SELECT *,* FROM z1,z2 LIMIT 1" {
    51.65 -59.58 belfries {} 21 51.65 -59.58 belfries {} 21
  }
  10 "SELECT z1.*,z1.* FROM z2,z1 LIMIT 1" {
    51.65 -59.58 belfries 51.65 -59.58 belfries
  }
}

```

```

# EVIDENCE-OF: R-61869-22578 It is an error to use a "*" or "alias.*"
# expression in any context other than than a result expression list.
#

```

```

# EVIDENCE-OF: R-44324-41166 It is also an error to use a "*" or
# "alias.*" expression in a simple SELECT query that does not have a
# FROM clause.
#

```

```

foreach {tn select err} {
  1.1 "SELECT a, b, c FROM z1 WHERE *" {near "*": syntax error}
  1.2 "SELECT a, b, c FROM z1 GROUP BY *" {near "*": syntax error}
  1.3 "SELECT 1 + * FROM z1"          {near "*": syntax error}
  1.4 "SELECT * + 1 FROM z1"          {near "+": syntax error}

```

```

  2.1 "SELECT *" {no tables specified}
  2.2 "SELECT * WHERE 1" {no tables specified}
  2.3 "SELECT * WHERE 0" {no tables specified}

```

```

2.4 "SELECT count(*), *" {no tables specified}
} {
do_catchsql_test e_select-4.2.$tn $select [list 1 $err]
}

# EVIDENCE-OF: R-08669-22397 The number of columns in the rows returned
# by a simple SELECT statement is equal to the number of expressions in
# the result expression list after substitution of * and alias.*
# expressions.
#
foreach {tn select nCol} {
  1 "SELECT * FROM z1" 3
  2 "SELECT * FROM z1 NATURAL JOIN z3" 3
  3 "SELECT z1.* FROM z1 NATURAL JOIN z3" 3
  4 "SELECT z3.* FROM z1 NATURAL JOIN z3" 2
  5 "SELECT z1.*, z3.* FROM z1 NATURAL JOIN z3" 5
  6 "SELECT 1, 2, z1.* FROM z1" 5
  7 "SELECT a, *, b, c FROM z1" 6
} {
set ::stmt [sqlite3_prepare_v2 db $select -1 DUMMY]
do_test e_select-4.3.$tn { sqlite3_column_count $::stmt } $nCol
sqlite3_finalize $::stmt
}

```

```

# In lang_select.html, a non-aggregate query is defined as any simple SELECT
# that has no GROUP BY clause and no aggregate expressions in the result
# expression list. Other queries are aggregate queries. Test cases
# e_select-4.4.* through e_select-4.12.*, inclusive, which test the part of
# simple SELECT that is different for aggregate and non-aggregate queries
# verify (in a way) that these definitions are consistent:
#
# EVIDENCE-OF: R-20637-43463 A simple SELECT statement is an aggregate
# query if it contains either a GROUP BY clause or one or more aggregate
# functions in the result-set.
#
# EVIDENCE-OF: R-23155-55597 Otherwise, if a simple SELECT contains no
# aggregate functions or a GROUP BY clause, it is a non-aggregate query.
#

```

```

# EVIDENCE-OF: R-44050-47362 If the SELECT statement is a non-aggregate
# query, then each expression in the result expression list is evaluated
# for each row in the dataset filtered by the WHERE clause.
#
do_select_tests e_select-4.4 {
  1 "SELECT a, b FROM z1"
  {51.65 -59.58 -5 {} -2.2 -23.18 {} 67 -1.04 -32.3 63 born}
}

```



```

2 "SELECT a IS NULL, b+1, * FROM z1" {
    0 -58.58 51.65 -59.58 belfries
    0 {} -5 {} 75
    0 -22.18 -2.2 -23.18 suiters
    1 68 {} 67 quartets
    0 -31.3 -1.04 -32.3 aspen
    0 1 63 born -26
}

3 "SELECT 32*32, d||e FROM z2" { 1024 {} 1024 366 }
}

# Test cases e_select-4.5.* and e_select-4.6.* together show that:
#
# EVIDENCE-OF: R-51988-01124 The single row of result-set data created
# by evaluating the aggregate and non-aggregate expressions in the
# result-set forms the result of an aggregate query without a GROUP BY
# clause.
#
# EVIDENCE-OF: R-57629-25253 If the SELECT statement is an aggregate
# query without a GROUP BY clause, then each aggregate expression in the
# result-set is evaluated once across the entire dataset.
#
do_select_tests e_select-4.5 {
1 "SELECT count(a), max(a), count(b), max(b) FROM z1" {5 63 5 born}
2 "SELECT count(*), max(1)" {1 1}

3 "SELECT sum(b+1) FROM z1 NATURAL LEFT JOIN z3" {-43.06}
4 "SELECT sum(b+2) FROM z1 NATURAL LEFT JOIN z3" {-38.06}
5 "SELECT sum(b IS NOT NULL) FROM z1 NATURAL LEFT JOIN z3" {5}
}

# EVIDENCE-OF: R-26684-40576 Each non-aggregate expression in the
# result-set is evaluated once for an arbitrarily selected row of the
# dataset.
#
# EVIDENCE-OF: R-27994-60376 The same arbitrarily selected row is used
# for each non-aggregate expression.
#
# Note: The results of many of the queries in this block of tests are
# technically undefined, as the documentation does not specify which row
# SQLite will arbitrarily select to use for the evaluation of the
# non-aggregate expressions.
#
drop_all_tables

```

```

do_execsql_test e_select-4.6.0 {
CREATE TABLE a1(one PRIMARY KEY, two);
INSERT INTO a1 VALUES(1, 1);
INSERT INTO a1 VALUES(2, 3);
INSERT INTO a1 VALUES(3, 6);
INSERT INTO a1 VALUES(4, 10);

CREATE TABLE a2(one PRIMARY KEY, three);
INSERT INTO a2 VALUES(1, 1);
INSERT INTO a2 VALUES(3, 2);
INSERT INTO a2 VALUES(6, 3);
INSERT INTO a2 VALUES(10, 4);
} {}

do_select_tests e_select-4.6 {
1 "SELECT one, two, count(*) FROM a1"           {4 10 4}
2 "SELECT one, two, count(*) FROM a1 WHERE one<3"   {2 3 2}
3 "SELECT one, two, count(*) FROM a1 WHERE one>3"   {4 10 1}
4 "SELECT *, count(*) FROM a1 JOIN a2"           {4 10 10 4 16}
5 "SELECT *, sum(three) FROM a1 NATURAL JOIN a2"   {3 6 2 3}
6 "SELECT *, sum(three) FROM a1 NATURAL JOIN a2"   {3 6 2 3}
7 "SELECT group_concat(three, ''), a1.* FROM a1 NATURAL JOIN a2" {12 3 6}
}

# EVIDENCE-OF: R-04486-07266 Or, if the dataset contains zero rows, then
# each non-aggregate expression is evaluated against a row consisting
# entirely of NULL values.
#
do_select_tests e_select-4.7 {
1 "SELECT one, two, count(*) FROM a1 WHERE 0"      {{{} {} 0}
2 "SELECT sum(two), * FROM a1, a2 WHERE three>5"  {{{} {} {} {} {}}}
3 "SELECT max(one) IS NULL, one IS NULL, two IS NULL FROM a1 WHERE two=7" {
1 1 1
}
}

# EVIDENCE-OF: R-64138-28774 An aggregate query without a GROUP BY
# clause always returns exactly one row of data, even if there are zero
# rows of input data.
#
foreach {tn select} {
8.1 "SELECT count(*) FROM a1"
8.2 "SELECT count(*) FROM a1 WHERE 0"
8.3 "SELECT count(*) FROM a1 WHERE 1"
8.4 "SELECT max(a1.one)+min(two), a1.one, two, * FROM a1, a2 WHERE 1"
8.5 "SELECT max(a1.one)+min(two), a1.one, two, * FROM a1, a2 WHERE 0"
} {
# Set $nRow to the number of rows returned by $select:
set ::stmt [sqlite3_prepare_v2 db $select -1 DUMMY]

```

```

set nRow 0
while {"SQLITE_ROW" == [sqlite3_step $::stmt]} { incr nRow }
set rc [sqlite3_finalize $::stmt]

# Test that $nRow==1 and that statement execution was successful
# (rc==SQLITE_OK).
do_test e_select-4.$tn [list list $rc $nRow] {SQLITE_OK 1}
}

drop_all_tables
do_execsql_test e_select-4.9.0 {
CREATE TABLE b1(one PRIMARY KEY, two);
INSERT INTO b1 VALUES(1, 'o');
INSERT INTO b1 VALUES(4, 'f');
INSERT INTO b1 VALUES(3, 't');
INSERT INTO b1 VALUES(2, 't');
INSERT INTO b1 VALUES(5, 'f');
INSERT INTO b1 VALUES(7, 's');
INSERT INTO b1 VALUES(6, 's');

CREATE TABLE b2(x, y);
INSERT INTO b2 VALUES(NULL, 0);
INSERT INTO b2 VALUES(NULL, 1);
INSERT INTO b2 VALUES('xyz', 2);
INSERT INTO b2 VALUES('abc', 3);
INSERT INTO b2 VALUES('xyz', 4);

CREATE TABLE b3(a COLLATE nocase, b COLLATE binary);
INSERT INTO b3 VALUES('abc', 'abc');
INSERT INTO b3 VALUES('aBC', 'aBC');
INSERT INTO b3 VALUES('Def', 'Def');
INSERT INTO b3 VALUES('dEF', 'dEF');
} {}

# EVIDENCE-OF: R-57754-57109 If the SELECT statement is an aggregate
# query with a GROUP BY clause, then each of the expressions specified
# as part of the GROUP BY clause is evaluated for each row of the
# dataset. Each row is then assigned to a "group" based on the results;
# rows for which the results of evaluating the GROUP BY expressions are
# the same are assigned to the same group.
#
# These tests also show that the following is not untrue:
#
# EVIDENCE-OF: R-25883-55063 The expressions in the GROUP BY clause do
# not have to be expressions that appear in the result.
#
do_select_tests e_select-4.9 {
1 "SELECT group_concat(one), two FROM b1 GROUP BY two" {

```

```

/##,# f 1 o ##,# s ##,# t/
}
2 "SELECT group_concat(one), sum(one) FROM b1 GROUP BY (one>4)" {
  1,2,3,4 10 5,6,7 18
}
3 "SELECT group_concat(one) FROM b1 GROUP BY (two>'o'), one%2" {
  4 1,5 2,6 3,7
}
4 "SELECT group_concat(one) FROM b1 GROUP BY (one==2 OR two=='o')" {
  4,3,5,7,6 1,2
}
}
}

```

EVIDENCE-OF: R-14926-50129 For the purposes of grouping rows, NULL values are considered equal.

```

#
do_select_tests e_select-4.10 {
  1 "SELECT group_concat(y) FROM b2 GROUP BY x" {/##,# 3 ##,#/}
  2 "SELECT count(*) FROM b2 GROUP BY CASE WHEN y<4 THEN NULL ELSE 0 END" {4 1}
}

```

EVIDENCE-OF: R-10470-30318 The usual rules for selecting a collation sequence with which to compare text values apply when evaluating expressions in a GROUP BY clause.

```

#
do_select_tests e_select-4.11 {
  1 "SELECT count(*) FROM b3 GROUP BY b" {1 1 1 1}
  2 "SELECT count(*) FROM b3 GROUP BY a" {2 2}
  3 "SELECT count(*) FROM b3 GROUP BY +b" {1 1 1 1}
  4 "SELECT count(*) FROM b3 GROUP BY +a" {2 2}
  5 "SELECT count(*) FROM b3 GROUP BY b||'" {1 1 1 1}
  6 "SELECT count(*) FROM b3 GROUP BY a||'" {1 1 1 1}
}

```

EVIDENCE-OF: R-63573-50730 The expressions in a GROUP BY clause may not be aggregate expressions.

```

#
foreach {tn select} {
  12.1 "SELECT * FROM b3 GROUP BY count(*)"
  12.2 "SELECT max(a) FROM b3 GROUP BY max(b)"
  12.3 "SELECT group_concat(a) FROM b3 GROUP BY a, max(b)"
} {
  set res {1 {aggregate functions are not allowed in the GROUP BY clause}}
  do_catchsql_test e_select-4.$tn $select $res
}

```

EVIDENCE-OF: R-31537-00101 If a HAVING clause is specified, it is evaluated once for each group of rows as a boolean expression. If the

```

# result of evaluating the HAVING clause is false, the group is
# discarded.
#
# This requirement is tested by all e_select-4.13.* tests.
#
# EVIDENCE-OF: R-04132-09474 If the HAVING clause is an aggregate
# expression, it is evaluated across all rows in the group.
#
# Tested by e_select-4.13.1.*
#
# EVIDENCE-OF: R-28262-47447 If a HAVING clause is a non-aggregate
# expression, it is evaluated with respect to an arbitrarily selected
# row from the group.
#
# Tested by e_select-4.13.2.*
#
# Tests in this block also show that this is not untrue:
#
# EVIDENCE-OF: R-55403-13450 The HAVING expression may refer to values,
# even aggregate functions, that are not in the result.
#
do_execsql_test e_select-4.13.0 {
CREATE TABLE c1(up, down);
INSERT INTO c1 VALUES('x', 1);
INSERT INTO c1 VALUES('x', 2);
INSERT INTO c1 VALUES('x', 4);
INSERT INTO c1 VALUES('x', 8);
INSERT INTO c1 VALUES('y', 16);
INSERT INTO c1 VALUES('y', 32);

CREATE TABLE c2(i, j);
INSERT INTO c2 VALUES(1, 0);
INSERT INTO c2 VALUES(2, 1);
INSERT INTO c2 VALUES(3, 3);
INSERT INTO c2 VALUES(4, 6);
INSERT INTO c2 VALUES(5, 10);
INSERT INTO c2 VALUES(6, 15);
INSERT INTO c2 VALUES(7, 21);
INSERT INTO c2 VALUES(8, 28);
INSERT INTO c2 VALUES(9, 36);

CREATE TABLE c3(i PRIMARY KEY, k TEXT);
INSERT INTO c3 VALUES(1, 'hydrogen');
INSERT INTO c3 VALUES(2, 'helium');
INSERT INTO c3 VALUES(3, 'lithium');
INSERT INTO c3 VALUES(4, 'beryllium');
INSERT INTO c3 VALUES(5, 'boron');
INSERT INTO c3 VALUES(94, 'plutonium');

```

```
} {}
```

```
do_select_tests e_select-4.13 {
```

- 1.1 "SELECT up FROM c1 GROUP BY up HAVING count(*)>3" {x}
- 1.2 "SELECT up FROM c1 GROUP BY up HAVING sum(down)>16" {y}
- 1.3 "SELECT up FROM c1 GROUP BY up HAVING sum(down)<16" {x}
- 1.4 "SELECT up||down FROM c1 GROUP BY (down<5) HAVING max(down)<10" {x4}

2.1 "SELECT up FROM c1 GROUP BY up HAVING down>10" {y}

2.2 "SELECT up FROM c1 GROUP BY up HAVING up='y'" {y}

2.3 "SELECT i, j FROM c2 GROUP BY i>4 HAVING i>6" {9 36}

```
}
```

```
# EVIDENCE-OF: R-23927-54081 Each expression in the result-set is then
```

```
# evaluated once for each group of rows.
```

```
#
```

```
# EVIDENCE-OF: R-53735-47017 If the expression is an aggregate
```

```
# expression, it is evaluated across all rows in the group.
```

```
#
```

```
do_select_tests e_select-4.15 {
```

- 1 "SELECT sum(down) FROM c1 GROUP BY up" {15 48}
- 2 "SELECT sum(j), max(j) FROM c2 GROUP BY (i%3)" {54 36 27 21 39 28}
- 3 "SELECT sum(j), max(j) FROM c2 GROUP BY (j%2)" {80 36 40 21}
- 4 "SELECT 1+sum(j), max(j)+1 FROM c2 GROUP BY (j%2)" {81 37 41 22}
- 5 "SELECT count(*), round(avg(i),2) FROM c1, c2 ON (i=down) GROUP BY j%2"
{3 4.33 1 2.0}

```
}
```

```
# EVIDENCE-OF: R-62913-19830 Otherwise, it is evaluated against a single
```

```
# arbitrarily chosen row from within the group.
```

```
#
```

```
# EVIDENCE-OF: R-53924-08809 If there is more than one non-aggregate
```

```
# expression in the result-set, then all such expressions are evaluated
```

```
# for the same row.
```

```
#
```

```
do_select_tests e_select-4.15 {
```

- 1 "SELECT i, j FROM c2 GROUP BY i%2" {8 28 9 36}
- 2 "SELECT i, j FROM c2 GROUP BY i%2 HAVING j<30" {8 28}
- 3 "SELECT i, j FROM c2 GROUP BY i%2 HAVING j>30" {9 36}
- 4 "SELECT i, j FROM c2 GROUP BY i%2 HAVING j>30" {9 36}
- 5 "SELECT count(*), i, k FROM c2 NATURAL JOIN c3 GROUP BY substr(k, 1, 1)"
{2 5 boron 2 2 helium 1 3 lithium}

```
}
```

```
# EVIDENCE-OF: R-19334-12811 Each group of input dataset rows
```

```
# contributes a single row to the set of result rows.
```

```
#
```

```
# EVIDENCE-OF: R-02223-49279 Subject to filtering associated with the
# DISTINCT keyword, the number of rows returned by an aggregate query
# with a GROUP BY clause is the same as the number of groups of rows
# produced by applying the GROUP BY and HAVING clauses to the filtered
# input dataset.
```

```
#
```

```
do_select_tests e_select.4.16 -count {
  1 "SELECT i, j FROM c2 GROUP BY i%2"      2
  2 "SELECT i, j FROM c2 GROUP BY i"      9
  3 "SELECT i, j FROM c2 GROUP BY i HAVING i<5" 4
}
```

```
#-----
```

```
# The following tests attempt to verify statements made regarding the ALL
# and DISTINCT keywords.
```

```
#
```

```
drop_all_tables
```

```
do_execsql_test e_select-5.1.0 {
  CREATE TABLE h1(a, b);
  INSERT INTO h1 VALUES(1, 'one');
  INSERT INTO h1 VALUES(1, 'T');
  INSERT INTO h1 VALUES(1, 'i');
  INSERT INTO h1 VALUES(4, 'four');
  INSERT INTO h1 VALUES(4, 'IV');
  INSERT INTO h1 VALUES(4, 'iv');
```

```
CREATE TABLE h2(x COLLATE nocase);
INSERT INTO h2 VALUES('One');
INSERT INTO h2 VALUES('Two');
INSERT INTO h2 VALUES('Three');
INSERT INTO h2 VALUES('Four');
INSERT INTO h2 VALUES('one');
INSERT INTO h2 VALUES('two');
INSERT INTO h2 VALUES('three');
INSERT INTO h2 VALUES('four');
```

```
CREATE TABLE h3(c, d);
INSERT INTO h3 VALUES(1, NULL);
INSERT INTO h3 VALUES(2, NULL);
INSERT INTO h3 VALUES(3, NULL);
INSERT INTO h3 VALUES(4, '2');
INSERT INTO h3 VALUES(5, NULL);
INSERT INTO h3 VALUES(6, '2,3');
INSERT INTO h3 VALUES(7, NULL);
INSERT INTO h3 VALUES(8, '2,4');
INSERT INTO h3 VALUES(9, '3');
} {}
```

```

# EVIDENCE-OF: R-60770-10612 One of the ALL or DISTINCT keywords may
# follow the SELECT keyword in a simple SELECT statement.
#
do_select_tests e_select-5.1 {
  1 "SELECT ALL a FROM h1"    {1 1 1 4 4 4}
  2 "SELECT DISTINCT a FROM h1" {1 4}
}

# EVIDENCE-OF: R-08861-34280 If the simple SELECT is a SELECT ALL, then
# the entire set of result rows are returned by the SELECT.
#
# EVIDENCE-OF: R-47911-02086 If neither ALL or DISTINCT are present,
# then the behavior is as if ALL were specified.
#
# EVIDENCE-OF: R-14442-41305 If the simple SELECT is a SELECT DISTINCT,
# then duplicate rows are removed from the set of result rows before it
# is returned.
#
# The three testable statements above are tested by e_select-5.2.*,
# 5.3.* and 5.4.* respectively.
#
do_select_tests e_select-5 {
  3.1 "SELECT ALL x FROM h2" {One Two Three Four one two three four}
  3.2 "SELECT ALL x FROM h1, h2 ON (x=b)" {One one Four four}

  3.1 "SELECT x FROM h2" {One Two Three Four one two three four}
  3.2 "SELECT x FROM h1, h2 ON (x=b)" {One one Four four}

  4.1 "SELECT DISTINCT x FROM h2" {One Two Three Four}
  4.2 "SELECT DISTINCT x FROM h1, h2 ON (x=b)" {One Four}
}

# EVIDENCE-OF: R-02054-15343 For the purposes of detecting duplicate
# rows, two NULL values are considered to be equal.
#
do_select_tests e_select-5.5 {
  1 "SELECT DISTINCT d FROM h3" {{} 2 2,3 2,4 3}
}

# EVIDENCE-OF: R-58359-52112 The normal rules for selecting a collation
# sequence to compare text values with apply.
#
do_select_tests e_select-5.6 {
  1 "SELECT DISTINCT b FROM h1"          {one I i four IV iv}
  2 "SELECT DISTINCT b COLLATE nocase FROM h1" {one I four IV}
  3 "SELECT DISTINCT x FROM h2"          {One Two Three Four}
  4 "SELECT DISTINCT x COLLATE binary FROM h2" {
    One Two Three Four one two three four
  }
}

```



```

}
}

#-----
# The following tests - e_select-7.* - test that statements made to do
# with compound SELECT statements are correct.
#

# EVIDENCE-OF: R-39368-64333 In a compound SELECT, all the constituent
# SELECTs must return the same number of result columns.
#
# All the other tests in this section use compound SELECTs created
# using component SELECTs that do return the same number of columns.
# So the tests here just show that it is an error to attempt otherwise.
#
drop_all_tables
do_execsql_test e_select-7.1.0 {
CREATE TABLE j1(a, b, c);
CREATE TABLE j2(e, f);
CREATE TABLE j3(g);
} {}
do_select_tests e_select-7.1 -error {
SELECTs to the left and right of %s do not have the same number of result columns
} {
1 "SELECT a, b FROM j1 UNION ALL SELECT g FROM j3" {{UNION ALL}}
2 "SELECT * FROM j1 UNION ALL SELECT * FROM j3" {{UNION ALL}}
3 "SELECT a, b FROM j1 UNION ALL SELECT g FROM j3" {{UNION ALL}}
4 "SELECT a, b FROM j1 UNION ALL SELECT * FROM j3,j2" {{UNION ALL}}
5 "SELECT * FROM j3,j2 UNION ALL SELECT a, b FROM j1" {{UNION ALL}}

6 "SELECT a, b FROM j1 UNION SELECT g FROM j3" {UNION}
7 "SELECT * FROM j1 UNION SELECT * FROM j3" {UNION}
8 "SELECT a, b FROM j1 UNION SELECT g FROM j3" {UNION}
9 "SELECT a, b FROM j1 UNION SELECT * FROM j3,j2" {UNION}
10 "SELECT * FROM j3,j2 UNION SELECT a, b FROM j1" {UNION}

11 "SELECT a, b FROM j1 INTERSECT SELECT g FROM j3" {INTERSECT}
12 "SELECT * FROM j1 INTERSECT SELECT * FROM j3" {INTERSECT}
13 "SELECT a, b FROM j1 INTERSECT SELECT g FROM j3" {INTERSECT}
14 "SELECT a, b FROM j1 INTERSECT SELECT * FROM j3,j2" {INTERSECT}
15 "SELECT * FROM j3,j2 INTERSECT SELECT a, b FROM j1" {INTERSECT}

16 "SELECT a, b FROM j1 EXCEPT SELECT g FROM j3" {EXCEPT}
17 "SELECT * FROM j1 EXCEPT SELECT * FROM j3" {EXCEPT}
18 "SELECT a, b FROM j1 EXCEPT SELECT g FROM j3" {EXCEPT}
19 "SELECT a, b FROM j1 EXCEPT SELECT * FROM j3,j2" {EXCEPT}
20 "SELECT * FROM j3,j2 EXCEPT SELECT a, b FROM j1" {EXCEPT}
}

```

```

# EVIDENCE-OF: R-01450-11152 As the components of a compound SELECT must
# be simple SELECT statements, they may not contain ORDER BY or LIMIT
# clauses.
#
foreach {tn select op1 op2} {
  1 "SELECT * FROM j1 ORDER BY a UNION ALL SELECT * FROM j2,j3"
    {ORDER BY} {UNION ALL}
  2 "SELECT count(*) FROM j1 ORDER BY 1 UNION ALL SELECT max(e) FROM j2"
    {ORDER BY} {UNION ALL}
  3 "SELECT count(*), * FROM j1 ORDER BY 1,2,3 UNION ALL SELECT *,* FROM j2"
    {ORDER BY} {UNION ALL}
  4 "SELECT * FROM j1 LIMIT 10 UNION ALL SELECT * FROM j2,j3"
    LIMIT {UNION ALL}
  5 "SELECT * FROM j1 LIMIT 10 OFFSET 5 UNION ALL SELECT * FROM j2,j3"
    LIMIT {UNION ALL}
  6 "SELECT a FROM j1 LIMIT (SELECT e FROM j2) UNION ALL SELECT g FROM j2,j3"
    LIMIT {UNION ALL}

  7 "SELECT * FROM j1 ORDER BY a UNION SELECT * FROM j2,j3"
    {ORDER BY} {UNION}
  8 "SELECT count(*) FROM j1 ORDER BY 1 UNION SELECT max(e) FROM j2"
    {ORDER BY} {UNION}
  9 "SELECT count(*), * FROM j1 ORDER BY 1,2,3 UNION SELECT *,* FROM j2"
    {ORDER BY} {UNION}
  10 "SELECT * FROM j1 LIMIT 10 UNION SELECT * FROM j2,j3"
    LIMIT {UNION}
  11 "SELECT * FROM j1 LIMIT 10 OFFSET 5 UNION SELECT * FROM j2,j3"
    LIMIT {UNION}
  12 "SELECT a FROM j1 LIMIT (SELECT e FROM j2) UNION SELECT g FROM j2,j3"
    LIMIT {UNION}

  13 "SELECT * FROM j1 ORDER BY a EXCEPT SELECT * FROM j2,j3"
    {ORDER BY} {EXCEPT}
  14 "SELECT count(*) FROM j1 ORDER BY 1 EXCEPT SELECT max(e) FROM j2"
    {ORDER BY} {EXCEPT}
  15 "SELECT count(*), * FROM j1 ORDER BY 1,2,3 EXCEPT SELECT *,* FROM j2"
    {ORDER BY} {EXCEPT}
  16 "SELECT * FROM j1 LIMIT 10 EXCEPT SELECT * FROM j2,j3"
    LIMIT {EXCEPT}
  17 "SELECT * FROM j1 LIMIT 10 OFFSET 5 EXCEPT SELECT * FROM j2,j3"
    LIMIT {EXCEPT}
  18 "SELECT a FROM j1 LIMIT (SELECT e FROM j2) EXCEPT SELECT g FROM j2,j3"
    LIMIT {EXCEPT}

  19 "SELECT * FROM j1 ORDER BY a INTERSECT SELECT * FROM j2,j3"
    {ORDER BY} {INTERSECT}
  20 "SELECT count(*) FROM j1 ORDER BY 1 INTERSECT SELECT max(e) FROM j2"

```

```

    {ORDER BY} {INTERSECT}
21 "SELECT count(*), * FROM j1 ORDER BY 1,2,3 INTERSECT SELECT *,* FROM j2"
    {ORDER BY} {INTERSECT}
22 "SELECT * FROM j1 LIMIT 10 INTERSECT SELECT * FROM j2,j3"
    LIMIT {INTERSECT}
23 "SELECT * FROM j1 LIMIT 10 OFFSET 5 INTERSECT SELECT * FROM j2,j3"
    LIMIT {INTERSECT}
24 "SELECT a FROM j1 LIMIT (SELECT e FROM j2) INTERSECT SELECT g FROM j2,j3"
    LIMIT {INTERSECT}
} {
set err "$op1 clause should come after $op2 not before"
do_catchsql_test e_select-7.2.$tn $select [list 1 $err]
}

# EVIDENCE-OF: R-22874-32655 ORDER BY and LIMIT clauses may only occur
# at the end of the entire compound SELECT.
#
foreach {tn select} {
  1 "SELECT * FROM j1 UNION ALL SELECT * FROM j2,j3 ORDER BY a"
  2 "SELECT count(*) FROM j1 UNION ALL SELECT max(e) FROM j2 ORDER BY 1"
  3 "SELECT count(*), * FROM j1 UNION ALL SELECT *,* FROM j2 ORDER BY 1,2,3"
  4 "SELECT * FROM j1 UNION ALL SELECT * FROM j2,j3 LIMIT 10"
  5 "SELECT * FROM j1 UNION ALL SELECT * FROM j2,j3 LIMIT 10 OFFSET 5"
  6 "SELECT a FROM j1 UNION ALL SELECT g FROM j2,j3 LIMIT (SELECT 10)"

  7 "SELECT * FROM j1 UNION SELECT * FROM j2,j3 ORDER BY a"
  8 "SELECT count(*) FROM j1 UNION SELECT max(e) FROM j2 ORDER BY 1"
  9 "SELECT count(*), * FROM j1 UNION SELECT *,* FROM j2 ORDER BY 1,2,3"
  10 "SELECT * FROM j1 UNION SELECT * FROM j2,j3 LIMIT 10"
  11 "SELECT * FROM j1 UNION SELECT * FROM j2,j3 LIMIT 10 OFFSET 5"
  12 "SELECT a FROM j1 UNION SELECT g FROM j2,j3 LIMIT (SELECT 10)"

  13 "SELECT * FROM j1 EXCEPT SELECT * FROM j2,j3 ORDER BY a"
  14 "SELECT count(*) FROM j1 EXCEPT SELECT max(e) FROM j2 ORDER BY 1"
  15 "SELECT count(*), * FROM j1 EXCEPT SELECT *,* FROM j2 ORDER BY 1,2,3"
  16 "SELECT * FROM j1 EXCEPT SELECT * FROM j2,j3 LIMIT 10"
  17 "SELECT * FROM j1 EXCEPT SELECT * FROM j2,j3 LIMIT 10 OFFSET 5"
  18 "SELECT a FROM j1 EXCEPT SELECT g FROM j2,j3 LIMIT (SELECT 10)"

  19 "SELECT * FROM j1 INTERSECT SELECT * FROM j2,j3 ORDER BY a"
  20 "SELECT count(*) FROM j1 INTERSECT SELECT max(e) FROM j2 ORDER BY 1"
  21 "SELECT count(*), * FROM j1 INTERSECT SELECT *,* FROM j2 ORDER BY 1,2,3"
  22 "SELECT * FROM j1 INTERSECT SELECT * FROM j2,j3 LIMIT 10"
  23 "SELECT * FROM j1 INTERSECT SELECT * FROM j2,j3 LIMIT 10 OFFSET 5"
  24 "SELECT a FROM j1 INTERSECT SELECT g FROM j2,j3 LIMIT (SELECT 10)"
} {
do_test e_select-7.3.$tn { catch {execsql $select} msg } 0
}

```

```

# EVIDENCE-OF: R-08531-36543 A compound SELECT created using UNION ALL
# operator returns all the rows from the SELECT to the left of the UNION
# ALL operator, and all the rows from the SELECT to the right of it.
#
drop_all_tables
do_execsql_test e_select-7.4.0 {
CREATE TABLE q1(a TEXT, b INTEGER, c);
CREATE TABLE q2(d NUMBER, e BLOB);
CREATE TABLE q3(f REAL, g);

INSERT INTO q1 VALUES(16, -87.66, NULL);
INSERT INTO q1 VALUES('legible', 94, -42.47);
INSERT INTO q1 VALUES('beauty', 36, NULL);

INSERT INTO q2 VALUES('legible', 1);
INSERT INTO q2 VALUES('beauty', 2);
INSERT INTO q2 VALUES(-65.91, 4);
INSERT INTO q2 VALUES('emanating', -16.56);

INSERT INTO q3 VALUES('beauty', 2);
INSERT INTO q3 VALUES('beauty', 2);
} {}
do_select_tests e_select-7.4 {
1 {SELECT a FROM q1 UNION ALL SELECT d FROM q2}
  {16 legible beauty legible beauty -65.91 emanating}

2 {SELECT * FROM q1 WHERE a=16 UNION ALL SELECT 'x', * FROM q2 WHERE oid=1}
  {16 -87.66 {} x legible 1}

3 {SELECT count(*) FROM q1 UNION ALL SELECT min(e) FROM q2}
  {3 -16.56}

4 {SELECT * FROM q2 UNION ALL SELECT * FROM q3}
  {legible 1 beauty 2 -65.91 4 emanating -16.56 beauty 2 beauty 2}
}

# EVIDENCE-OF: R-20560-39162 The UNION operator works the same way as
# UNION ALL, except that duplicate rows are removed from the final
# result set.
#
do_select_tests e_select-7.5 {
1 {SELECT a FROM q1 UNION SELECT d FROM q2}
  {-65.91 16 beauty emanating legible}

2 {SELECT * FROM q1 WHERE a=16 UNION SELECT 'x', * FROM q2 WHERE oid=1}
  {16 -87.66 {} x legible 1}

```

```
3 {SELECT count(*) FROM q1 UNION SELECT min(e) FROM q2}
{-16.56 3}
```

```
4 {SELECT * FROM q2 UNION SELECT * FROM q3}
{-65.91 4 beauty 2 emanating -16.56 legible 1}
}
```

EVIDENCE-OF: R-45764-31737 The INTERSECT operator returns the
intersection of the results of the left and right SELECTs.

#

```
do_select_tests e_select-7.6 {
```

```
1 {SELECT a FROM q1 INTERSECT SELECT d FROM q2} {beauty legible}
```

```
2 {SELECT * FROM q2 INTERSECT SELECT * FROM q3} {beauty 2}
```

```
}
```

EVIDENCE-OF: R-25787-28949 The EXCEPT operator returns the subset of
rows returned by the left SELECT that are not also returned by the
right-hand SELECT.

#

```
do_select_tests e_select-7.7 {
```

```
1 {SELECT a FROM q1 EXCEPT SELECT d FROM q2} {16}
```

```
2 {SELECT * FROM q2 EXCEPT SELECT * FROM q3}
```

```
{-65.91 4 emanating -16.56 legible 1}
```

```
}
```

EVIDENCE-OF: R-40729-56447 Duplicate rows are removed from the results
of INTERSECT and EXCEPT operators before the result set is returned.

#

```
do_select_tests e_select-7.8 {
```

```
0 {SELECT * FROM q3} {beauty 2 beauty 2}
```

```
1 {SELECT * FROM q3 INTERSECT SELECT * FROM q3} {beauty 2}
```

```
2 {SELECT * FROM q3 EXCEPT SELECT a,b FROM q1} {beauty 2}
```

```
}
```

EVIDENCE-OF: R-46765-43362 For the purposes of determining duplicate
rows for the results of compound SELECT operators, NULL values are
considered equal to other NULL values and distinct from all non-NULL
values.

#

```
db nullvalue null
```

```
do_select_tests e_select-7.9 {
```

```
1 {SELECT NULL UNION ALL SELECT NULL} {null null}
```

```
2 {SELECT NULL UNION SELECT NULL} {null}
```

```
3 {SELECT NULL INTERSECT SELECT NULL} {null}
```

```
4 {SELECT NULL EXCEPT SELECT NULL} {}
```

```

5 {SELECT NULL UNION ALL SELECT 'ab'} {null ab}
6 {SELECT NULL UNION   SELECT 'ab'} {null ab}
7 {SELECT NULL INTERSECT SELECT 'ab'} {}
8 {SELECT NULL EXCEPT  SELECT 'ab'} {null}

9 {SELECT NULL UNION ALL SELECT 0} {null 0}
10 {SELECT NULL UNION   SELECT 0} {null 0}
11 {SELECT NULL INTERSECT SELECT 0} {}
12 {SELECT NULL EXCEPT  SELECT 0} {null}

13 {SELECT c FROM q1 UNION ALL SELECT g FROM q3} {null -42.47 null 2 2}
14 {SELECT c FROM q1 UNION   SELECT g FROM q3} {null -42.47 2}
15 {SELECT c FROM q1 INTERSECT SELECT g FROM q3} {}
16 {SELECT c FROM q1 EXCEPT  SELECT g FROM q3} {null -42.47}
}
db nullvalue {}

# EVIDENCE-OF: R-51232-50224 The collation sequence used to compare two
# text values is determined as if the columns of the left and right-hand
# SELECT statements were the left and right-hand operands of the equals
# (=) operator, except that greater precedence is not assigned to a
# collation sequence specified with the postfix COLLATE operator.
#
drop_all_tables
do_execsql_test e_select-7.10.0 {
    CREATE TABLE y1(a COLLATE nocase, b COLLATE binary, c);
    INSERT INTO y1 VALUES('Abc', 'abc', 'aBC');
} {}
do_select_tests e_select-7.10 {
1 {SELECT 'abc'          UNION SELECT 'ABC'} {ABC abc}
2 {SELECT 'abc' COLLATE nocase UNION SELECT 'ABC'} {ABC}
3 {SELECT 'abc'          UNION SELECT 'ABC' COLLATE nocase} {ABC}
4 {SELECT 'abc' COLLATE binary UNION SELECT 'ABC' COLLATE nocase} {ABC abc}
5 {SELECT 'abc' COLLATE nocase UNION SELECT 'ABC' COLLATE binary} {ABC}

6 {SELECT a FROM y1 UNION SELECT b FROM y1}      {abc}
7 {SELECT b FROM y1 UNION SELECT a FROM y1}      {Abc abc}
8 {SELECT a FROM y1 UNION SELECT c FROM y1}      {aBC}

9 {SELECT a FROM y1 UNION SELECT c COLLATE binary FROM y1} {aBC}
}

# EVIDENCE-OF: R-32706-07403 No affinity transformations are applied to
# any values when comparing rows as part of a compound SELECT.
#
drop_all_tables
do_execsql_test e_select-7.10.0 {
    CREATE TABLE w1(a TEXT, b NUMBER);

```

```
CREATE TABLE w2(a, b TEXT);
```

```
INSERT INTO w1 VALUES('1', 4.1);
```

```
INSERT INTO w2 VALUES(1, 4.1);
```

```
} {}
```

```
do_select_tests e_select-7.11 {
```

```
1 { SELECT a FROM w1 UNION SELECT a FROM w2 } {1 1}
```

```
2 { SELECT a FROM w2 UNION SELECT a FROM w1 } {1 1}
```

```
3 { SELECT b FROM w1 UNION SELECT b FROM w2 } {4.1 4.1}
```

```
4 { SELECT b FROM w2 UNION SELECT b FROM w1 } {4.1 4.1}
```

```
5 { SELECT a FROM w1 INTERSECT SELECT a FROM w2 } {}
```

```
6 { SELECT a FROM w2 INTERSECT SELECT a FROM w1 } {}
```

```
7 { SELECT b FROM w1 INTERSECT SELECT b FROM w2 } {}
```

```
8 { SELECT b FROM w2 INTERSECT SELECT b FROM w1 } {}
```

```
9 { SELECT a FROM w1 EXCEPT SELECT a FROM w2 } {1}
```

```
10 { SELECT a FROM w2 EXCEPT SELECT a FROM w1 } {1}
```

```
11 { SELECT b FROM w1 EXCEPT SELECT b FROM w2 } {4.1}
```

```
12 { SELECT b FROM w2 EXCEPT SELECT b FROM w1 } {4.1}
```

```
}
```

```
# EVIDENCE-OF: R-32562-20566 When three or more simple SELECTs are  
# connected into a compound SELECT, they group from left to right. In  
# other words, if "A", "B" and "C" are all simple SELECT statements, (A  
# op B op C) is processed as ((A op B) op C).
```

```
#
```

```
# e_select-7.12.1: Precedence of UNION vs. INTERSECT
```

```
# e_select-7.12.2: Precedence of UNION vs. UNION ALL
```

```
# e_select-7.12.3: Precedence of UNION vs. EXCEPT
```

```
# e_select-7.12.4: Precedence of INTERSECT vs. UNION ALL
```

```
# e_select-7.12.5: Precedence of INTERSECT vs. EXCEPT
```

```
# e_select-7.12.6: Precedence of UNION ALL vs. EXCEPT
```

```
# e_select-7.12.7: Check that "a EXCEPT b EXCEPT c" is processed as
```

```
# "(a EXCEPT b) EXCEPT c".
```

```
#
```

```
# The INTERSECT and EXCEPT operations are mutually commutative. So
```

```
# the e_select-7.12.5 test cases do not prove very much.
```

```
#
```

```
drop_all_tables
```

```
do_execsql_test e_select-7.12.0 {
```

```
CREATE TABLE t1(x);
```

```
INSERT INTO t1 VALUES(1);
```

```
INSERT INTO t1 VALUES(2);
```

```
INSERT INTO t1 VALUES(3);
```

```
} {}
```

```

foreach {tn select res} {
  1a "(1,2) INTERSECT (1) UNION (3)" {1 3}
  1b "(3) UNION (1,2) INTERSECT (1)" {1}

  2a "(1,2) UNION (3) UNION ALL (1)" {1 2 3 1}
  2b "(1) UNION ALL (3) UNION (1,2)" {1 2 3}

  3a "(1,2) UNION (3) EXCEPT (1)" {2 3}
  3b "(1,2) EXCEPT (3) UNION (1)" {1 2}

  4a "(1,2) INTERSECT (1) UNION ALL (3)" {1 3}
  4b "(3) UNION (1,2) INTERSECT (1)" {1}

  5a "(1,2) INTERSECT (2) EXCEPT (2)" {}
  5b "(2,3) EXCEPT (2) INTERSECT (2)" {}

  6a "(2) UNION ALL (2) EXCEPT (2)" {}
  6b "(2) EXCEPT (2) UNION ALL (2)" {2}

  7 "(2,3) EXCEPT (2) EXCEPT (3)" {}
} {
  set select [string map {( {SELECT x FROM t1 WHERE x IN ({} )} $select)
do_execsql_test e_select-7.12.$tn $select [list {*}]$res]
}

```

```

#-----
# ORDER BY clauses
#

```

drop_all_tables

```
do_execsql_test e_select-8.1.0 {
```

```
CREATE TABLE d1(x, y, z);
```

```
INSERT INTO d1 VALUES(1, 2, 3);
```

```
INSERT INTO d1 VALUES(2, 5, -1);
```

```
INSERT INTO d1 VALUES(1, 2, 8);
```

```
INSERT INTO d1 VALUES(1, 2, 7);
```

```
INSERT INTO d1 VALUES(2, 4, 93);
```

```
INSERT INTO d1 VALUES(1, 2, -20);
```

```
INSERT INTO d1 VALUES(1, 4, 93);
```

```
INSERT INTO d1 VALUES(1, 5, -1);
```

```
CREATE TABLE d2(a, b);
```

```
INSERT INTO d2 VALUES('gently', 'failings');
```

```
INSERT INTO d2 VALUES('commercials', 'bathrobe');
```

```
INSERT INTO d2 VALUES('iterate', 'sexton');
```

```
INSERT INTO d2 VALUES('babied', 'charitableness');
```



```

INSERT INTO d2 VALUES('solemnness', 'annexed');
INSERT INTO d2 VALUES('rejoicing', 'liabilities');
INSERT INTO d2 VALUES('pragmatist', 'guarded');
INSERT INTO d2 VALUES('barked', 'interrupted');
INSERT INTO d2 VALUES('reemphasizes', 'reply');
INSERT INTO d2 VALUES('lad', 'relenting');
} {}

```

```

# EVIDENCE-OF: R-44988-41064 Rows are first sorted based on the results
# of evaluating the left-most expression in the ORDER BY list, then ties
# are broken by evaluating the second left-most expression and so on.
#

```

```

do_select_tests e_select-8.1 {
  1 "SELECT * FROM d1 ORDER BY x, y, z" {
    1 2 -20  1 2 3  1 2 7  1 2 8
    1 4 93  1 5 -1  2 4 93  2 5 -1
  }
}

```

```

# EVIDENCE-OF: R-06617-54588 Each ORDER BY expression may be optionally
# followed by one of the keywords ASC (smaller values are returned
# first) or DESC (larger values are returned first).
#

```

```

# Test cases e_select-8.2.* test the above.
#

```

```

# EVIDENCE-OF: R-18705-33393 If neither ASC or DESC are specified, rows
# are sorted in ascending (smaller values first) order by default.
#

```

```

# Test cases e_select-8.3.* test the above. All 8.3 test cases are
# copies of 8.2 test cases with the explicit "ASC" removed.
#

```

```

do_select_tests e_select-8 {
  2.1 "SELECT * FROM d1 ORDER BY x ASC, y ASC, z ASC" {
    1 2 -20  1 2 3  1 2 7  1 2 8
    1 4 93  1 5 -1  2 4 93  2 5 -1
  }
  2.2 "SELECT * FROM d1 ORDER BY x DESC, y DESC, z DESC" {
    2 5 -1  2 4 93  1 5 -1  1 4 93
    1 2 8  1 2 7  1 2 3  1 2 -20
  }
  2.3 "SELECT * FROM d1 ORDER BY x DESC, y ASC, z DESC" {
    2 4 93  2 5 -1  1 2 8  1 2 7
    1 2 3  1 2 -20  1 4 93  1 5 -1
  }
  2.4 "SELECT * FROM d1 ORDER BY x DESC, y ASC, z ASC" {
    2 4 93  2 5 -1  1 2 -20  1 2 3
    1 2 7  1 2 8  1 4 93  1 5 -1
  }
}

```

```

3.1 "SELECT * FROM d1 ORDER BY x, y, z" {
  1 2 -20  1 2 3  1 2 7  1 2 8
  1 4 93  1 5 -1  2 4 93  2 5 -1
}
3.3 "SELECT * FROM d1 ORDER BY x DESC, y, z DESC" {
  2 4 93  2 5 -1  1 2 8  1 2 7
  1 2 3  1 2 -20  1 4 93  1 5 -1
}
3.4 "SELECT * FROM d1 ORDER BY x DESC, y, z" {
  2 4 93  2 5 -1  1 2 -20  1 2 3
  1 2 7  1 2 8  1 4 93  1 5 -1
}
}

# EVIDENCE-OF: R-29779-04281 If the ORDER BY expression is a constant
# integer K then the expression is considered an alias for the K-th
# column of the result set (columns are numbered from left to right
# starting with 1).
#
do_select_tests e_select-8.4 {
  1 "SELECT * FROM d1 ORDER BY 1 ASC, 2 ASC, 3 ASC" {
    1 2 -20  1 2 3  1 2 7  1 2 8
    1 4 93  1 5 -1  2 4 93  2 5 -1
  }
  2 "SELECT * FROM d1 ORDER BY 1 DESC, 2 DESC, 3 DESC" {
    2 5 -1  2 4 93  1 5 -1  1 4 93
    1 2 8  1 2 7  1 2 3  1 2 -20
  }
  3 "SELECT * FROM d1 ORDER BY 1 DESC, 2 ASC, 3 DESC" {
    2 4 93  2 5 -1  1 2 8  1 2 7
    1 2 3  1 2 -20  1 4 93  1 5 -1
  }
  4 "SELECT * FROM d1 ORDER BY 1 DESC, 2 ASC, 3 ASC" {
    2 4 93  2 5 -1  1 2 -20  1 2 3
    1 2 7  1 2 8  1 4 93  1 5 -1
  }
  5 "SELECT * FROM d1 ORDER BY 1, 2, 3" {
    1 2 -20  1 2 3  1 2 7  1 2 8
    1 4 93  1 5 -1  2 4 93  2 5 -1
  }
  6 "SELECT * FROM d1 ORDER BY 1 DESC, 2, 3 DESC" {
    2 4 93  2 5 -1  1 2 8  1 2 7
    1 2 3  1 2 -20  1 4 93  1 5 -1
  }
  7 "SELECT * FROM d1 ORDER BY 1 DESC, 2, 3" {
    2 4 93  2 5 -1  1 2 -20  1 2 3
    1 2 7  1 2 8  1 4 93  1 5 -1
  }
}

```

```

}
8 "SELECT z, x FROM d1 ORDER BY 2" {
  /# 1 # 1 # 1 # 1
  # 1 # 1 # 2 # 2/
}
9 "SELECT z, x FROM d1 ORDER BY 1" {
  /-20 1 -1 # -1 # 3 1
  7 1 8 1 93 # 93 #/
}
}

```

EVIDENCE-OF: R-63286-51977 If the ORDER BY expression is an identifier
that corresponds to the alias of one of the output columns, then the
expression is considered an alias for that column.

#

```

do_select_tests e_select-8.5 {
1 "SELECT z+1 AS abc FROM d1 ORDER BY abc" {
  -19 0 0 4 8 9 94 94
}
2 "SELECT z+1 AS abc FROM d1 ORDER BY abc DESC" {
  94 94 9 8 4 0 0 -19
}
3 "SELECT z AS x, x AS z FROM d1 ORDER BY z" {
  /# 1 # 1 # 1 # 1 # 1 # 1 # 2 # 2/
}
4 "SELECT z AS x, x AS z FROM d1 ORDER BY x" {
  /-20 1 -1 # -1 # 3 1 7 1 8 1 93 # 93 #/
}
}
}

```

EVIDENCE-OF: R-65068-27207 Otherwise, if the ORDER BY expression is
any other expression, it is evaluated and the returned value used to
order the output rows.

#

EVIDENCE-OF: R-03421-57988 If the SELECT statement is a simple SELECT,
then an ORDER BY may contain any arbitrary expressions.

#

```

do_select_tests e_select-8.6 {
1 "SELECT * FROM d1 ORDER BY x+y+z" {
  1 2 -20 1 5 -1 1 2 3 2 5 -1
  1 2 7 1 2 8 1 4 93 2 4 93
}
2 "SELECT * FROM d1 ORDER BY x*z" {
  1 2 -20 2 5 -1 1 5 -1 1 2 3
  1 2 7 1 2 8 1 4 93 2 4 93
}
3 "SELECT * FROM d1 ORDER BY y*z" {
  1 2 -20 2 5 -1 1 5 -1 1 2 3
}
}

```

```

1 2 7   1 2 8   2 4 93  1 4 93
}
}

# EVIDENCE-OF: R-28853-08147 However, if the SELECT is a compound
# SELECT, then ORDER BY expressions that are not aliases to output
# columns must be exactly the same as an expression used as an output
# column.
#
do_select_tests e_select-8.7.1 -error {
  %s ORDER BY term does not match any column in the result set
} {
  1 "SELECT x FROM d1 UNION ALL SELECT a FROM d2 ORDER BY x*z"      1st
  2 "SELECT x,z FROM d1 UNION ALL SELECT a,b FROM d2 ORDER BY x, x/z" 2nd
}

do_select_tests e_select-8.7.2 {
  1 "SELECT x*z FROM d1 UNION ALL SELECT a FROM d2 ORDER BY x*z" {
    -20 -2 -1 3 7 8 93 186 babied barked commercials gently
    iterate lad pragmatist reemphasizes rejoicing solemnness
  }
  2 "SELECT x, x/z FROM d1 UNION ALL SELECT a,b FROM d2 ORDER BY x, x/z" {
    1 -1 1 0 1 0 1 0 1 0 1 0 2 -2 2 0
    babied charitableness barked interrupted commercials bathrobe gently
    failings iterate sexton lad relenting pragmatist guarded reemphasizes reply
    rejoicing liabilities solemnness annexed
  }
}

do_execsql_test e_select-8.8.0 {
  CREATE TABLE d3(a);
  INSERT INTO d3 VALUES('text');
  INSERT INTO d3 VALUES(14.1);
  INSERT INTO d3 VALUES(13);
  INSERT INTO d3 VALUES(X'78787878');
  INSERT INTO d3 VALUES(15);
  INSERT INTO d3 VALUES(12.9);
  INSERT INTO d3 VALUES(null);

  CREATE TABLE d4(x COLLATE nocase);
  INSERT INTO d4 VALUES('abc');
  INSERT INTO d4 VALUES('ghi');
  INSERT INTO d4 VALUES('DEF');
  INSERT INTO d4 VALUES('JKL');
} {}

# EVIDENCE-OF: R-10883-17697 For the purposes of sorting rows, values
# are compared in the same way as for comparison expressions.

```

```

#
# The following tests verify that values of different types are sorted
# correctly, and that mixed real and integer values are compared properly.
#
do_execsql_test e_select-8.8.1 {
  SELECT a FROM d3 ORDER BY a
} {{} 12.9 13 14.1 15 text xxxx}
do_execsql_test e_select-8.8.2 {
  SELECT a FROM d3 ORDER BY a DESC
} {xxxx text 15 14.1 13 12.9 {}}

# EVIDENCE-OF: R-64199-22471 If the ORDER BY expression is assigned a
# collation sequence using the postfix COLLATE operator, then the
# specified collation sequence is used.
#
do_execsql_test e_select-8.9.1 {
  SELECT x FROM d4 ORDER BY 1 COLLATE binary
} {DEF JKL abc ghi}
do_execsql_test e_select-8.9.2 {
  SELECT x COLLATE binary FROM d4 ORDER BY 1 COLLATE nocase
} {abc DEF ghi JKL}

# EVIDENCE-OF: R-09398-26102 Otherwise, if the ORDER BY expression is
# an alias to an expression that has been assigned a collation sequence
# using the postfix COLLATE operator, then the collation sequence
# assigned to the aliased expression is used.
#
# In the test 8.10.2, the only result-column expression has no alias. So the
# ORDER BY expression is not a reference to it and therefore does not inherit
# the collation sequence. In test 8.10.3, "x" is the alias (as well as the
# column name), so the ORDER BY expression is interpreted as an alias and the
# collation sequence attached to the result column is used for sorting.
#
do_execsql_test e_select-8.10.1 {
  SELECT x COLLATE binary FROM d4 ORDER BY 1
} {DEF JKL abc ghi}
do_execsql_test e_select-8.10.2 {
  SELECT x COLLATE binary FROM d4 ORDER BY x
} {abc DEF ghi JKL}
do_execsql_test e_select-8.10.3 {
  SELECT x COLLATE binary AS x FROM d4 ORDER BY x
} {DEF JKL abc ghi}

# EVIDENCE-OF: R-27301-09658 Otherwise, if the ORDER BY expression is a
# column or an alias of an expression that is a column, then the default
# collation sequence for the column is used.
#

```

```

do_execsql_test e_select-8.11.1 {
    SELECT x AS y FROM d4 ORDER BY y
} {abc DEF ghi JKL}
do_execsql_test e_select-8.11.2 {
    SELECT x||" FROM d4 ORDER BY x
} {abc DEF ghi JKL}

# EVIDENCE-OF: R-49925-55905 Otherwise, the BINARY collation sequence is
# used.
#
do_execsql_test e_select-8.12.1 {
    SELECT x FROM d4 ORDER BY x||"
} {DEF JKL abc ghi}

# EVIDENCE-OF: R-44130-32593 If an ORDER BY expression is not an integer
# alias, then SQLite searches the left-most SELECT in the compound for a
# result column that matches either the second or third rules above. If
# a match is found, the search stops and the expression is handled as an
# alias for the result column that it has been matched against.
# Otherwise, the next SELECT to the right is tried, and so on.
#
do_execsql_test e_select-8.13.0 {
    CREATE TABLE d5(a, b);
    CREATE TABLE d6(c, d);
    CREATE TABLE d7(e, f);

    INSERT INTO d5 VALUES(1, 'f');
    INSERT INTO d6 VALUES(2, 'e');
    INSERT INTO d7 VALUES(3, 'd');
    INSERT INTO d5 VALUES(4, 'c');
    INSERT INTO d6 VALUES(5, 'b');
    INSERT INTO d7 VALUES(6, 'a');

    CREATE TABLE d8(x COLLATE nocase);
    CREATE TABLE d9(y COLLATE nocase);

    INSERT INTO d8 VALUES('a');
    INSERT INTO d9 VALUES('B');
    INSERT INTO d8 VALUES('c');
    INSERT INTO d9 VALUES('D');
} {}
do_select_tests e_select-8.13 {
    1 { SELECT a FROM d5 UNION ALL SELECT c FROM d6 UNION ALL SELECT e FROM d7
        ORDER BY a
        } {1 2 3 4 5 6}
    2 { SELECT a FROM d5 UNION ALL SELECT c FROM d6 UNION ALL SELECT e FROM d7
        ORDER BY c
        } {1 2 3 4 5 6}

```

```

3 { SELECT a FROM d5 UNION ALL SELECT c FROM d6 UNION ALL SELECT e FROM d7
  ORDER BY e
  } {1 2 3 4 5 6}
4 { SELECT a FROM d5 UNION ALL SELECT c FROM d6 UNION ALL SELECT e FROM d7
  ORDER BY 1
  } {1 2 3 4 5 6}

5 { SELECT a, b FROM d5 UNION ALL SELECT b, a FROM d5 ORDER BY b }
  {f1 c4 4c 1f}
6 { SELECT a, b FROM d5 UNION ALL SELECT b, a FROM d5 ORDER BY 2 }
  {f1 c4 4c 1f}

7 { SELECT a, b FROM d5 UNION ALL SELECT b, a FROM d5 ORDER BY a }
  {1f 4c c4 f1}
8 { SELECT a, b FROM d5 UNION ALL SELECT b, a FROM d5 ORDER BY 1 }
  {1f 4c c4 f1}

9 { SELECT a, b FROM d5 UNION ALL SELECT b, a+1 FROM d5 ORDER BY a+1 }
  {f2 c5 4c 1f}
10 { SELECT a, b FROM d5 UNION ALL SELECT b, a+1 FROM d5 ORDER BY 2 }
  {f2 c5 4c 1f}

11 { SELECT a+1, b FROM d5 UNION ALL SELECT b, a+1 FROM d5 ORDER BY a+1 }
  {2f 5c c5 f2}
12 { SELECT a+1, b FROM d5 UNION ALL SELECT b, a+1 FROM d5 ORDER BY 1 }
  {2f 5c c5 f2}
}

```

```

# EVIDENCE-OF: R-39265-04070 If no matching expression can be found in
# the result columns of any constituent SELECT, it is an error.
#

```

```

do_select_tests e_select-8.14 -error {
  %s ORDER BY term does not match any column in the result set
} {
  1 { SELECT a FROM d5 UNION SELECT c FROM d6 ORDER BY a+1 }      1st
  2 { SELECT a FROM d5 UNION SELECT c FROM d6 ORDER BY a, a+1 }  2nd
  3 { SELECT * FROM d5 INTERSECT SELECT * FROM d6 ORDER BY 'hello' } 1st
  4 { SELECT * FROM d5 INTERSECT SELECT * FROM d6 ORDER BY blah } 1st
  5 { SELECT * FROM d5 INTERSECT SELECT * FROM d6 ORDER BY c,d,c+d } 3rd
  6 { SELECT * FROM d5 EXCEPT SELECT * FROM d7 ORDER BY 1,2,b,a/b } 4th
}

```

```

# EVIDENCE-OF: R-03407-11483 Each term of the ORDER BY clause is
# processed separately and may be matched against result columns from
# different SELECT statements in the compound.
#

```

```

do_select_tests e_select-8.15 {
  1 { SELECT a, b FROM d5 UNION ALL SELECT c-1, d FROM d6 ORDER BY a, d }
}

```

```

    {1 e 1 f 4 b 4 c}
2 { SELECT a, b FROM d5 UNION ALL SELECT c-1, d FROM d6 ORDER BY c-1, b }
    {1 e 1 f 4 b 4 c}
3 { SELECT a, b FROM d5 UNION ALL SELECT c-1, d FROM d6 ORDER BY 1, 2 }
    {1 e 1 f 4 b 4 c}
}

```

```

#-----
# Tests related to statements made about the LIMIT/OFFSET clause.
#

```

```

do_execsql_test e_select-9.0 {
CREATE TABLE f1(a, b);
INSERT INTO f1 VALUES(26, 'z');
INSERT INTO f1 VALUES(25, 'y');
INSERT INTO f1 VALUES(24, 'x');
INSERT INTO f1 VALUES(23, 'w');
INSERT INTO f1 VALUES(22, 'v');
INSERT INTO f1 VALUES(21, 'u');
INSERT INTO f1 VALUES(20, 't');
INSERT INTO f1 VALUES(19, 's');
INSERT INTO f1 VALUES(18, 'r');
INSERT INTO f1 VALUES(17, 'q');
INSERT INTO f1 VALUES(16, 'p');
INSERT INTO f1 VALUES(15, 'o');
INSERT INTO f1 VALUES(14, 'n');
INSERT INTO f1 VALUES(13, 'm');
INSERT INTO f1 VALUES(12, 'l');
INSERT INTO f1 VALUES(11, 'k');
INSERT INTO f1 VALUES(10, 'j');
INSERT INTO f1 VALUES(9, 'i');
INSERT INTO f1 VALUES(8, 'h');
INSERT INTO f1 VALUES(7, 'g');
INSERT INTO f1 VALUES(6, 'f');
INSERT INTO f1 VALUES(5, 'e');
INSERT INTO f1 VALUES(4, 'd');
INSERT INTO f1 VALUES(3, 'c');
INSERT INTO f1 VALUES(2, 'b');
INSERT INTO f1 VALUES(1, 'a');
} {}

```

```

# EVIDENCE-OF: R-30481-56627 Any scalar expression may be used in the
# LIMIT clause, so long as it evaluates to an integer or a value that
# can be losslessly converted to an integer.
#

```

```

do_select_tests e_select-9.1 {
1 { SELECT b FROM f1 ORDER BY a LIMIT 5 } {a b c d e}
2 { SELECT b FROM f1 ORDER BY a LIMIT 2+3 } {a b c d e}

```



```

3 { SELECT b FROM f1 ORDER BY a LIMIT (SELECT a FROM f1 WHERE b = 'e') }
  {a b c d e}
4 { SELECT b FROM f1 ORDER BY a LIMIT 5.0 } {a b c d e}
5 { SELECT b FROM f1 ORDER BY a LIMIT '5' } {a b c d e}
}

```

```

# EVIDENCE-OF: R-46155-47219 If the expression evaluates to a NULL value
# or any other value that cannot be losslessly converted to an integer,
# an error is returned.
#

```

```

do_select_tests e_select-9.2 -error "datatype mismatch" {
1 { SELECT b FROM f1 ORDER BY a LIMIT 'hello' } {}
2 { SELECT b FROM f1 ORDER BY a LIMIT NULL } {}
3 { SELECT b FROM f1 ORDER BY a LIMIT X'ABCD' } {}
4 { SELECT b FROM f1 ORDER BY a LIMIT 5.1 } {}
5 { SELECT b FROM f1 ORDER BY a LIMIT (SELECT group_concat(b) FROM f1) } {}
}

```

```

# EVIDENCE-OF: R-03014-26414 If the LIMIT expression evaluates to a
# negative value, then there is no upper bound on the number of rows
# returned.
#

```

```

do_select_tests e_select-9.4 {
1 { SELECT b FROM f1 ORDER BY a LIMIT -1 }
  {a b c d e f g h i j k l m n o p q r s t u v w x y z}
2 { SELECT b FROM f1 ORDER BY a LIMIT length('abc')-100 }
  {a b c d e f g h i j k l m n o p q r s t u v w x y z}
3 { SELECT b FROM f1 ORDER BY a LIMIT (SELECT count(*) FROM f1)/2 - 14 }
  {a b c d e f g h i j k l m n o p q r s t u v w x y z}
}

```

```

# EVIDENCE-OF: R-33750-29536 Otherwise, the SELECT returns the first N
# rows of its result set only, where N is the value that the LIMIT
# expression evaluates to.
#

```

```

do_select_tests e_select-9.5 {
1 { SELECT b FROM f1 ORDER BY a LIMIT 0 } {}
2 { SELECT b FROM f1 ORDER BY a DESC LIMIT 4 } {z y x w}
3 { SELECT b FROM f1 ORDER BY a DESC LIMIT 8 } {z y x w v u t s}
4 { SELECT b FROM f1 ORDER BY a DESC LIMIT '12.0' } {z y x w v u t s r q p o}
}

```

```

# EVIDENCE-OF: R-54935-19057 Or, if the SELECT statement would return
# less than N rows without a LIMIT clause, then the entire result set is
# returned.
#

```

```

do_select_tests e_select-9.6 {

```

```

1 { SELECT b FROM f1 WHERE a>21 ORDER BY a LIMIT 10 } {v w x y z}
2 { SELECT count(*) FROM f1 GROUP BY a/5 ORDER BY 1 LIMIT 10 } {2 4 5 5 5 5}
}

```

EVIDENCE-OF: R-24188-24349 The expression attached to the optional # OFFSET clause that may follow a LIMIT clause must also evaluate to an # integer, or a value that can be losslessly converted to an integer.

```

#
foreach {tn select} {
1 { SELECT b FROM f1 ORDER BY a LIMIT 2 OFFSET 'hello' }
2 { SELECT b FROM f1 ORDER BY a LIMIT 2 OFFSET NULL }
3 { SELECT b FROM f1 ORDER BY a LIMIT 2 OFFSET X'ABCD' }
4 { SELECT b FROM f1 ORDER BY a LIMIT 2 OFFSET 5.1 }
5 { SELECT b FROM f1 ORDER BY a
LIMIT 2 OFFSET (SELECT group_concat(b) FROM f1)
}
} {
do_catchsql_test e_select-9.7.$tn $select {1 {datatype mismatch}}
}

```

EVIDENCE-OF: R-20467-43422 If an expression has an OFFSET clause, then # the first M rows are omitted from the result set returned by the # SELECT statement and the next N rows are returned, where M and N are # the values that the OFFSET and LIMIT clauses evaluate to, # respectively.

```

#
do_select_tests e_select-9.8 {
1 { SELECT b FROM f1 ORDER BY a LIMIT 10 OFFSET 5 } {f g h i j k l m n o}
2 { SELECT b FROM f1 ORDER BY a LIMIT 2+3 OFFSET 10 } {k l m n o}
3 { SELECT b FROM f1 ORDER BY a
LIMIT (SELECT a FROM f1 WHERE b='j')
OFFSET (SELECT a FROM f1 WHERE b='b')
} {c d e f g h i j k l}
4 { SELECT b FROM f1 ORDER BY a LIMIT '5' OFFSET 3.0 } {d e f g h}
5 { SELECT b FROM f1 ORDER BY a LIMIT '5' OFFSET 0 } {a b c d e}
6 { SELECT b FROM f1 ORDER BY a LIMIT 0 OFFSET 10 } {}
7 { SELECT b FROM f1 ORDER BY a LIMIT 3 OFFSET '1' || '5' } {p q r}
}

```

EVIDENCE-OF: R-34648-44875 Or, if the SELECT would return less than # M+N rows if it did not have a LIMIT clause, then the first M rows are # skipped and the remaining rows (if any) are returned.

```

#
do_select_tests e_select-9.9 {
1 { SELECT b FROM f1 ORDER BY a LIMIT 10 OFFSET 20 } {u v w x y z}
2 { SELECT a FROM f1 ORDER BY a DESC LIMIT 100 OFFSET 18+4 } {4 3 2 1}
}

```

```

# EVIDENCE-OF: R-23293-62447 If the OFFSET clause evaluates to a
# negative value, the results are the same as if it had evaluated to
# zero.
#
do_select_tests e_select-9.10 {
  1 { SELECT b FROM f1 ORDER BY a LIMIT 5 OFFSET -1 } {a b c d e}
  2 { SELECT b FROM f1 ORDER BY a LIMIT 5 OFFSET -500 } {a b c d e}
  3 { SELECT b FROM f1 ORDER BY a LIMIT 5 OFFSET 0 } {a b c d e}
}

```

```

# EVIDENCE-OF: R-19509-40356 Instead of a separate OFFSET clause, the
# LIMIT clause may specify two scalar expressions separated by a comma.
#

```

```

# EVIDENCE-OF: R-33788-46243 In this case, the first expression is used
# as the OFFSET expression and the second as the LIMIT expression.
#

```

```

do_select_tests e_select-9.11 {
  1 { SELECT b FROM f1 ORDER BY a LIMIT 5, 10 } {f g h i j k l m n o}
  2 { SELECT b FROM f1 ORDER BY a LIMIT 10, 2+3 } {k l m n o}
  3 { SELECT b FROM f1 ORDER BY a
    LIMIT (SELECT a FROM f1 WHERE b='b'), (SELECT a FROM f1 WHERE b='j')
    } {c d e f g h i j k l}
  4 { SELECT b FROM f1 ORDER BY a LIMIT 3.0, '5' } {d e f g h}
  5 { SELECT b FROM f1 ORDER BY a LIMIT 0, '5' } {a b c d e}
  6 { SELECT b FROM f1 ORDER BY a LIMIT 10, 0 } {}
  7 { SELECT b FROM f1 ORDER BY a LIMIT '1' || '5', 3 } {p q r}

  8 { SELECT b FROM f1 ORDER BY a LIMIT 20, 10 } {u v w x y z}
  9 { SELECT a FROM f1 ORDER BY a DESC LIMIT 18+4, 100 } {4 3 2 1}

  10 { SELECT b FROM f1 ORDER BY a LIMIT -1, 5 } {a b c d e}
  11 { SELECT b FROM f1 ORDER BY a LIMIT -500, 5 } {a b c d e}
  12 { SELECT b FROM f1 ORDER BY a LIMIT 0, 5 } {a b c d e}
}

```

finish_test

Found in path(s):

```

* /opt/cola/permits/1146568937_1616563472.04/0/sqlite-3.7.17-8.el7_7.1-1.src.rpm-cosi-expand-archive-
lltKQC5N/sqlite-src-3071700.zip-cosi-expand-archive-cheW8kUH/sqlite-src-3071700/test/e_select.test
No license file was found, but licenses were detected in source scan.

```

public domain.

Found in path(s):

```

* /opt/cola/permits/1146568937_1616563472.04/0/sqlite-3.7.17-8.el7_7.1-1.src.rpm-cosi-expand-archive-

```

lltKQC5N/sqlite-doc-3071700.zip-cosi-expand-archive-r9EckcaZ/sqlite-doc-3071700/changes.html

No license file was found, but licenses were detected in source scan.

```
/*
 * This code implements the MD5 message-digest algorithm.
 * The algorithm is due to Ron Rivest. This code was
 * written by Colin Plumb in 1993, no copyright is claimed.
 * This code is in the public domain; do with it what you wish.
 *
 * Equivalent code is available from RSA Data Security, Inc.
 * This code has been tested against that, and is equivalent,
 * except that you don't need to include two pages of legalese
 * with every copy.
 *
 * To compute the message digest of a chunk of bytes, declare an
 * MD5Context structure, pass it to MD5Init, call MD5Update as
 * needed on buffers full of bytes, and then call MD5Final, which
 * will fill a supplied 16-byte array with the digest.
 */
```

Found in path(s):

* /opt/cola/permits/1146568937_1616563472.04/0/sqlite-3.7.17-8.el7_7.1-1.src.rpm-cosi-expand-archive-lltKQC5N/sqlite-src-3071700.zip-cosi-expand-archive-cheW8kUH/sqlite-src-3071700/src/tclsqlite.c

* /opt/cola/permits/1146568937_1616563472.04/0/sqlite-3.7.17-8.el7_7.1-1.src.rpm-cosi-expand-archive-lltKQC5N/sqlite-src-3071700.zip-cosi-expand-archive-cheW8kUH/sqlite-src-3071700/test/threadtest3.c

No license file was found, but licenses were detected in source scan.

SQLite is in the public domain. This document describes what that means

Found in path(s):

* /opt/cola/permits/1146568937_1616563472.04/0/sqlite-3.7.17-8.el7_7.1-1.src.rpm-cosi-expand-archive-lltKQC5N/sqlite-doc-3071700.zip-cosi-expand-archive-r9EckcaZ/sqlite-doc-3071700/docs.html

No license file was found, but licenses were detected in source scan.

2.31 0

1.23 0

1.0 0

Found in path(s):

* %%Version

No license file was found, but licenses were detected in source scan.

<h3>Proprietary SQLite Extensions</h3>

public domain. But there also exist proprietary, licensed extensions to SQLite, written and maintained by third parties. You are welcomed to use SQLite in closed source, proprietary, and/or

Found in path(s):

* /opt/cola/permits/1146568937_1616563472.04/0/sqlite-3.7.17-8.el7_7.1-1.src.rpm-cosi-expand-archive-lltKQC5N/sqlite-doc-3071700.zip-cosi-expand-archive-r9EckcaZ/sqlite-doc-3071700/support.html

No license file was found, but licenses were detected in source scan.

<html>

<body bgcolor="white">

<p>FOR IMMEDIATE RELEASE:</p>

<h2 align="center">SQLite Consortium Launches With Mozilla And Symbian As Charter Members</h2>

<h3 align="center">Ensures independent technical direction for world's most deployed SQL database engine</h3>

<p>Charlotte, North Carolina - December 12, 2007 - The SQLite Consortium, a new membership association dedicated to maintaining SQLite as a fully open and independent product, was formally announced today. Mozilla and Symbian Ltd. have joined the SQLite Consortium as charter members.</p>

<p>SQLite is a compact, high efficiency, high reliability, embeddable SQL database engine. The source code to SQLite is in the public domain and is available with no associated fees. SQLite is the most deployed SQL database engine in the world and is currently used in a wide range of commercial software products and electronic devices from leading manufacturers. SQLite is found today in many mobile phones, MP3 players, set-top boxes, and PCs.</p>

<p>The mission of the SQLite Consortium is to continue developing and enhancing SQLite as a product that anyone may use without paying royalties or licensing fees. Members of the SQLite Consortium provide funding to enable this mission and in return receive enterprise-level technical support. Technical control and direction of SQLite remains entirely with the SQLite developers.</p>

<p>Mozilla, developer of the popular open-source Firefox web browser, and Symbian, the market-leading open operating system for advanced data-enabled smartphones, both deploy the SQLite database engine in their products. As charter members of the Consortium, Mozilla and Symbian are ensuring the development and support of SQLite as a freely accessible and public domain software asset.</p>

<p>"SQLite has become a popular embedded database because it is lightweight, fast, and open source," said Michael Schroepfer, Vice President of Engineering, Mozilla. "As a charter member of the SQLite Consortium, Mozilla is excited to help ensure SQLite remains a vibrant and open technology, in line with our mission to promote choice and innovation on the Internet."</p>

<p>"The SQLite Consortium will help set the standards for database management which are essential in smartphone functionality and will also help create a pool of developers, highly-skilled in SQLite for future mobile phone development," said Bruce Carney, Director, Developer Programmes & Services, Symbian.

"Our involvement with the SQL Consortium not only demonstrates Symbian's commitment to open standards in the industry, but as mobile phones become increasingly powerful and smartphones become increasingly popular, we are focused on ensuring that desktop developers, who move to the mobile space, have the easiest and most productive experience possible."

SQLite is a winner of the 2005 Google/O'Reilly Open Source Award. Additional information regarding the SQLite Consortium is available at the SQLite website, <http://www.sqlite.org/>.

###

About SQLite

SQLite is a software library that implements a self-contained, embeddable, serverless, zero-configuration, transactional SQL database engine. The code for SQLite is in the public domain and is free for any use, commercial or private. SQLite is currently found in countless software titles and electronic devices.

SQLite was originally developed and released 2000 by Dr. D. Richard Hipp. The code continues to be maintained and enhanced by an international team of developers under Hipp's direction.

CONTACT INFORMATION:
SQLite Consortium
Dr. D. Richard Hipp
6200 Maple Cove Lane
Charlotte, NC 28269
Email: drh@sqlite.org
<http://www.sqlite.org/>
Tel: +1.704.948.4565

About Mozilla

Mozilla is a global community dedicated to building free, open source products and technologies that improve the online experience for people everywhere. Mozilla works in the open with a highly disciplined, transparent and cooperative development process, under the umbrella of the non-profit Mozilla Foundation. As a wholly owned subsidiary, the Mozilla Corporation organizes the development and marketing of Mozilla products. This unique structure has enabled Mozilla to financially support and cultivate competitive, viable community innovation. For more information, visit www.mozilla.com/

<p>CONTACT INFORMATION:

Mozilla Corporation

Jessica Waight

Tel: +1.415.345.4754

Email: jwaight@outcastpr.com
</p>

<p>About Symbian Limited</p>

<p>Symbian is a software licensing company that develops and licenses Symbian OS, the market-leading open operating system for advanced, data-enabled mobile phones known as smartphones.</p>

<p>Symbian licenses Symbian OS to the world's leading handset manufacturers and has built close co-operative business relationships with leading companies across the mobile industry. During Q3 2007, 20.4 million Symbian smartphones were sold worldwide to over 250 major network operators, bringing the total number of Symbian smartphones shipped up to 30 September 2007 to 165 million.</p>

<p>Symbian has its headquarters in London, United Kingdom, with offices in the United States, United Kingdom, Asia (India, P.R. China, and Korea) and Japan. For more information, please visit www.symbian.com.</p>

<p>CONTACT INFORMATION:

Symbian Global Press Office

Karen Hamblen

+44 207 154 1707

press@symbian.com
</p>
</body></html>

Found in path(s):

* /opt/cola/permits/1146568937_1616563472.04/0/sqlite-3.7.17-8.e17_7.1-1.src.rpm-cosi-expand-archive-lltKQC5N/sqlite-doc-3071700.zip-cosi-expand-archive-r9EckcaZ/sqlite-doc-3071700/pressrelease-20071212.html
No license file was found, but licenses were detected in source scan.

2006 September 14

#

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

#

May you do good and not evil.

May you find forgiveness for yourself and forgive others.

May you share freely, never taking more than you give.

#

This file implements regression tests for SQLite library. The

```

# focus of this script is testing the FTS2 module.
#
# $Id: fts2c.test,v 1.1 2006/10/19 23:36:26 shess Exp $
#

set testdir [file dirname $argv0]
source $testdir/tester.tcl

# If SQLITE_ENABLE_FTS2 is defined, omit this file.
ifcapable !fts2 {
    finish_test
    return
}

# Create a table of sample email data.  The data comes from email
# archives of Enron executives that was published as part of the
# litigation against that company.
#
do_test fts2c-1.1 {
    db eval {
        CREATE VIRTUAL TABLE email USING fts2([from],[to],subject,body);
        BEGIN TRANSACTION;
        INSERT INTO email([from],[to],subject,body) VALUES('savita.puthigai@enron.com', 'traders.eol@enron.com,
traders.eol@enron.com', 'EnronOnline- Change to Autohedge', 'Effective Monday, October 22, 2001 the following
changes will be made to the Autohedge functionality on EnronOnline.

```

The volume on the hedge will now respect the minimum volume and volume increment settings on the parent product. See rules below:

- ? If the transaction volume on the child is less than half of the parent's minimum volume no hedge will occur.
- ? If the transaction volume on the child is more than half the parent's minimum volume but less than half the volume increment on the parent, the hedge will volume will be the parent's minimum volume.
- ? For all other volumes, the same rounding rules will apply based on the volume increment on the parent product.

Please see example below:

Parent's Settings:

Minimum: 5000

Increment: 1000

Volume on Autohedge transaction Volume Hedged

1 - 2499 0

2500 - 5499 5000

5500 - 6499 6000');

```

INSERT INTO email([from],[to],subject,body) VALUES('dana.davis@enron.com', 'laynie.east@enron.com,
lisa.king@enron.com, lisa.best@enron.com,', 'Leaving Early', 'FYI:

```

If it's ok with everyone's needs, I would like to leave @4pm. If you think you will need my assistance past the 4 o'clock hour just let me know; I'll

be more than willing to stay.');

INSERT INTO email([from],[to],subject,body) VALUES('enron_update@concreworkplace.com',
'louise.kitchen@enron.com', '<<Concur Expense Document>> - CC02.06.02', 'The following expense report is ready
for approval:

Employee Name: Christopher F. Calger
Status last changed by: Mollie E. Gustafson Ms
Expense Report Name: CC02.06.02
Report Total: \$3,972.93
Amount Due Employee: \$3,972.93

To approve this expense report, click on the following link for Concur Expense.

<http://expensxms.enron.com>);

INSERT INTO email([from],[to],subject,body) VALUES('jeff.duff@enron.com', 'julie.johnson@enron.com', 'Work
request', 'Julie,

Could you print off the current work request report by 1:30 today?

Gentlemen,

I'd like to review this today at 1:30 in our office. Also, could you provide
me with your activity reports so I can have Julie enter this information.

JD');

INSERT INTO email([from],[to],subject,body) VALUES('v.weldon@enron.com', 'gary.l.carrier@usa.dupont.com,
scott.joyce@bankofamerica.com', 'Enron News', 'This could turn into something big....
<http://biz.yahoo.com/rf/010129/n29305829.html>);

INSERT INTO email([from],[to],subject,body) VALUES('mark.haedicke@enron.com', 'paul.simons@enron.com',
'Re: First Polish Deal!', 'Congrats! Things seem to be building rapidly now on the Continent. Mark');

INSERT INTO email([from],[to],subject,body) VALUES('e..carter@enron.com', 't..robinson@enron.com', 'FW:
Producers Newsletter 9-24-2001', '

The producer lumber pricing sheet.

-----Original Message-----

From: Johnson, Jay
Sent: Tuesday, October 16, 2001 3:42 PM
To: Carter, Karen E.
Subject: FW: Producers Newsletter 9-24-2001

-----Original Message-----

From: Daigre, Sergai
Sent: Friday, September 21, 2001 8:33 PM
Subject: Producers Newsletter 9-24-2001

');

INSERT INTO email([from],[to],subject,body) VALUES('david.delainey@enron.com', 'kenneth.lay@enron.com',

'Greater Houston Partnership', 'Ken, in response to the letter from Mr Miguel San Juan, my suggestion would be to offer up the Falcon for their use; however, given the tight time frame and your recent visit with Mr. Fox that it would be difficult for either you or me to participate.

I spoke to Max and he agrees with this approach.

I hope this meets with your approval.

Regards

Delaine');

INSERT INTO email([from],[to],subject,body) VALUES('lachandra.fenceroy@enron.com', 'lindy.donoho@enron.com', 'FW: Bus Applications Meeting Follow Up', 'Lindy,

Here is the original memo we discussed earlier. Please provide any information that you may have.

Your cooperation is greatly appreciated.

Thanks,

lachandra.fenceroy@enron.com
713.853.3884
877.498.3401 Pager

-----Original Message-----

From: Bisbee, Joanne
Sent: Wednesday, September 26, 2001 7:50 AM
To: Fenceroy, LaChandra
Subject: FW: Bus Applications Meeting Follow Up

Lachandra, Please get with David Duff today and see what this is about. Who are our TW accounting business users?

-----Original Message-----

From: Koh, Wendy
Sent: Tuesday, September 25, 2001 2:41 PM
To: Bisbee, Joanne
Subject: Bus Applications Meeting Follow Up

Lisa brought up a TW change effective Nov 1. It involves eliminating a turnback surcharge. I have no other information, but you might check with the business folks for any system changes required.

Wendy');

INSERT INTO email([from],[to],subject,body) VALUES('danny.mccarty@enron.com', 'fran.fagan@enron.com', 'RE: worksheets', 'Fran,

If Julie's merit needs to be lump sum, just move it over to that column. Also, send me Eric Gadd's sheets as well.

Thanks.

Dan

-----Original Message-----

From: Fagan, Fran
Sent: Thursday, December 20, 2001 11:10 AM
To: McCarty, Danny
Subject: worksheets

As discussed, attached are your sheets for bonus and merit.

Thanks,

Fran Fagan
Sr. HR Rep
713.853.5219

<< File: McCartyMerit.xls >> << File: mccartyBonusCommercial_UnP.xls >>

);

INSERT INTO email([from],[to],subject,body) VALUES('bert.meyers@enron.com', 'shift.dl-portland@enron.com', 'OCTOBER SCHEDULE', 'TEAM,

PLEASE SEND ME ANY REQUESTS THAT YOU HAVE FOR OCTOBER. SO FAR I HAVE THEM FOR LEAF. I WOULD LIKE TO HAVE IT DONE BY THE 15TH OF THE MONTH. ANY QUESTIONS PLEASE GIVE ME A CALL.

BERT');

INSERT INTO email([from],[to],subject,body) VALUES('errol.mclaughlin@enron.com', 'john.arnold@enron.com, bilal.bajwa@enron.com, john.griffith@enron.com,', 'TRV Notification: (NG - PROPT P/L - 09/27/2001)', 'The report named: NG - PROPT P/L <http://trv.corp.enron.com/linkFromExcel.asp?report_cd=11&report_name=NG+-+PROPT+P/L&category_cd=5&category_name=FINANCIAL&toc_hide=1&sTV1=5&TV1Exp=Y¤t_efct_d ate=09/27/2001>, published as of 09/27/2001 is now available for viewing on the website.');

INSERT INTO email([from],[to],subject,body) VALUES('patrice.mims@enron.com', 'calvin.eakins@enron.com', 'Re: Small business supply assistance', 'Hi Calvin

I spoke with Rickey (boy, is he long-winded!!). Gave him the name of our credit guy, Russell Diamond.

Thank for your help!');

INSERT INTO email([from],[to],subject,body) VALUES('legal <.hall@enron.com>', 'stephanie.panus@enron.com', 'Termination update', 'City of Vernon and Salt River Project terminated their contracts. I will fax these notices to you.');

INSERT INTO email([from],[to],subject,body) VALUES('d..steffes@enron.com', 'richard.shapiro@enron.com', 'EES / ENA Government Affairs Staffing & Outside Services', 'Rick --

Here is the information on staffing and outside services. Call if you need anything else.

Jim

');

INSERT INTO email([from],[to],subject,body) VALUES('gelliott@industrialinfo.com',
'pcopello@industrialinfo.com', 'ECAAR (Gavin), WSCC (Diablo Canyon), & NPCC (Seabrook)', 'Dear Power
Outage Database Customer,

Attached you will find an excel document. The outages contained within are forced or rescheduled outages. Your
daily delivery will still contain these outages.

In addition to the two excel documents, there is a dbf file that is formatted like your daily deliveries you receive
nightly. This will enable you to load the data into your regular database. Any questions please let me know. Thanks.

Greg Elliott

IIR, Inc.

713-783-5147 x 3481

outages@industrialinfo.com

THE INFORMATION CONTAINED IN THIS E-MAIL IS LEGALLY PRIVILEGED AND CONFIDENTIAL
INFORMATION INTENDED ONLY FOR THE USE OF THE INDIVIDUAL OR ENTITY NAMED ABOVE.
YOU ARE HEREBY NOTIFIED THAT ANY DISSEMINATION, DISTRIBUTION, OR COPY OF THIS E-
MAIL TO UNAUTHORIZED ENTITIES IS STRICTLY PROHIBITED. IF YOU HAVE RECEIVED THIS
E-MAIL IN ERROR, PLEASE DELETE IT.

- OUTAGE.dbf

- 111201R.xls

- 111201.xls ');

INSERT INTO email([from],[to],subject,body) VALUES('enron.announcements@enron.com',
'all_ena_egm_eim@enron.com', 'EWS Brown Bag', 'MARK YOUR LUNCH CALENDARS NOW !

You are invited to attend the EWS Brown Bag Lunch Series

Featuring: RAY BOWEN, COO

Topic: Enron Industrial Markets

Thursday, March 15, 2001

11:30 am - 12:30 pm

EB 5 C2

You bring your lunch, Limited Seating

We provide drinks and dessert. RSVP x 3-9610');

INSERT INTO email([from],[to],subject,body) VALUES('chris.germany@enron.com',
'ingrid.immer@williams.com', 'Re: About St Pauls', 'Sounds good to me. I bet this is next to the Warick?? Hotel.

"Immer, Ingrid" <Ingrid.Immer@Williams.com> on 12/21/2000 11:48:47 AM

To: ""chris.germany@enron.com"" <chris.germany@enron.com>

cc:

Subject: About St Pauls

<<About St Pauls.url>>

?

?<http://www.stpaulshouston.org/about.html>

Chris,

I like the looks of this place.? What do you think about going here Christmas eve?? They have an 11:00 a.m. service and a candlelight service at 5:00 p.m., among others.

Let me know.?? ii

- About St Pauls.url

');

INSERT INTO email([from],[to],subject,body) VALUES('nas@cpuc.ca.gov', 'skatz@sempratrading.com, kmccrea@sablaw.com, thompson@wrightlaw.com,', 'Reply Brief filed July 31, 2000', '- CPUC01-#76371-v1-Revised_Reply_Brief__Due_today_7_31_.doc');

INSERT INTO email([from],[to],subject,body) VALUES('gascontrol@aglresources.com', 'dscott4@enron.com, lcampbel@enron.com', 'Alert Posted 10:00 AM November 20,2000: E-GAS Request Reminder', 'Alert Posted 10:00 AM November 20,2000: E-GAS Request Reminder

As discussed in the Winter Operations Meeting on Sept.29,2000,

E-Gas(Emergency Gas) will not be offered this winter as a service from AGLC.

Marketers and Poolers can receive gas via Peaking and IBSS nominations(daisy chain) from other marketers up to the 6 p.m. Same Day 2 nomination cycle.

');

INSERT INTO email([from],[to],subject,body) VALUES('dutch.quigley@enron.com', 'rwolkwitz@powermerchants.com', ', ')

Here is a goody for you');

INSERT INTO email([from],[to],subject,body) VALUES('ryan.o'rourke@enron.com', 'k..allen@enron.com, randy.bhatia@enron.com, frank.ermis@enron.com,', 'TRV Notification: (West VaR - 11/07/2001)', 'The report named: West VaR

<http://trv.corp.enron.com/linkFromExcel.asp?report_cd=36&report_name=West+VaR&category_cd=2&category_name=WEST&toc_hide=1&sTV1=2&TV1Exp=Y¤t_efct_date=11/07/2001>, published as of 11/07/2001 is now available for viewing on the website.');

INSERT INTO email([from],[to],subject,body) VALUES('mjones7@txu.com', 'cstone1@txu.com, ggreen2@txu.com, timpowell@txu.com,', 'Enron / HPL Actuals for July 10, 2000', 'Teco Tap 10.000 / Enron ; 110.000 / HPL IFERC

LS HPL LSK IC 30.000 / Enron

');

INSERT INTO email([from],[to],subject,body) VALUES('susan.pereira@enron.com', 'kkw816@aol.com', 'soccer practice', 'Kathy-

Is it safe to assume that practice is cancelled for tonight??

Susan Pereira');

INSERT INTO email([from],[to],subject,body) VALUES('mark.whitt@enron.com', 'barry.tycholiz@enron.com', 'Huber Internal Memo', 'Please look at this. I didn't know how deep to go with the desk. Do you think this works.

');

INSERT INTO email([from],[to],subject,body) VALUES('m..forney@enron.com', 'george.phillips@enron.com', ', 'George,

Give me a call and we will further discuss opportunities on the 13st floor.

Thanks,

JMForney

3-7160');

INSERT INTO email([from],[to],subject,body) VALUES('brad.mckay@enron.com', 'angusmcka@aol.com', 'Re: (no subject)', 'not yet');

INSERT INTO email([from],[to],subject,body) VALUES('adam.bayer@enron.com', 'jonathan.mckay@enron.com', 'FW: Curve Fetch File', 'Here is the curve fetch file sent to me. It has plenty of points in it. If you give me a list of which ones you need we may be able to construct a secondary worksheet to vlookup the values.

adam

35227

-----Original Message-----

From: Royed, Jeff

Sent: Tuesday, September 25, 2001 11:37 AM

To: Bayer, Adam

Subject: Curve Fetch File

Let me know if it works. It may be required to have a certain version of Oracle for it to work properly.

Jeff Royed

Enron

Energy Operations

Phone: 713-853-5295');

INSERT INTO email([from],[to],subject,body) VALUES('matt.smith@enron.com', 'yan.wang@enron.com', 'Report Formats', 'Yan,

The merged reports look great. I believe the only orientation changes are to "unmerge" the following six reports:

31 Keystone Receipts

15 Questar Pipeline

40 Rockies Production

22 West_2
23 West_3
25 CIG_WIC

The orientation of the individual reports should be correct. Thanks.

Mat

PS. Just a reminder to add the "*" by the title of calculated points.);
INSERT INTO email([from],[to],subject,body) VALUES('michelle.lokay@enron.com', 'jimboman@bigfoot.com',
'Egyptian Festival', '----- Forwarded by Michelle Lokay/ET&S/Enron on 09/07/2000
10:08 AM -----')

"Karkour, Randa" <Randa.Karkour@COMPAQ.com> on 09/07/2000 09:01:04 AM
To: ""Agheb (E-mail)" <Agheb@aol.com>, "Leila Mankarious (E-mail)"
<Leila_Mankarious@mhhs.org>, ""Marymankarious (E-mail)"
<marymankarious@aol.com>, "Michelle lokay (E-mail)" <mlokay@enron.com>, "Ramy
Mankarious (E-mail)" <Mankarious@aol.com>
cc:

Subject: Egyptian Festival

<<Egyptian Festival.url>>

<http://www.egyptianfestival.com/>

- Egyptian Festival.url
)
INSERT INTO email([from],[to],subject,body) VALUES('errol.mclaughlin@enron.com',
'sherry.dawson@enron.com', 'Urgent!!! --- New EAST books', 'This has to be done.....')

Thanks
----- Forwarded by Errol McLaughlin/Corp/Enron on 12/20/2000
08:39 AM -----

From: William Kelly @ ECT 12/20/2000 08:31 AM

To: Kam Keiser/HOU/ECT@ECT, Darron C Giron/HOU/ECT@ECT, David
Baumbach/HOU/ECT@ECT, Errol McLaughlin/Corp/Enron@ENRON
cc: Kimat Singla/HOU/ECT@ECT, Kulvinder Fowler/NA/Enron@ENRON, Kyle R
Lilly/HOU/ECT@ECT, Jeff Royed/Corp/Enron@ENRON, Alejandra
Chavez/NA/Enron@ENRON, Crystal Hyde/HOU/ECT@ECT

Subject: New EAST books

We have new book names in TAGG for our intramonth portfolios and it is extremely important that any deal booked to the East is communicated quickly to someone on my team. I know it will take some time for the new names to sink in and I do not want us to miss any positions or P&L.

Thanks for your help on this.

New:

Scott Neal : East Northeast

Dick Jenkins: East Marketeast

WK

');

INSERT INTO email([from],[to],subject,body) VALUES('david.forster@enron.com', 'eol.wide@enron.com', 'Change to Stack Manager', 'Effective immediately, there is a change to the Stack Manager which will affect any Inactive Child.

An inactive Child with links to Parent products will not have their calculated prices updated until the Child product is Activated.

When the Child Product is activated, the price will be recalculated and updated BEFORE it is displayed on the web.

This means that if you are inputting a basis price on a Child product, you will not see the final, calculated price until you Activate the product, at which time the customer will also see it.

If you have any questions, please contact the Help Desk on:

Americas: 713 853 4357

Europe: + 44 (0) 20 7783 7783

Asia/Australia: +61 2 9229 2300

Dave');

INSERT INTO email([from],[to],subject,body) VALUES('vince.kaminski@enron.com', 'jhh1@email.msn.com', 'Re: Light reading - see pieces beginning on page 7', 'John,

I saw it. Very interesting.

Vince

"John H Herbert" <jhh1@email.msn.com> on 07/28/2000 08:38:08 AM

To: "Vince J Kaminski" <Vince_J_Kaminski@enron.com>

cc:

Subject: Light reading - see pieces beginning on page 7

Cheers and have a nice weekend,

JHHerbert

- gd000728.pdf

);

INSERT INTO email([from],[to],subject,body) VALUES('matthew.lenhart@enron.com',

'mmmarcanel@equiva.com', 'RE:', 'i will try to line up a pig for you ');

INSERT INTO email([from],[to],subject,body) VALUES('jae.black@enron.com', 'claudette.harvey@enron.com,

chaun.roberts@enron.com, judy.martinez@enron.com,', 'Disaster Recovery Equipment', 'As a reminder...there are several pieces of equipment that are set up on the 30th Floor, as well as on our floor, for the Disaster Recovery Team. PLEASE DO NOT TAKE, BORROW OR USE this equipment. Should you need to use another computer system, other than yours, or make conference calls please work with your Assistant to help find or set up equipment for you to use.

Thanks for your understanding in this matter.

T.Jae Black

East Power Trading

Assistant to Kevin Presto

off. 713-853-5800

fax 713-646-8272

cell 713-539-4760);

INSERT INTO email([from],[to],subject,body) VALUES('eric.bass@enron.com', 'dale.neuner@enron.com', '5 X

24', 'Dale,

Have you heard anything more on the 5 X 24s? We would like to get this product out ASAP.

Thanks,

Eric);

INSERT INTO email([from],[to],subject,body) VALUES('messenger@smartreminders.com', 'm..tholt@enron.com',

'10% Coupon - PrintPal Printer Cartridges - 100% Guaranteed', '[IMAGE]

[IMAGE][IMAGE][IMAGE]

Dear SmartReminders Member,

[IMAGE] [IMAGE] [IMAGE] [IMAGE] [IMAGE] [IMAGE] [IMAGE] [IMAGE]

We respect your privacy and are a Certified Participant of the BBBOnLine Privacy Program. To be removed from future offers,click here.

SmartReminders.com is a permission based service. To unsubscribe click here . ');

INSERT INTO email([from],[to],subject,body) VALUES('benjamin.rogers@enron.com', 'mark.bernstein@enron.com', ', 'The guy you are talking about left CIN under a "cloud of suspicion" sort of speak. He was the one who got into several bad deals and PPA"s in California for CIN, thus he left on a bad note. Let me know if you need more detail than that, I felt this was the type of info you were looking for. Thanks!

Ben');

INSERT INTO email([from],[to],subject,body) VALUES('enron_update@concuereworkplace.com', 'michelle.cash@enron.com', 'Expense Report Receipts Not Received', 'Employee Name: Michelle Cash

Report Name: Houston Cellular 8-11-01

Report Date: 12/13/01

Report ID: 594D37C9ED2111D5B452

Submitted On: 12/13/01

You are only allowed 2 reports with receipts outstanding. Your expense reports will not be paid until you meet this requirement.');

INSERT INTO email([from],[to],subject,body) VALUES('susan.mara@enron.com', 'ray.alvarez@enron.com, mark.palmer@enron.com, karen.denne@enron.com,', 'CAISO Emergency Motion -- to discontinue market-based rates for', 'FYI. the latest broadside against the generators.

Sue Mara

Enron Corp.

Tel: (415) 782-7802

Fax:(415) 782-7854

----- Forwarded by Susan J Mara/NA/Enron on 06/08/2001 12:24 PM -----

"Milner, Marcie" <MMilner@coral-energy.com> 06/08/2001 11:13 AM To: ""smara@enron.com""
<smara@enron.com> cc: Subject: CAISO Emergency Motion

Sue, did you see this emergency motion the CAISO filed today? Apparently they are requesting that FERC discontinue market-based rates immediately and grant refunds plus interest on the difference between cost-based rates and market revenues received back to May 2000. They are requesting the commission act within 14 days. Have you heard anything about what they are doing?

Marcie

<http://www.caiso.com/docs/2001/06/08/200106081005526469.pdf>

);

INSERT INTO email([from],[to],subject,body) VALUES('fletcher.sturm@enron.com', 'eloy.escobar@enron.com', 'Re: General Brinks Position Meeting', 'Eloy,

Who is General Brinks?

Fletch');

INSERT INTO email([from],[to],subject,body) VALUES('nailia.dindarova@enron.com', 'richard.shapiro@enron.com', 'Documents for Mark Frevert (on EU developments and lessons from', 'Rick,

Here are the documents that Peter has prepared for Mark Frevert.

Nailia

----- Forwarded by Nailia Dindarova/LON/ECT on 25/06/2001
16:36 -----

Nailia Dindarova

25/06/2001 15:36

To: Michael Brown/Enron@EUEnronXGate

cc: Ross Sankey/Enron@EUEnronXGate, Eric Shaw/ENRON@EUEnronXGate, Peter Styles/LON/ECT@ECT

Subject: Documents for Mark Frevert (on EU developments and lessons from California)

Michael,

These are the documents that Peter promised to give to you for Mark Frevert.

He has now handed them to him in person but asked me to transmit them electronically to you, as well as Eric and Ross.

Nailia

```
);  
INSERT INTO email([from],[to],subject,body) VALUES('peggy.a.kostial@accenture.com',  
'dave.samuels@enron.com', 'EOL-Accenture Deal Sheet', 'Dave -
```

Attached are our comments and suggested changes. Please call to review.

On the time line for completion, we have four critical steps to complete:

- Finalize market analysis to refine business case, specifically projected revenue stream
- Complete counterparty surveying, including targeting 3 CPs for letters of intent
- Review Enron asset base for potential reuse/ licensing
- Contract negotiations

Joe will come back to us with an updated time line, but it is my expectation that we are still on the same schedule (we just begun week three) with possibly a week or so slippage.....contract negotiations will probably be the critical path.

We will send our cut at the actual time line here shortly. Thanks,

Peggy

(See attached file: accenture-dealpoints v2.doc)

- accenture-dealpoints v2.doc ');

```
INSERT INTO email([from],[to],subject,body) VALUES('thomas.martin@enron.com', 'thomas.martin@enron.com',  
'Re: Guadalupe Power Partners LP', '----- Forwarded by Thomas A Martin/HOU/ECT on 03/20/2001  
03:49 PM -----
```

Thomas A Martin

10/11/2000 03:55 PM

To: Patrick Wade/HOU/ECT@ECT

cc:

Subject: Re: Guadalupe Power Partners LP

The deal is physically served at Oasis Waha or Oasis Katy and is priced at either HSC, Waha or Katytailgate GD at buyers option three days prior to NYMEX close.

);
INSERT INTO email([from],[to],subject,body) VALUES('judy.townsend@enron.com', 'dan.junek@enron.com,
chris.germany@enron.com', 'Columbia Distribution's Capacity Available for Release - Sum', '-----
Forwarded by Judy Townsend/HOU/ECT on 03/09/2001 11:04
AM -----

agoddard@nisource.com on 03/08/2001 09:16:57 AM
To: " - *Koch, Kent" <kkoch@nisource.com>, " -
*Millar, Debra" <dmillar@nisource.com>, " - *Burke, Lynn"
<lburke@nisource.com>
cc: " - *Heckathorn, Tom" <heckathorn@nisource.com>
Subject: Columbia Distribution's Capacity Available for Release - Sum

Attached is Columbia Distribution's notice of capacity available for release
for
the summer of 2001 (Apr. 2001 through Oct. 2001).

Please note that the deadline for bids is 3:00pm EST on March 20, 2001.

If you have any questions, feel free to contact any of the representatives
listed
at the bottom of the attachment.

Aaron Goddard

- 2001Summer.doc

);
INSERT INTO email([from],[to],subject,body) VALUES('rhonda.denton@enron.com', 'tim.belden@enron.com,
dana.davis@enron.com, genia.fitzgerald@enron.com,', 'Split Rock Energy LLC', 'We have received the executed
EEI contract from this CP dated 12/12/2000.

Copies will be distributed to Legal and Credit.);

INSERT INTO email([from],[to],subject,body) VALUES('kerrymcelroy@dwt.com', 'jack.speer@alcoa.com,
crow@millernash.com, michaelearly@earthlink.net,', 'Oral Argument Request', ' - Oral Argument Request.doc');
INSERT INTO email([from],[to],subject,body) VALUES('mike.carson@enron.com', 'rlmichaelis@hormel.com', ",
'Did you come in town this wk end..... My new number at our house is :
713-668-3712..... my cell # is 281-381-7332

the kid');

INSERT INTO email([from],[to],subject,body) VALUES('cooper.richey@enron.com', 'trycooper@hotmail.com',
'FW: Contact Info', '

-----Original Message-----

From: Punja, Karim
Sent: Thursday, December 13, 2001 2:35 PM
To: Richey, Cooper
Subject: Contact Info

Cooper,

Its been a real pleasure working with you (even though it was for only a small amount of time)
I hope we can stay in touch.

Home# 234-0249
email: kpunja@hotmail.com

Take Care,

Karim.

');

INSERT INTO email([from],[to],subject,body) VALUES('bjm30@earthlink.net', 'mcguinn.k@enron.com,
mcguinn.ian@enron.com, mcguinn.stephen@enron.com,', 'email address change', 'Hello all.

I haven't talked to many of you via email recently but I do want to give you
my new address for your email file:

bjm30@earthlink.net

I hope all is well.

Brian McGuinn');

INSERT INTO email([from],[to],subject,body) VALUES('shelley.corman@enron.com', 'steve.hotte@enron.com',
'Flat Panels', 'Can you please advise what is going on with the flat panels that we had planned to distribute to our gas
logistics team. It was in the budget and we had the okay, but now I'm hearing there is some hold-up & the units are
stored on 44.

Shelley');

INSERT INTO email([from],[to],subject,body) VALUES('sara.davidson@enron.com',
'john.schwartzenburg@enron.com, scott.dieball@enron.com, recipients@enron.com,', '2001 Enron Law Conference
(Distribution List 2)', ' Enron Law Conference

San Antonio, Texas May 2-4, 2001 Westin Riverwalk

See attached memo for more details!!

? Registration for the law conference this year will be handled through an
Online RSVP Form on the Enron Law Conference Website at
<http://lawconference.corp.enron.com>. The website is still under construction
and will not be available until Thursday, March 15, 2001.

? We will send you another e-mail to confirm when the Law Conference Website is operational.

? Please complete the Online RSVP Form as soon as it is available and submit it no later than Friday, March 30th.

');

INSERT INTO email([from],[to],subject,body) VALUES('tori.kuykendall@enron.com', 'heath.b.taylor@accenture.com', 'Re:', 'hey - thats funny about john - he definitely remembers him - i'll call pat and let him know - we are coming on saturday - i just havent had a chance to call you guys back -- looking forward to it -- i probably need the directions again though');

INSERT INTO email([from],[to],subject,body) VALUES('darron.giron@enron.com', 'bryce.baxter@enron.com', 'Re: Feedback for Audrey Cook', 'Bryce,

I'll get it done today.

DG 3-9573

From: Bryce Baxter 06/12/2000 07:15 PM

To: Darron C Giron/HOU/ECT@ECT

cc:

Subject: Feedback for Audrey Cook

You were identified as a reviewer for Audrey Cook. If possible, could you complete her feedback by end of business Wednesday? It will really help me in the PRC process to have your input. Thanks.

');

INSERT INTO email([from],[to],subject,body) VALUES('casey.evans@enron.com', 'stephanie.sever@enron.com', 'Gas EOL ID', 'Stephanie,

In conjunction with the recent movement of several power traders, they are changing the names of their gas books as well. The names of the new gas books and traders are as follows:

PWR-NG-LT-SPP: Mike Carson

PWR-NG-LT-SERC: Jeff King

If you need to know their power desk to map their ID to their gas books, those desks are as follows:

EPMI-LT-SPP: Mike Carson

EPMI-LT-SERC: Jeff King

I will be in training this afternoon, but will be back when class is over. Let me know if you have any questions.

Thanks for your help!

Casey');

INSERT INTO email([from],[to],subject,body) VALUES('darrell.schoolcraft@enron.com',
'david.roensch@enron.com, kimberly.watson@enron.com, michelle.lokay@enron.com,', 'Postings', 'Please see the
attached.

ds

');

INSERT INTO email([from],[to],subject,body) VALUES('mcominsky@aol.com', 'cpatman@bracepatt.com,
james_derrick@enron.com', 'Jurisprudence Luncheon', 'Carrin & Jim --

It was an honor and a pleasure to meet both of you yesterday. I know we will
have fun working together on this very special event.

Jeff left the jurisprudence luncheon lists for me before he left on vacation.

I wasn't sure whether he transmitted them to you as well. Would you please
advise me if you would like them sent to you? I can email the MS Excel files
or I can fax the hard copies to you. Please advise what is most convenient.

I plan to be in town through the holidays and can be reached by phone, email,
or cell phone at any time. My cell phone number is 713/705-4829.

Thanks again for your interest in the ADL's work. Martin.

Martin B. Cominsky

Director, Southwest Region

Anti-Defamation League

713/627-3490, ext. 122

713/627-2011 (fax)

MCominsky@aol.com');

INSERT INTO email([from],[to],subject,body) VALUES('phillip.love@enron.com', 'todagost@utmb.edu,
gbsonnta@utmb.edu', 'New President', 'I had a little bird put a word in my ear. Is there any possibility for Ben
Raimier to be Bush's secretary of HHS? Just curious about that infamous UTMB
rumor mill. Hope things are well, happy holidays.

PL');

INSERT INTO email([from],[to],subject,body) VALUES('marie.heard@enron.com', 'ehamilton@fna.com', 'ISDA

Master Agreement', 'Erin:

Pursuant to your request, attached are the Schedule to the ISDA Master Agreement, together with Paragraph 13 to the ISDA Credit Support Annex. Please let me know if you need anything else. We look forward to hearing your comments.

Marie

Marie Heard
Senior Legal Specialist
Enron North America Corp.
Phone: (713) 853-3907
Fax: (713) 646-3490
marie.heard@enron.com

);
INSERT INTO email([from],[to],subject,body) VALUES('andrea.ring@enron.com', 'beverly.beaty@enron.com',
'Re: Tennessee Buy - Louis Dreyfus', 'Beverly - once again thanks so much for your help on this.

);
INSERT INTO email([from],[to],subject,body) VALUES('karolyn.criado@enron.com', 'j.bonin@enron.com,
felicia.case@enron.com, b.clapp@enron.com,', 'Price List week of Oct. 8-9, 2001', '
Please contact me if you have any questions regarding last weeks prices.

Thank you,
Karolyn Criado
3-9441

);
INSERT INTO email([from],[to],subject,body) VALUES('kevin.presto@enron.com',
'edward.baughman@enron.com, billy.braddock@enron.com', 'Associated', 'Please begin working on filling our
Associated short position in 02. I would like to take this risk off the books.

In addition, please find out what a buy-out of VEPCO would cost us. With Rogers transitioning to run our retail risk management, I would like to clean up our customer positions.

We also need to continue to explore a JEA buy-out.

Thanks.);
INSERT INTO email([from],[to],subject,body) VALUES('stacy.dickson@enron.com', 'gregg.penman@enron.com',
'RE: Constellation TC 5-7-01', 'Gregg,

I am at home with a sick baby. (Lots of fun!) I will call you about this

tomorrow.

Stacy');

INSERT INTO email([from],[to],subject,body) VALUES('joe.quenet@enron.com', 'dfincher@utilicorp.com', '', 'hey big guy.....check this out.....

w ww.gorelieberman-2000.com/');

INSERT INTO email([from],[to],subject,body) VALUES('k..allen@enron.com', 'jacqestc@aol.com', '', 'Jacques,

I sent you a fax of Kevin Kolb's comments on the release. The payoff on the note would be \$36,248 (\$36090(principal) + \$158 (accrued interest)).

This is assuming we wrap this up on Tuesday.

Please email to confirm that their changes are ok so I can set up a meeting on Tuesday to reach closure.

Phillip');

INSERT INTO email([from],[to],subject,body) VALUES('kourtney.nelson@enron.com', 'mike.swerzbin@enron.com', 'Adjusted L/R Balance', 'Mike,

I placed the adjusted L/R Balance on the Enronwest site. It is under the "Staff/Kourtney Nelson". There are two links:

- 1) "Adj L_R" is the same data/format from the weekly strategy meeting.
- 2) "New Gen 2001_2002" link has all of the supply side info that is used to calculate the L/R balance
-Please note the Data Flag column, a value of "3" indicates the project was cancelled, on hold, etc and is not included in the calc.

Both of these sheets are interactive Excel spreadsheets and thus you can play around with the data as you please. Also, James Bruce is working to get his gen report on the web. That will help with your access to information on new gen.

Please let me know if you have any questions or feedback,

Kourtney

Kourtney Nelson

Fundamental Analysis

Enron North America

(503) 464-8280

kourtney.nelson@enron.com');

INSERT INTO email([from],[to],subject,body) VALUES('d..thomas@enron.com', 'naveed.ahmed@enron.com', 'FW: Current Enron TCC Portfolio', '

-----Original Message-----

From: Grace, Rebecca M.

Sent: Monday, December 17, 2001 9:44 AM

To: Thomas, Paul D.
Cc: Cashion, Jim; Allen, Thresa A.; May, Tom
Subject: RE: Current Enron TCC Portfolio

Paul,

I reviewed NY's list. I agree with all of their contracts numbers and mw amounts.

Call if you have any more questions.

Rebecca

-----Original Message-----

From: Thomas, Paul D.
Sent: Monday, December 17, 2001 9:08 AM
To: Grace, Rebecca M.
Subject: FW: Current Enron TCC Portfolio

<< File: enrontccs.xls >>

Rebecca,
Let me know if you see any differences.

Paul

X 3-0403

-----Original Message-----

From: Thomas, Paul D.
Sent: Monday, December 17, 2001 9:04 AM
To: Ahmed, Naveed
Subject: FW: Current Enron TCC Portfolio

-----Original Message-----

From: Thomas, Paul D.
Sent: Thursday, December 13, 2001 10:01 AM
To: Baughman, Edward D.
Subject: Current Enron TCC Portfolio

');

INSERT INTO email([from],[to],subject,body) VALUES('stephanie.panus@enron.com',
'william.bradford@enron.com, debbie.brackett@enron.com,', 'Coastal Merchant Energy/El Paso Merchant Energy',
'Coastal Merchant Energy, L.P. merged with and into El Paso Merchant Energy',
L.P., effective February 1, 2001, with the surviving entity being El Paso

Merchant Energy, L.P. We currently have ISDA Master Agreements with both counterparties. Please see the attached memo regarding the existing Masters and let us know which agreement should be terminated.

Thanks,
Stephanie

');

INSERT INTO email([from],[to],subject,body) VALUES('kam.keiser@enron.com', 'c..kenne@enron.com', 'RE: What about this too???' , '

-----Original Message-----

From: Kenne, Dawn C.

Sent: Wednesday, February 06, 2002 11:50 AM

To: Keiser, Kam

Subject: What about this too???

<< File: Netco Trader Matrix.xls >>

');

INSERT INTO email([from],[to],subject,body) VALUES('chris.meyer@enron.com', 'joe.parks@enron.com', 'Centana', 'Talked to Chip. We do need Cash Committe approval given the netting feature of your deal, which means Batch Funding Request. Please update per my previous e-mail and forward.

Thanks

chris

x31666');

INSERT INTO email([from],[to],subject,body) VALUES('debra.perlingiere@enron.com', 'jworman@academyofhealth.com', ', 'Have a great weekend! Happy Fathers Day!

Debra Perlingiere

Enron North America Corp.

1400 Smith Street, EB 3885

Houston, Texas 77002

dperlin@enron.com

Phone 713-853-7658

Fax 713-646-3490');

INSERT INTO email([from],[to],subject,body) VALUES('outlook.team@enron.com', ', 'Demo by Martha Janousek of Dashboard & Pipeline Profile / Julia &', 'CALENDAR ENTRY: APPOINTMENT

Description:

Demo by Martha Janousek of Dashboard & Pipeline Profile / Julia & Dir Rpts. - 4102

Date: 1/5/2001

Time: 9:00 AM - 10:00 AM (Central Standard Time)

Chairperson: Outlook Migration Team

Detailed Description:');

INSERT INTO email([from],[to],subject,body) VALUES('diana.seifert@enron.com', 'mark.taylor@enron.com', 'Guest access Chile', 'Hello Mark,

Justin Boyd told me that your can help me with questions regarding Chile.

We got a request for guest access through MG.

The company is called Escondida and is a subsidiary of BHP Australia.

Please advise if I can set up a guest account or not.

F.Y.I.: MG is planning to put a "in w/h Chile" contract for Copper on-line as soon as Enron has done the due diligence for this country.

Thanks !

Best regards

Diana Seifert

EOL PCG');

INSERT INTO email([from],[to],subject,body) VALUES('enron_update@concuworkplace.com', 'mark.whitt@enron.com', '<<Concur Expense Document>> - 121001', 'The Approval status has changed on the following report:

Status last changed by: Barry L. Tycholiz

Expense Report Name: 121001

Report Total: \$198.98

Amount Due Employee: \$198.98

Amount Approved: \$198.98

Amount Paid: \$0.00

Approval Status: Approved

Payment Status: Pending

To review this expense report, click on the following link for Concur Expense.

<http://expense.ms.enron.com>');

INSERT INTO email([from],[to],subject,body) VALUES('kevin.hyatt@enron.com', '', 'Technical Support', 'Outside the U.S., please refer to the list below:

Australia:

1800 678-515

support@palm-au.com

Canada:

1905 305-6530

support@palm.com

New Zealand:

0800 446-398

support@palm-nz.com

U.K.:

0171 867 0108

eurosupport@palm.3com.com

Please refer to the Worldwide Customer Support card for a complete technical support contact list.');

INSERT INTO email([from],[to],subject,body) VALUES('geoff.storey@enron.com', 'dutch.quigley@enron.com', 'RE:', 'duke contact?')

-----Original Message-----

From: Quigley, Dutch

Sent: Wednesday, October 31, 2001 10:14 AM

To: Storey, Geoff

Subject: RE:

bp corp Albert LaMore 281-366-4962

running the reports now

-----Original Message-----

From: Storey, Geoff

Sent: Wednesday, October 31, 2001 10:10 AM

To: Quigley, Dutch

Subject: RE:

give me a contact over there too

BP

-----Original Message-----

From: Quigley, Dutch

Sent: Wednesday, October 31, 2001 9:42 AM

To: Storey, Geoff

Subject:

Coral Jeff Whitnah 713-767-5374

Relaint Steve McGinn 713-207-4000');

INSERT INTO email([from],[to],subject,body) VALUES('pete.davis@enron.com', 'pete.davis@enron.com', 'Start Date: 4/22/01; HourAhead hour: 3; <CODESITE>', 'Start Date: 4/22/01; HourAhead hour: 3; No ancillary schedules awarded.

Variances detected.

Variances detected in Load schedule.

LOG MESSAGES:

PARSING FILE -->> O:\Portland\WestDesk\California Scheduling\ISO Final

Schedules\2001042203.txt

---- Load Schedule ----

\$\$\$ Variance found in table tblLoads.

Details: (Hour: 3 / Preferred: 1.92 / Final: 1.89)

TRANS_TYPE: FINAL

LOAD_ID: PGE4

MKT_TYPE: 2

TRANS_DATE: 4/22/01

SC_ID: EPMI

);

INSERT INTO email([from],[to],subject,body) VALUES('john.postlethwaite@enron.com', 'john.zufferli@enron.com', 'Reference', 'John, hope things are going well up there for you. The big day is almost here for you and Jessica. I was wondering if I could use your name as a job reference if need be. I am just trying to get everything in order just in case something happens.

John');

INSERT INTO email([from],[to],subject,body) VALUES('jeffrey.shankman@enron.com', 'lschiffm@jonesday.com', 'Re:', 'I saw you called on the cell this a.m. Sorry I missed you. (I was in the shower). I have had a shitty week--I suspect my silence (not only to you, but others) after our phone call is a result of the week. I'm seeing Glen at 11:15....talk to you');

INSERT INTO email([from],[to],subject,body) VALUES('litebytz@enron.com', '', 'Lite Bytz RSVP', 'This week's Lite Bytz presentation will feature the following TOOLZ speaker:

Richard McDougall
Solaris 8
Thursday, June 7, 2001

If you have not already signed up, please RSVP via email to litebytz@enron.com by the end of the day Tuesday, June 5, 2001.

*Remember: this is now a Brown Bag Event--so bring your lunch and we will provide cookies and drinks.

Click below for more details.

<http://home.enron.com:84/messaging/litebytztoolzprint.jpg>);

```
COMMIT;
}
} {}
```

```
#####
# Everything above just builds an interesting test database. The actual
# tests come after this comment.
#####
```

```
do_test fts2c-1.2 {
```

```

execsql {
  SELECT rowid FROM email WHERE email MATCH 'mark'
}
} {6 17 25 38 40 42 73 74}
do_test fts2c-1.3 {
  execsql {
    SELECT rowid FROM email WHERE email MATCH 'susan'
  }
} {24 40}
do_test fts2c-1.4 {
  execsql {
    SELECT rowid FROM email WHERE email MATCH 'mark susan'
  }
} {40}
do_test fts2c-1.5 {
  execsql {
    SELECT rowid FROM email WHERE email MATCH 'susan mark'
  }
} {40}
do_test fts2c-1.6 {
  execsql {
    SELECT rowid FROM email WHERE email MATCH "'mark susan'"
  }
} {}
do_test fts2c-1.7 {
  execsql {
    SELECT rowid FROM email WHERE email MATCH 'mark -susan'
  }
} {6 17 25 38 42 73 74}
do_test fts2c-1.8 {
  execsql {
    SELECT rowid FROM email WHERE email MATCH '-mark susan'
  }
} {24}
do_test fts2c-1.9 {
  execsql {
    SELECT rowid FROM email WHERE email MATCH 'mark OR susan'
  }
} {6 17 24 25 38 40 42 73 74}

```

```

# Some simple tests of the automatic "offsets(email)" column. In the sample
# data set above, only one message, number 20, contains the words
# "gas" and "reminder" in both body and subject.
#

```

```

do_test fts2c-2.1 {
  execsql {
    SELECT rowid, offsets(email) FROM email
    WHERE email MATCH 'gas reminder'
  }
}

```



```

}
} {20 {2 0 42 3 2 1 54 8 3 0 42 3 3 1 54 8 3 0 129 3 3 0 143 3 3 0 240 3}}
do_test fts2c-2.2 {
execsql {
    SELECT rowid, offsets(email) FROM email
    WHERE email MATCH 'subject:gas reminder'
}
} {20 {2 0 42 3 2 1 54 8 3 1 54 8}}
do_test fts2c-2.3 {
execsql {
    SELECT rowid, offsets(email) FROM email
    WHERE email MATCH 'body:gas reminder'
}
} {20 {2 1 54 8 3 0 42 3 3 1 54 8 3 0 129 3 3 0 143 3 3 0 240 3}}
do_test fts2c-2.4 {
execsql {
    SELECT rowid, offsets(email) FROM email
    WHERE subject MATCH 'gas reminder'
}
} {20 {2 0 42 3 2 1 54 8}}
do_test fts2c-2.5 {
execsql {
    SELECT rowid, offsets(email) FROM email
    WHERE body MATCH 'gas reminder'
}
} {20 {3 0 42 3 3 1 54 8 3 0 129 3 3 0 143 3 3 0 240 3}}

# Document 32 contains 5 instances of the world "child". But only
# 3 of them are paired with "product". Make sure only those instances
# that match the phrase appear in the offsets(email) list.
#
do_test fts2c-3.1 {
execsql {
    SELECT rowid, offsets(email) FROM email
    WHERE body MATCH 'child product' AND +rowid=32
}
} {32 {3 0 94 5 3 0 114 5 3 0 207 5 3 1 213 7 3 0 245 5 3 1 251 7 3 0 409 5 3 1 415 7 3 1 493 7}}
do_test fts2c-3.2 {
execsql {
    SELECT rowid, offsets(email) FROM email
    WHERE body MATCH "'child product'"
}
} {32 {3 0 207 5 3 1 213 7 3 0 245 5 3 1 251 7 3 0 409 5 3 1 415 7}}

# Snippet generator tests
#
do_test fts2c-4.1 {
execsql {

```

```

SELECT snippet(email) FROM email
WHERE email MATCH 'subject:gas reminder'
}
} {{Alert Posted 10:00 AM November 20,2000: E-<b>GAS</b> Request <b>Reminder</b>}}
do_test fts2c-4.2 {
execsql {
SELECT snippet(email) FROM email
WHERE email MATCH 'christmas candlelight'
}
} {{<b>...</b> place.? What do you think about going here <b>Christmas</b>
eve?? They have an 11:00 a.m. service and a <b>candlelight</b> service at 5:00 p.m.,
among others. <b>...</b>}}

do_test fts2c-4.3 {
execsql {
SELECT snippet(email) FROM email
WHERE email MATCH 'deal sheet potential reuse'
}
} {{EOL-Accenture <b>Deal</b> <b>Sheet</b> <b>...</b> intent
Review Enron asset base for <b>potential</b> <b>reuse</b>/ licensing
Contract negotiations <b>...</b>}}
do_test fts2c-4.4 {
execsql {
SELECT snippet(email,'<<<','>>>',') FROM email
WHERE email MATCH 'deal sheet potential reuse'
}
} {{EOL-Accenture <<<Deal>>> <<<Sheet>>> intent
Review Enron asset base for <<<potential>>> <<<reuse>>>/ licensing
Contract negotiations }}
do_test fts2c-4.5 {
execsql {
SELECT snippet(email,'<<<','>>>',') FROM email
WHERE email MATCH 'first things'
}
} {{Re: <<<First>>> Polish Deal! Congrats! <<<Things>>> seem to be building rapidly now on the }}
do_test fts2c-4.6 {
execsql {
SELECT snippet(email) FROM email
WHERE email MATCH 'chris is here'
}
} {{<b>chris</b>.germany@enron.com <b>...</b> Sounds good to me. I bet this <b>is</b> next to the Warick??
Hotel. <b>...</b> place.? What do you think about going <b>here</b> Christmas
eve?? They have an 11:00 a.m. <b>...</b>}}
do_test fts2c-4.7 {
execsql {
SELECT snippet(email) FROM email
WHERE email MATCH "'pursuant to'"
}
}

```

} {Erin:

Pursuant to your request, attached are the Schedule to ...}}

do_test fts2c-4.8 {

execsql {

SELECT snippet(email) FROM email

WHERE email MATCH 'ancillary load davis'

}

} {pete.davis@enron.com ... Start Date: 4/22/01; HourAhead hour: 3; No ancillary schedules awarded.

Variances detected.

Variances detected in Load schedule.

LOG MESSAGES:

PARSING ...}}

Combinations of AND and OR operators:

#

do_test fts2c-5.1 {

execsql {

SELECT snippet(email) FROM email

WHERE email MATCH 'questar enron OR com'

}

} {matt.smith@enron.com ... six reports:

31 Keystone Receipts

15 Questar Pipeline

40 Rockies Production

22 West_2 ...}}

do_test fts2c-5.2 {

execsql {

SELECT snippet(email) FROM email

WHERE email MATCH 'enron OR com questar'

}

} {matt.smith@enron.com ... six reports:

31 Keystone Receipts

15 Questar Pipeline

40 Rockies Production

22 West_2 ...}}

finish_test

Found in path(s):

* /opt/cola/permits/1146568937_1616563472.04/0/sqlite-3.7.17-8.el7_7.1-1.src.rpm-cosi-expand-archive-lltKQC5N/sqlite-src-3071700.zip-cosi-expand-archive-cheW8kUH/sqlite-src-3071700/test/fts2c.test

No license file was found, but licenses were detected in source scan.

SQLite core and like the SQLite core are in the public domain. The
The **TH3** test harness is a set of proprietary tests, written in

Found in path(s):

* /opt/cola/permits/1146568937_1616563472.04/0/sqlite-3.7.17-8.el7_7.1-1.src.rpm-cosi-expand-archive-
lltKQC5N/sqlite-doc-3071700.zip-cosi-expand-archive-r9EckcaZ/sqlite-doc-3071700/testing.html

No license file was found, but licenses were detected in source scan.

SQLite itself is in the public domain and
can be used for any purpose. But TH3 is proprietary and requires a license.

Found in path(s):

* /opt/cola/permits/1146568937_1616563472.04/0/sqlite-3.7.17-8.el7_7.1-1.src.rpm-cosi-expand-archive-
lltKQC5N/sqlite-doc-3071700.zip-cosi-expand-archive-r9EckcaZ/sqlite-doc-3071700/th3.html

No license file was found, but licenses were detected in source scan.

public domain.

Found in path(s):

* /opt/cola/permits/1146568937_1616563472.04/0/sqlite-3.7.17-8.el7_7.1-1.src.rpm-cosi-expand-archive-
lltKQC5N/sqlite-doc-3071700.zip-cosi-expand-archive-r9EckcaZ/sqlite-doc-3071700/index.html

No license file was found, but licenses were detected in source scan.

```
{string currentfile exch readstring pop}executeonly def
```

Found in path(s):

*/

No license file was found, but licenses were detected in source scan.

```
# 2012 May 21
```

```
#
```

```
# The author disclaims copyright to this source code. In place of
```

```
# a legal notice, here is a blessing:
```

```
#
```

```
# May you do good and not evil.
```

```
# May you find forgiveness for yourself and forgive others.
```

```
# May you share freely, never taking more than you give.
```

```
#
```

```
# NB: Portions of this file are extracted from open-source projects
```

```
# covered by permissive licenses. Use of this file for testing is clearly
```

```
# allowed. However, do not incorporate the text of this one file into
```

```
# end-products without checking the licenses on the open-source projects
```

```
# from which this code was extracted. This warning applies to this one
```

```
# file only - not the bulk of the SQLite source code and tests.
```

```
#
```

```
*****
```

```

#
# This file contains large and complex schemas obtained from open-source
# software projects. The schemas are parsed just to make sure that nothing
# breaks in the parser logic.
#
# These tests merely verify that the parse occurs without error.
# No attempt is made to verify correct operation of the resulting schema
# and statements.
#

set testdir [file dirname $argv0]
source $testdir/tester.tcl

# Schema and query extracted from Skrooge.org.
#
do_test fuzz-oss1-skrooge {
  db eval {
    CREATE TABLE parameters (id INTEGER NOT NULL PRIMARY KEY AUTOINCREMENT,t_uuid_parent
    TEXT NOT NULL DEFAULT "",t_name TEXT NOT NULL,t_value TEXT NOT NULL DEFAULT "",b_blob
    BLOB,d_lastmodifdate DATE NOT NULL DEFAULT CURRENT_TIMESTAMP,i_tmp INTEGER NOT NULL
    DEFAULT 0);
    CREATE TABLE doctransaction (id INTEGER NOT NULL PRIMARY KEY AUTOINCREMENT,t_name TEXT
    NOT NULL,t_mode VARCHAR(1) DEFAULT 'U' CHECK (t_mode IN ('U', 'R')),d_date DATE NOT
    NULL,t_savestep VARCHAR(1) DEFAULT 'N' CHECK (t_savestep IN ('Y', 'N')),i_parent INTEGER,
    t_refreshviews VARCHAR(1) DEFAULT 'Y' CHECK (t_refreshviews IN ('Y', 'N')));
    CREATE TABLE doctransactionitem (id INTEGER NOT NULL PRIMARY KEY AUTOINCREMENT,
    rd_doctransaction_id INTEGER NOT NULL,i_object_id INTEGER NOT NULL,t_object_table TEXT NOT
    NULL,t_action VARCHAR(1) DEFAULT 'T' CHECK (t_action IN ('T', 'U', 'D')),t_sqlorder TEXT NOT NULL
    DEFAULT "");
    CREATE TABLE doctransactionmsg (id INTEGER NOT NULL PRIMARY KEY AUTOINCREMENT,
    rd_doctransaction_id INTEGER NOT NULL,t_message TEXT NOT NULL DEFAULT "",t_popup VARCHAR(1)
    DEFAULT 'Y' CHECK (t_popup IN ('Y', 'N')));
    CREATE TABLE unit(id INTEGER NOT NULL PRIMARY KEY AUTOINCREMENT,t_name TEXT NOT
    NULL,t_symbol TEXT NOT NULL DEFAULT "",t_country TEXT NOT NULL DEFAULT "",t_type VARCHAR(1)
    NOT NULL DEFAULT 'C' CHECK (t_type IN ('1', '2', 'C', 'S', 'I', 'O')),t_internet_code TEXT NOT NULL
    DEFAULT "",i_nbdecimal INT NOT NULL DEFAULT 2,rd_unit_id INTEGER NOT NULL DEFAULT 0, t_source
    TEXT NOT NULL DEFAULT "");
    CREATE TABLE unitvalue(id INTEGER NOT NULL PRIMARY KEY AUTOINCREMENT,rd_unit_id
    INTEGER NOT NULL,d_date DATE NOT NULL,f_quantity FLOAT NOT NULL CHECK (f_quantity>=0));
    CREATE TABLE bank (id INTEGER NOT NULL PRIMARY KEY AUTOINCREMENT,t_name TEXT NOT
    NULL DEFAULT "",t_bank_number TEXT NOT NULL DEFAULT "",t_icon TEXT NOT NULL DEFAULT "");
    CREATE TABLE interest(id INTEGER NOT NULL PRIMARY KEY AUTOINCREMENT,rd_account_id
    INTEGER NOT NULL,d_date DATE NOT NULL,f_rate FLOAT NOT NULL CHECK
    (f_rate>=0),t_income_value_date_mode VARCHAR(1) NOT NULL DEFAULT 'F' CHECK
    (t_income_value_date_mode IN ('F', '0', '1', '2', '3', '4', '5')),t_expenditure_value_date_mode VARCHAR(1) NOT
    NULL DEFAULT 'F' CHECK (t_expenditure_value_date_mode IN ('F', '0', '1', '2', '3', '4', '5')),t_base VARCHAR(3)
    NOT NULL DEFAULT '24' CHECK (t_base IN ('24', '360', '365')));
    CREATE TABLE operation(id INTEGER NOT NULL PRIMARY KEY AUTOINCREMENT,i_group_id

```

```

INTEGER NOT NULL DEFAULT 0,i_number INTEGER DEFAULT 0 CHECK (i_number>=0),d_date DATE
NOT NULL DEFAULT '0000-00-00',rd_account_id INTEGER NOT NULL,t_mode TEXT NOT NULL
DEFAULT ",r_payee_id INTEGER NOT NULL DEFAULT 0,t_comment TEXT NOT NULL DEFAULT
",rc_unit_id INTEGER NOT NULL,t_status VARCHAR(1) NOT NULL DEFAULT 'N' CHECK (t_status IN ('N',
'P', 'Y')),t_bookmarked VARCHAR(1) NOT NULL DEFAULT 'N' CHECK (t_bookmarked IN ('Y', 'N')),t_imported
VARCHAR(1) NOT NULL DEFAULT 'N' CHECK (t_imported IN ('Y', 'N', 'P', 'T')),t_template VARCHAR(1)
NOT NULL DEFAULT 'N' CHECK (t_template IN ('Y', 'N')),t_import_id TEXT NOT NULL DEFAULT ",i_tmp
INTEGER NOT NULL DEFAULT 0,r_recurrentoperation_id INTEGER NOT NULL DEFAULT 0);
CREATE TABLE operationbalance(id INTEGER NOT NULL PRIMARY KEY AUTOINCREMENT,f_balance
FLOAT NOT NULL DEFAULT 0,r_operation_id INTEGER NOT NULL);
CREATE TABLE refund (id INTEGER NOT NULL PRIMARY KEY AUTOINCREMENT,t_name TEXT NOT
NULL DEFAULT ",t_comment TEXT NOT NULL DEFAULT ",t_close VARCHAR(1) DEFAULT 'N' CHECK
(t_close IN ('Y', 'N')));
CREATE TABLE payee (id INTEGER NOT NULL PRIMARY KEY AUTOINCREMENT,t_name TEXT NOT
NULL DEFAULT ",t_address TEXT NOT NULL DEFAULT ", t_bookmarked VARCHAR(1) NOT NULL
DEFAULT 'N' CHECK (t_bookmarked IN ('Y', 'N')));
CREATE TABLE suboperation(id INTEGER NOT NULL PRIMARY KEY AUTOINCREMENT,t_comment
TEXT NOT NULL DEFAULT ",rd_operation_id INTEGER NOT NULL,r_category_id INTEGER NOT NULL
DEFAULT 0,f_value FLOAT NOT NULL DEFAULT 0.0,i_tmp INTEGER NOT NULL DEFAULT 0,r_refund_id
INTEGER NOT NULL DEFAULT 0, t_formula TEXT NOT NULL DEFAULT ");
CREATE TABLE rule (id INTEGER NOT NULL PRIMARY KEY AUTOINCREMENT,t_description TEXT
NOT NULL DEFAULT ",t_definition TEXT NOT NULL DEFAULT ",t_action_description TEXT NOT NULL
DEFAULT ",t_action_definition TEXT NOT NULL DEFAULT ",t_action_type VARCHAR(1) DEFAULT 'S'
CHECK (t_action_type IN ('S', 'U', 'A')),t_bookmarked VARCHAR(1) NOT NULL DEFAULT 'N' CHECK
(t_bookmarked IN ('Y', 'N')),f_sortorder FLOAT);
CREATE TABLE budget (id INTEGER NOT NULL PRIMARY KEY AUTOINCREMENT,rc_category_id
INTEGER NOT NULL DEFAULT 0,t_including_subcategories TEXT NOT NULL DEFAULT 'N' CHECK
(t_including_subcategories IN ('Y', 'N')),f_budgeted FLOAT NOT NULL DEFAULT 0.0,f_budgeted_modified
FLOAT NOT NULL DEFAULT 0.0,f_transferred FLOAT NOT NULL DEFAULT 0.0,i_year INTEGER NOT
NULL DEFAULT 2010,i_month INTEGER NOT NULL DEFAULT 0 CHECK (i_month>=0 AND
i_month<=12));
CREATE TABLE budgetcategory(id INTEGER NOT NULL DEFAULT 0,id_category INTEGER NOT NULL
DEFAULT 0);
CREATE TABLE budgetrule (id INTEGER NOT NULL PRIMARY KEY AUTOINCREMENT,rc_category_id
INTEGER NOT NULL DEFAULT 0,t_category_condition TEXT NOT NULL DEFAULT 'Y' CHECK
(t_category_condition IN ('Y', 'N')),t_year_condition TEXT NOT NULL DEFAULT 'Y' CHECK (t_year_condition
IN ('Y', 'N')),i_year INTEGER NOT NULL DEFAULT 2010,i_month INTEGER NOT NULL DEFAULT 0
CHECK (i_month>=0 AND i_month<=12),t_month_condition TEXT NOT NULL DEFAULT 'Y' CHECK
(t_month_condition IN ('Y', 'N')),i_condition INTEGER NOT NULL DEFAULT 0 CHECK (i_condition IN (-
1,0,1)),f_quantity FLOAT NOT NULL DEFAULT 0.0,t_absolute TEXT NOT NULL DEFAULT 'Y' CHECK
(t_absolute IN ('Y', 'N')),rc_category_id_target INTEGER NOT NULL DEFAULT 0,t_category_target TEXT NOT
NULL DEFAULT 'Y' CHECK (t_category_target IN ('Y', 'N')),t_rule TEXT NOT NULL DEFAULT 'N' CHECK
(t_rule IN ('N', 'C', 'Y')));
CREATE TABLE "recurrentoperation" (id INTEGER NOT NULL PRIMARY KEY AUTOINCREMENT,d_date
DATE NOT NULL DEFAULT '0000-00-00',rd_operation_id INTEGER NOT NULL,i_period_increment
INTEGER NOT NULL DEFAULT 1 CHECK (i_period_increment>=0),t_period_unit TEXT NOT NULL
DEFAULT 'M' CHECK (t_period_unit IN ('D', 'W', 'M', 'Y')),t_auto_write VARCHAR(1) DEFAULT 'Y' CHECK
(t_auto_write IN ('Y', 'N')),i_auto_write_days INTEGER NOT NULL DEFAULT 5 CHECK

```

```

(i_auto_write_days>=0),t_warn VARCHAR(1) DEFAULT 'Y' CHECK (t_warn IN ('Y', 'N')),i_warn_days
INTEGER NOT NULL DEFAULT 5 CHECK (i_warn_days>=0),t_times VARCHAR(1) DEFAULT 'N' CHECK
(t_times IN ('Y', 'N')),i_nb_times INTEGER NOT NULL DEFAULT 1 CHECK (i_nb_times>=0));
CREATE TABLE "category" (id INTEGER NOT NULL PRIMARY KEY AUTOINCREMENT,t_name TEXT
NOT NULL DEFAULT " CHECK (t_name NOT LIKE '% > %'),t_fullname TEXT,rd_category_id
INT,t_bookmarked VARCHAR(1) NOT NULL DEFAULT 'N' CHECK (t_bookmarked IN ('Y', 'N')));
CREATE TABLE "account"(id INTEGER NOT NULL PRIMARY KEY AUTOINCREMENT,t_name TEXT NOT
NULL,t_number TEXT NOT NULL DEFAULT "",t_agency_number TEXT NOT NULL DEFAULT
"",t_agency_address TEXT NOT NULL DEFAULT "",t_comment TEXT NOT NULL DEFAULT "",t_close
VARCHAR(1) DEFAULT 'N' CHECK (t_close IN ('Y', 'N')),t_type VARCHAR(1) NOT NULL DEFAULT 'C'
CHECK (t_type IN ('C', 'D', 'A', 'T', 'L', 'W', 'O')),t_bookmarked VARCHAR(1) NOT NULL DEFAULT 'N' CHECK
(t_bookmarked IN ('Y', 'N')),rd_bank_id INTEGER NOT NULL);
CREATE TABLE "node" (id INTEGER NOT NULL PRIMARY KEY AUTOINCREMENT,t_name TEXT NOT
NULL DEFAULT " CHECK (t_name NOT LIKE '% > %'),t_fullname TEXT,t_icon TEXT DEFAULT
"",f_sortorder FLOAT,t_autostart VARCHAR(1) DEFAULT 'N' CHECK (t_autostart IN ('Y', 'N')),t_data
TEXT,rd_node_id INT CONSTRAINT fk_id REFERENCES node(id) ON DELETE CASCADE);
CREATE TABLE vm_category_display_tmp(
id INT,
t_name TEXT,
t_fullname TEXT,
rd_category_id INT,
t_bookmarked TEXT,
i_NBOPERATIONS,
f_REALCURRENTAMOUNT
);
CREATE TABLE vm_budget_tmp(
id INT,
rc_category_id INT,
t_including_subcategories TEXT,
f_budgeted REAL,
f_budgeted_modified REAL,
f_transferred REAL,
i_year INT,
i_month INT,
t_CATEGORY,
t_PERIOD,
f_CURRENTAMOUNT,
t_RULES
);
CREATE INDEX idx_doctransaction_parent ON doctransaction (i_parent);
CREATE INDEX idx_doctransactionitem_i_object_id ON doctransactionitem (i_object_id);
CREATE INDEX idx_doctransactionitem_t_object_table ON doctransactionitem (t_object_table);
CREATE INDEX idx_doctransactionitem_t_action ON doctransactionitem (t_action);
CREATE INDEX idx_doctransactionitem_rd_doctransaction_id ON doctransactionitem (rd_doctransaction_id);
CREATE INDEX idx_doctransactionitem_optimization ON doctransactionitem (rd_doctransaction_id, i_object_id,
t_object_table, t_action, id);
CREATE INDEX idx_unit_unit_id ON unitvalue(rd_unit_id);
CREATE INDEX idx_account_bank_id ON account(rd_bank_id);

```

```

CREATE INDEX idx_account_type ON account(t_type);
CREATE INDEX idx_category_category_id ON category(rd_category_id);
CREATE INDEX idx_category_t_fullname ON category(t_fullname);
CREATE INDEX idx_operation_account_id ON operation (rd_account_id);
CREATE INDEX idx_operation_tmp1_found_transfert ON operation (rc_unit_id, d_date);
CREATE INDEX idx_operation_grouped_operation_id ON operation (i_group_id);
CREATE INDEX idx_operation_i_number ON operation (i_number);
CREATE INDEX idx_operation_i_tmp ON operation (i_tmp);
CREATE INDEX idx_operation_rd_account_id ON operation (rd_account_id);
CREATE INDEX idx_operation_rc_unit_id ON operation (rc_unit_id);
CREATE INDEX idx_operation_t_status ON operation (t_status);
CREATE INDEX idx_operation_t_import_id ON operation (t_import_id);
CREATE INDEX idx_operation_t_template ON operation (t_template);
CREATE INDEX idx_operation_d_date ON operation (d_date);
CREATE INDEX idx_operationbalance_operation_id ON operationbalance (r_operation_id);
CREATE INDEX idx_suboperation_operation_id ON suboperation (rd_operation_id);
CREATE INDEX idx_suboperation_i_tmp ON suboperation (i_tmp);
CREATE INDEX idx_suboperation_category_id ON suboperation (r_category_id);
CREATE INDEX idx_suboperation_refund_id_id ON suboperation (r_refund_id);
CREATE INDEX idx_recurrentoperation_rd_operation_id ON recurrentoperation (rd_operation_id);
CREATE INDEX idx_refund_close ON refund(t_close);
CREATE INDEX idx_interest_account_id ON interest (rd_account_id);
CREATE INDEX idx_rule_action_type ON rule(t_action_type);
CREATE INDEX idx_budget_category_id ON budget(rc_category_id);
CREATE INDEX idx_budgetcategory_id ON budgetcategory (id);
CREATE INDEX idx_budgetcategory_id_category ON budgetcategory (id_category);
CREATE UNIQUE INDEX uidx_parameters_uuid_parent_name ON parameters (t_uuid_parent, t_name);
CREATE UNIQUE INDEX uidx_node_parent_id_name ON node(t_name,rd_node_id);
CREATE UNIQUE INDEX uidx_node_fullname ON node(t_fullname);
CREATE UNIQUE INDEX uidx_unit_name ON unit(t_name);
CREATE UNIQUE INDEX uidx_unit_symbol ON unit(t_symbol);
CREATE UNIQUE INDEX uidx_unitvalue ON unitvalue(d_date,rd_unit_id);
CREATE UNIQUE INDEX uidx_bank_name ON bank(t_name);
CREATE UNIQUE INDEX uidx_account_name ON account(t_name);
CREATE UNIQUE INDEX uidx_category_parent_id_name ON category(t_name,rd_category_id);
CREATE UNIQUE INDEX uidx_category_fullname ON category(t_fullname);
CREATE UNIQUE INDEX uidx_refund_name ON refund(t_name);
CREATE UNIQUE INDEX uidx_payee_name ON payee(t_name);
CREATE UNIQUE INDEX uidx_interest ON interest(d_date,rd_account_id);
CREATE UNIQUE INDEX uidx_budget ON budget(i_year,i_month, rc_category_id);
CREATE VIEW v_node AS SELECT * from node;
CREATE VIEW v_node_displayname AS SELECT *, t_fullname AS t_displayname from node;
CREATE VIEW v_parameters_displayname AS SELECT *, t_name AS t_displayname from parameters;
CREATE TRIGGER fkdc_parameters_parameters_uuid BEFORE DELETE ON parameters FOR EACH ROW
BEGIN DELETE FROM parameters WHERE parameters.t_uuid_parent=OLD.id||'-'||'parameters'; END;
CREATE TRIGGER fkdc_node_parameters_uuid BEFORE DELETE ON node FOR EACH ROW BEGIN
DELETE FROM parameters WHERE parameters.t_uuid_parent=OLD.id||'-'||'node'; END;
CREATE TRIGGER cpt_node_fullname1 AFTER INSERT ON node BEGIN UPDATE node SET

```



```

t_fullname=CASE WHEN new.rd_node_id IS NULL OR new.rd_node_id="" OR new.rd_node_id=0 THEN
new.t_name ELSE (SELECT c.t_fullname from node c where c.id=new.rd_node_id)||' > '||new.t_name END
WHERE id=new.id;END;
CREATE TRIGGER cpt_node_fullname2 AFTER UPDATE OF t_name, rd_node_id ON node BEGIN UPDATE
node SET t_fullname=CASE WHEN new.rd_node_id IS NULL OR new.rd_node_id="" OR new.rd_node_id=0
THEN new.t_name ELSE (SELECT c.t_fullname from node c where c.id=new.rd_node_id)||' > '||new.t_name END
WHERE id=new.id;UPDATE node SET t_name=t_name WHERE rd_node_id=new.id;END;
CREATE TRIGGER fki_account_bank_rd_bank_id_id BEFORE INSERT ON account FOR EACH ROW BEGIN
SELECT RAISE(ABORT, 'Impossible d'ajouter un objet (bank est utilis par account)
Nom de la contrainte: fki_account_bank_rd_bank_id_id') WHERE NEW.rd_bank_id!=0 AND
NEW.rd_bank_id!=" AND (SELECT id FROM bank WHERE id = NEW.rd_bank_id) IS NULL; END;
CREATE TRIGGER fku_account_bank_rd_bank_id_id BEFORE UPDATE ON account FOR EACH ROW
BEGIN SELECT RAISE(ABORT, 'Impossible de modifier un objet (bank est utilis par account)
Nom de la contrainte: fku_account_bank_rd_bank_id_id') WHERE NEW.rd_bank_id!=0 AND
NEW.rd_bank_id!=" AND (SELECT id FROM bank WHERE id = NEW.rd_bank_id) IS NULL; END;
CREATE TRIGGER fkdc_bank_account_id_rd_bank_id BEFORE DELETE ON bank FOR EACH ROW BEGIN
DELETE FROM account WHERE account.rd_bank_id = OLD.id; END;
CREATE TRIGGER fki_budget_category_rc_category_id_id BEFORE INSERT ON budget FOR EACH ROW
BEGIN SELECT RAISE(ABORT, 'Impossible d'ajouter un objet (category est utilis par budget)
Nom de la contrainte: fki_budget_category_rc_category_id_id') WHERE NEW.rc_category_id!=0 AND
NEW.rc_category_id!=" AND (SELECT id FROM category WHERE id = NEW.rc_category_id) IS NULL; END;
CREATE TRIGGER fku_budget_category_rc_category_id_id BEFORE UPDATE ON budget FOR EACH ROW
BEGIN SELECT RAISE(ABORT, 'Impossible de modifier un objet (category est utilis par budget)
Nom de la contrainte: fku_budget_category_rc_category_id_id') WHERE NEW.rc_category_id!=0 AND
NEW.rc_category_id!=" AND (SELECT id FROM category WHERE id = NEW.rc_category_id) IS NULL; END;
CREATE TRIGGER fkd_budget_category_rc_category_id_id BEFORE DELETE ON category FOR EACH ROW
BEGIN SELECT RAISE(ABORT, 'Impossible de dtruire un objet (category est utilis par budget)
Nom de la contrainte: fkd_budget_category_rc_category_id_id') WHERE (SELECT rc_category_id FROM
budget WHERE rc_category_id = OLD.id) IS NOT NULL; END;
CREATE TRIGGER fki_budgetrule_category_rc_category_id_id BEFORE INSERT ON budgetrule FOR EACH
ROW BEGIN SELECT RAISE(ABORT, 'Impossible d'ajouter un objet (category est utilis par budgetrule)
Nom de la contrainte: fki_budgetrule_category_rc_category_id_id') WHERE NEW.rc_category_id!=0 AND
NEW.rc_category_id!=" AND (SELECT id FROM category WHERE id = NEW.rc_category_id) IS NULL; END;
CREATE TRIGGER fku_budgetrule_category_rc_category_id_id BEFORE UPDATE ON budgetrule FOR EACH
ROW BEGIN SELECT RAISE(ABORT, 'Impossible de modifier un objet (category est utilis par budgetrule)
Nom de la contrainte: fku_budgetrule_category_rc_category_id_id') WHERE NEW.rc_category_id!=0 AND
NEW.rc_category_id!=" AND (SELECT id FROM category WHERE id = NEW.rc_category_id) IS NULL; END;
CREATE TRIGGER fkd_budgetrule_category_rc_category_id_id BEFORE DELETE ON category FOR EACH
ROW BEGIN SELECT RAISE(ABORT, 'Impossible de dtruire un objet (category est utilis par budgetrule)
Nom de la contrainte: fkd_budgetrule_category_rc_category_id_id') WHERE (SELECT rc_category_id FROM
budgetrule WHERE rc_category_id = OLD.id) IS NOT NULL; END;
CREATE TRIGGER fki_budgetrule_category_rc_category_id_target_id BEFORE INSERT ON budgetrule FOR
EACH ROW BEGIN SELECT RAISE(ABORT, 'Impossible d'ajouter un objet (category est utilis par budgetrule)
Nom de la contrainte: fki_budgetrule_category_rc_category_id_target_id') WHERE
NEW.rc_category_id_target!=0 AND NEW.rc_category_id_target!=" AND (SELECT id FROM category WHERE
id = NEW.rc_category_id_target) IS NULL; END;
CREATE TRIGGER fku_budgetrule_category_rc_category_id_target_id BEFORE UPDATE ON budgetrule FOR
EACH ROW BEGIN SELECT RAISE(ABORT, 'Impossible de modifier un objet (category est utilis par

```

```

budgetrule)
Nom de la contrainte: fku_budgetrule_category_rc_category_id_target_id) WHERE
NEW.rc_category_id_target!=0 AND NEW.rc_category_id_target!=" AND (SELECT id FROM category WHERE
id = NEW.rc_category_id_target) IS NULL; END;
CREATE TRIGGER fkd_budgetrule_category_rc_category_id_target_id BEFORE DELETE ON category FOR
EACH ROW BEGIN SELECT RAISE(ABORT, 'Impossible de dtuire un objet (category est utilis par
budgetrule)
Nom de la contrainte: fkd_budgetrule_category_rc_category_id_target_id) WHERE (SELECT
rc_category_id_target FROM budgetrule WHERE rc_category_id_target = OLD.id) IS NOT NULL; END;
CREATE TRIGGER fki_category_category_rd_category_id_id BEFORE INSERT ON category FOR EACH ROW
BEGIN SELECT RAISE(ABORT, 'Impossible d"ajouter un objet (category est utilis par category)
Nom de la contrainte: fki_category_category_rd_category_id_id) WHERE NEW.rd_category_id!=0 AND
NEW.rd_category_id!=" AND (SELECT id FROM category WHERE id = NEW.rd_category_id) IS NULL; END;
CREATE TRIGGER fku_category_category_rd_category_id_id BEFORE UPDATE ON category FOR EACH
ROW BEGIN SELECT RAISE(ABORT, 'Impossible de modifier un objet (category est utilis par category)
Nom de la contrainte: fku_category_category_rd_category_id_id) WHERE NEW.rd_category_id!=0 AND
NEW.rd_category_id!=" AND (SELECT id FROM category WHERE id = NEW.rd_category_id) IS NULL; END;
CREATE TRIGGER fkdc_category_category_id_rd_category_id BEFORE DELETE ON category FOR EACH
ROW BEGIN DELETE FROM category WHERE category.rd_category_id = OLD.id; END;
CREATE TRIGGER fki_doctransactionitem_doctransaction_rd_doctransaction_id_id BEFORE INSERT ON
doctransactionitem FOR EACH ROW BEGIN SELECT RAISE(ABORT, 'Impossible d"ajouter un objet
(doctransaction est utilis par doctransactionitem)
Nom de la contrainte: fki_doctransactionitem_doctransaction_rd_doctransaction_id_id) WHERE
NEW.rd_doctransaction_id!=0 AND NEW.rd_doctransaction_id!=" AND (SELECT id FROM doctransaction
WHERE id = NEW.rd_doctransaction_id) IS NULL; END;
CREATE TRIGGER fku_doctransactionitem_doctransaction_rd_doctransaction_id_id BEFORE UPDATE ON
doctransactionitem FOR EACH ROW BEGIN SELECT RAISE(ABORT, 'Impossible de modifier un objet
(doctransaction est utilis par doctransactionitem)
Nom de la contrainte: fku_doctransactionitem_doctransaction_rd_doctransaction_id_id) WHERE
NEW.rd_doctransaction_id!=0 AND NEW.rd_doctransaction_id!=" AND (SELECT id FROM doctransaction
WHERE id = NEW.rd_doctransaction_id) IS NULL; END;
CREATE TRIGGER fkdc_doctransaction_doctransactionitem_id_rd_doctransaction_id BEFORE DELETE ON
doctransaction FOR EACH ROW BEGIN DELETE FROM doctransactionitem WHERE
doctransactionitem.rd_doctransaction_id = OLD.id; END;
CREATE TRIGGER fki_doctransactionmsg_doctransaction_rd_doctransaction_id_id BEFORE INSERT ON
doctransactionmsg FOR EACH ROW BEGIN SELECT RAISE(ABORT, 'Impossible d"ajouter un objet
(doctransaction est utilis par doctransactionmsg)
Nom de la contrainte: fki_doctransactionmsg_doctransaction_rd_doctransaction_id_id) WHERE
NEW.rd_doctransaction_id!=0 AND NEW.rd_doctransaction_id!=" AND (SELECT id FROM doctransaction
WHERE id = NEW.rd_doctransaction_id) IS NULL; END;
CREATE TRIGGER fku_doctransactionmsg_doctransaction_rd_doctransaction_id_id BEFORE UPDATE ON
doctransactionmsg FOR EACH ROW BEGIN SELECT RAISE(ABORT, 'Impossible de modifier un objet
(doctransaction est utilis par doctransactionmsg)
Nom de la contrainte: fku_doctransactionmsg_doctransaction_rd_doctransaction_id_id) WHERE
NEW.rd_doctransaction_id!=0 AND NEW.rd_doctransaction_id!=" AND (SELECT id FROM doctransaction
WHERE id = NEW.rd_doctransaction_id) IS NULL; END;
CREATE TRIGGER fkdc_doctransaction_doctransactionmsg_id_rd_doctransaction_id BEFORE DELETE ON
doctransaction FOR EACH ROW BEGIN DELETE FROM doctransactionmsg WHERE

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doctransactionmsg.rd_doctransaction_id = OLD.id; END;
CREATE TRIGGER fki_interest_account_rd_account_id_id BEFORE INSERT ON interest FOR EACH ROW
BEGIN SELECT RAISE(ABORT, 'Impossible d'ajouter un objet (account est utilis par interest)
Nom de la contrainte: fki_interest_account_rd_account_id_id') WHERE NEW.rd_account_id!=0 AND
NEW.rd_account_id!= " AND (SELECT id FROM account WHERE id = NEW.rd_account_id) IS NULL; END;
CREATE TRIGGER fku_interest_account_rd_account_id_id BEFORE UPDATE ON interest FOR EACH ROW
BEGIN SELECT RAISE(ABORT, 'Impossible de modifier un objet (account est utilis par interest)
Nom de la contrainte: fku_interest_account_rd_account_id_id') WHERE NEW.rd_account_id!=0 AND
NEW.rd_account_id!= " AND (SELECT id FROM account WHERE id = NEW.rd_account_id) IS NULL; END;
CREATE TRIGGER fkdc_account_interest_id_rd_account_id BEFORE DELETE ON account FOR EACH ROW
BEGIN DELETE FROM interest WHERE interest.rd_account_id = OLD.id; END;
CREATE TRIGGER fki_node_node_rd_node_id_id BEFORE INSERT ON node FOR EACH ROW BEGIN
SELECT RAISE(ABORT, 'Impossible d'ajouter un objet (node est utilis par node)
Nom de la contrainte: fki_node_node_rd_node_id_id') WHERE NEW.rd_node_id!=0 AND NEW.rd_node_id!= "
AND (SELECT id FROM node WHERE id = NEW.rd_node_id) IS NULL; END;
CREATE TRIGGER fku_node_node_rd_node_id_id BEFORE UPDATE ON node FOR EACH ROW BEGIN
SELECT RAISE(ABORT, 'Impossible de modifier un objet (node est utilis par node)
Nom de la contrainte: fku_node_node_rd_node_id_id') WHERE NEW.rd_node_id!=0 AND
NEW.rd_node_id!= " AND (SELECT id FROM node WHERE id = NEW.rd_node_id) IS NULL; END;
CREATE TRIGGER fkdc_node_node_id_rd_node_id BEFORE DELETE ON node FOR EACH ROW BEGIN
DELETE FROM node WHERE node.rd_node_id = OLD.id; END;
CREATE TRIGGER fki_operation_account_rd_account_id_id BEFORE INSERT ON operation FOR EACH ROW
BEGIN SELECT RAISE(ABORT, 'Impossible d'ajouter un objet (account est utilis par operation)
Nom de la contrainte: fki_operation_account_rd_account_id_id') WHERE NEW.rd_account_id!=0 AND
NEW.rd_account_id!= " AND (SELECT id FROM account WHERE id = NEW.rd_account_id) IS NULL; END;
CREATE TRIGGER fku_operation_account_rd_account_id_id BEFORE UPDATE ON operation FOR EACH
ROW BEGIN SELECT RAISE(ABORT, 'Impossible de modifier un objet (account est utilis par operation)
Nom de la contrainte: fku_operation_account_rd_account_id_id') WHERE NEW.rd_account_id!=0 AND
NEW.rd_account_id!= " AND (SELECT id FROM account WHERE id = NEW.rd_account_id) IS NULL; END;
CREATE TRIGGER fkdc_account_operation_id_rd_account_id BEFORE DELETE ON account FOR EACH ROW
BEGIN DELETE FROM operation WHERE operation.rd_account_id = OLD.id; END;
CREATE TRIGGER fki_operation_payee_r_payee_id_id BEFORE INSERT ON operation FOR EACH ROW
BEGIN SELECT RAISE(ABORT, 'Impossible d'ajouter un objet (payee est utilis par operation)
Nom de la contrainte: fki_operation_payee_r_payee_id_id') WHERE NEW.r_payee_id!=0 AND
NEW.r_payee_id!= " AND (SELECT id FROM payee WHERE id = NEW.r_payee_id) IS NULL; END;
CREATE TRIGGER fku_operation_payee_r_payee_id_id BEFORE UPDATE ON operation FOR EACH ROW
BEGIN SELECT RAISE(ABORT, 'Impossible de modifier un objet (payee est utilis par operation)
Nom de la contrainte: fku_operation_payee_r_payee_id_id') WHERE NEW.r_payee_id!=0 AND
NEW.r_payee_id!= " AND (SELECT id FROM payee WHERE id = NEW.r_payee_id) IS NULL; END;
CREATE TRIGGER fkd_operation_payee_r_payee_id_id BEFORE DELETE ON payee FOR EACH ROW
BEGIN UPDATE operation SET r_payee_id=0 WHERE r_payee_id=OLD.id; END;
CREATE TRIGGER fki_operation_unit_rc_unit_id_id BEFORE INSERT ON operation FOR EACH ROW BEGIN
SELECT RAISE(ABORT, 'Impossible d'ajouter un objet (unit est utilis par operation)
Nom de la contrainte: fki_operation_unit_rc_unit_id_id') WHERE NEW.rc_unit_id!=0 AND NEW.rc_unit_id!= "
AND (SELECT id FROM unit WHERE id = NEW.rc_unit_id) IS NULL; END;
CREATE TRIGGER fku_operation_unit_rc_unit_id_id BEFORE UPDATE ON operation FOR EACH ROW
BEGIN SELECT RAISE(ABORT, 'Impossible de modifier un objet (unit est utilis par operation)
Nom de la contrainte: fku_operation_unit_rc_unit_id_id') WHERE NEW.rc_unit_id!=0 AND

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NEW.rc_unit_id!=" AND (SELECT id FROM unit WHERE id = NEW.rc_unit_id) IS NULL; END;
CREATE TRIGGER fkd_operation_unit_rc_unit_id_id BEFORE DELETE ON unit FOR EACH ROW BEGIN
SELECT RAISE(ABORT, 'Impossible de dtruire un objet (unit est utilis par operation)
Nom de la contrainte: fkd_operation_unit_rc_unit_id_id') WHERE (SELECT rc_unit_id FROM operation
WHERE rc_unit_id = OLD.id) IS NOT NULL; END;
CREATE TRIGGER fki_operation_recurrentoperation_r_recurrentoperation_id_id BEFORE INSERT ON
operation FOR EACH ROW BEGIN SELECT RAISE(ABORT, 'Impossible d"ajouter un objet (recurrentoperation
est utilis par operation)
Nom de la contrainte: fki_operation_recurrentoperation_r_recurrentoperation_id_id') WHERE
NEW.r_recurrentoperation_id!=0 AND NEW.r_recurrentoperation_id!=" AND (SELECT id FROM
recurrentoperation WHERE id = NEW.r_recurrentoperation_id) IS NULL; END;
CREATE TRIGGER fku_operation_recurrentoperation_r_recurrentoperation_id_id BEFORE UPDATE ON
operation FOR EACH ROW BEGIN SELECT RAISE(ABORT, 'Impossible de modifier un objet
(recurrentoperation est utilis par operation)
Nom de la contrainte: fku_operation_recurrentoperation_r_recurrentoperation_id_id') WHERE
NEW.r_recurrentoperation_id!=0 AND NEW.r_recurrentoperation_id!=" AND (SELECT id FROM
recurrentoperation WHERE id = NEW.r_recurrentoperation_id) IS NULL; END;
CREATE TRIGGER fkd_operation_recurrentoperation_r_recurrentoperation_id_id BEFORE DELETE ON
recurrentoperation FOR EACH ROW BEGIN UPDATE operation SET r_recurrentoperation_id=0 WHERE
r_recurrentoperation_id=OLD.id; END;
CREATE TRIGGER fki_operationbalance_operation_r_operation_id_id BEFORE INSERT ON operationbalance
FOR EACH ROW BEGIN SELECT RAISE(ABORT, 'Impossible d"ajouter un objet (operation est utilis par
operationbalance)
Nom de la contrainte: fki_operationbalance_operation_r_operation_id_id') WHERE NEW.r_operation_id!=0 AND
NEW.r_operation_id!=" AND (SELECT id FROM operation WHERE id = NEW.r_operation_id) IS NULL; END;
CREATE TRIGGER fku_operationbalance_operation_r_operation_id_id BEFORE UPDATE ON operationbalance
FOR EACH ROW BEGIN SELECT RAISE(ABORT, 'Impossible de modifier un objet (operation est utilis par
operationbalance)
Nom de la contrainte: fku_operationbalance_operation_r_operation_id_id') WHERE NEW.r_operation_id!=0
AND NEW.r_operation_id!=" AND (SELECT id FROM operation WHERE id = NEW.r_operation_id) IS NULL;
END;
CREATE TRIGGER fkd_operationbalance_operation_r_operation_id_id BEFORE DELETE ON operation FOR
EACH ROW BEGIN UPDATE operationbalance SET r_operation_id=0 WHERE r_operation_id=OLD.id; END;
CREATE TRIGGER fki_recurrentoperation_operation_rd_operation_id_id BEFORE INSERT ON
recurrentoperation FOR EACH ROW BEGIN SELECT RAISE(ABORT, 'Impossible d"ajouter un objet (operation
est utilis par recurrentoperation)
Nom de la contrainte: fki_recurrentoperation_operation_rd_operation_id_id') WHERE NEW.rd_operation_id!=0
AND NEW.rd_operation_id!=" AND (SELECT id FROM operation WHERE id = NEW.rd_operation_id) IS
NULL; END;
CREATE TRIGGER fku_recurrentoperation_operation_rd_operation_id_id BEFORE UPDATE ON
recurrentoperation FOR EACH ROW BEGIN SELECT RAISE(ABORT, 'Impossible de modifier un objet
(operation est utilis par recurrentoperation)
Nom de la contrainte: fku_recurrentoperation_operation_rd_operation_id_id') WHERE
NEW.rd_operation_id!=0 AND NEW.rd_operation_id!=" AND (SELECT id FROM operation WHERE id =
NEW.rd_operation_id) IS NULL; END;
CREATE TRIGGER fkd_operation_recurrentoperation_id_rd_operation_id BEFORE DELETE ON operation
FOR EACH ROW BEGIN DELETE FROM recurrentoperation WHERE recurrentoperation.rd_operation_id =
OLD.id; END;

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CREATE TRIGGER fki_suboperation_operation_rd_operation_id_id BEFORE INSERT ON suboperation FOR
EACH ROW BEGIN SELECT RAISE(ABORT, 'Impossible d"ajouter un objet (operation est utilis par
suboperation)
Nom de la contrainte: fki_suboperation_operation_rd_operation_id_id') WHERE NEW.rd_operation_id!=0 AND
NEW.rd_operation_id!=" AND (SELECT id FROM operation WHERE id = NEW.rd_operation_id) IS NULL;
END;
CREATE TRIGGER fku_suboperation_operation_rd_operation_id_id BEFORE UPDATE ON suboperation FOR
EACH ROW BEGIN SELECT RAISE(ABORT, 'Impossible de modifier un objet (operation est utilis par
suboperation)
Nom de la contrainte: fku_suboperation_operation_rd_operation_id_id) WHERE NEW.rd_operation_id!=0
AND NEW.rd_operation_id!=" AND (SELECT id FROM operation WHERE id = NEW.rd_operation_id) IS
NULL; END;
CREATE TRIGGER fkdc_operation_suboperation_id_rd_operation_id BEFORE DELETE ON operation FOR
EACH ROW BEGIN DELETE FROM suboperation WHERE suboperation.rd_operation_id = OLD.id; END;
CREATE TRIGGER fki_suboperation_category_r_category_id_id BEFORE INSERT ON suboperation FOR
EACH ROW BEGIN SELECT RAISE(ABORT, 'Impossible d"ajouter un objet (category est utilis par
suboperation)
Nom de la contrainte: fki_suboperation_category_r_category_id_id') WHERE NEW.r_category_id!=0 AND
NEW.r_category_id!=" AND (SELECT id FROM category WHERE id = NEW.r_category_id) IS NULL; END;
CREATE TRIGGER fku_suboperation_category_r_category_id_id BEFORE UPDATE ON suboperation FOR
EACH ROW BEGIN SELECT RAISE(ABORT, 'Impossible de modifier un objet (category est utilis par
suboperation)
Nom de la contrainte: fku_suboperation_category_r_category_id_id) WHERE NEW.r_category_id!=0 AND
NEW.r_category_id!=" AND (SELECT id FROM category WHERE id = NEW.r_category_id) IS NULL; END;
CREATE TRIGGER fkd_suboperation_category_r_category_id_id BEFORE DELETE ON category FOR EACH
ROW BEGIN UPDATE suboperation SET r_category_id=0 WHERE r_category_id=OLD.id; END;
CREATE TRIGGER fki_suboperation_refund_r_refund_id_id BEFORE INSERT ON suboperation FOR EACH
ROW BEGIN SELECT RAISE(ABORT, 'Impossible d"ajouter un objet (refund est utilis par suboperation)
Nom de la contrainte: fki_suboperation_refund_r_refund_id_id') WHERE NEW.r_refund_id!=0 AND
NEW.r_refund_id!=" AND (SELECT id FROM refund WHERE id = NEW.r_refund_id) IS NULL; END;
CREATE TRIGGER fku_suboperation_refund_r_refund_id_id BEFORE UPDATE ON suboperation FOR EACH
ROW BEGIN SELECT RAISE(ABORT, 'Impossible de modifier un objet (refund est utilis par suboperation)
Nom de la contrainte: fku_suboperation_refund_r_refund_id_id) WHERE NEW.r_refund_id!=0 AND
NEW.r_refund_id!=" AND (SELECT id FROM refund WHERE id = NEW.r_refund_id) IS NULL; END;
CREATE TRIGGER fkd_suboperation_refund_r_refund_id_id BEFORE DELETE ON refund FOR EACH ROW
BEGIN UPDATE suboperation SET r_refund_id=0 WHERE r_refund_id=OLD.id; END;
CREATE TRIGGER fki_unit_unit_rd_unit_id_id BEFORE INSERT ON unit FOR EACH ROW BEGIN SELECT
RAISE(ABORT, 'Impossible d"ajouter un objet (unit est utilis par unit)
Nom de la contrainte: fki_unit_unit_rd_unit_id_id') WHERE NEW.rd_unit_id!=0 AND NEW.rd_unit_id!=" AND
(SELECT id FROM unit WHERE id = NEW.rd_unit_id) IS NULL; END;
CREATE TRIGGER fku_unit_unit_rd_unit_id_id BEFORE UPDATE ON unit FOR EACH ROW BEGIN
SELECT RAISE(ABORT, 'Impossible de modifier un objet (unit est utilis par unit)
Nom de la contrainte: fku_unit_unit_rd_unit_id_id) WHERE NEW.rd_unit_id!=0 AND NEW.rd_unit_id!="
AND (SELECT id FROM unit WHERE id = NEW.rd_unit_id) IS NULL; END;
CREATE TRIGGER fkdc_unit_unit_id_rd_unit_id BEFORE DELETE ON unit FOR EACH ROW BEGIN
DELETE FROM unit WHERE unit.rd_unit_id = OLD.id; END;
CREATE TRIGGER fki_unitvalue_unit_rd_unit_id_id BEFORE INSERT ON unitvalue FOR EACH ROW BEGIN
SELECT RAISE(ABORT, 'Impossible d"ajouter un objet (unit est utilis par unitvalue)

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Nom de la contrainte: fki_unitvalue_unit_rd_unit_id_id') WHERE NEW.rd_unit_id!=0 AND NEW.rd_unit_id!=
AND (SELECT id FROM unit WHERE id = NEW.rd_unit_id) IS NULL; END;
CREATE TRIGGER fku_unitvalue_unit_rd_unit_id_id BEFORE UPDATE ON unitvalue FOR EACH ROW
BEGIN SELECT RAISE(ABORT, 'Impossible de modifier un objet (unit est utilis par unitvalue)
Nom de la contrainte: fku_unitvalue_unit_rd_unit_id_id') WHERE NEW.rd_unit_id!=0 AND
NEW.rd_unit_id!=" AND (SELECT id FROM unit WHERE id = NEW.rd_unit_id) IS NULL; END;
CREATE TRIGGER fkdc_unit_unitvalue_id_rd_unit_id BEFORE DELETE ON unit FOR EACH ROW BEGIN
DELETE FROM unitvalue WHERE unitvalue.rd_unit_id = OLD.id; END;
CREATE TRIGGER fkd_vm_budget_tmp_category_rc_category_id_id BEFORE DELETE ON category FOR
EACH ROW BEGIN SELECT RAISE(ABORT, 'Impossible de dtruire un objet (category est utilis par
vm_budget_tmp)
Nom de la contrainte: fkd_vm_budget_tmp_category_rc_category_id_id') WHERE (SELECT rc_category_id
FROM vm_budget_tmp WHERE rc_category_id = OLD.id) IS NOT NULL; END;
CREATE TRIGGER fkdc_category_vm_category_display_tmp_id_rd_category_id BEFORE DELETE ON
category FOR EACH ROW BEGIN DELETE FROM vm_category_display_tmp WHERE
vm_category_display_tmp.rd_category_id = OLD.id; END;
CREATE VIEW v_unit_displayname AS SELECT *, t_name||' (||t_symbol||)' AS t_displayname FROM unit;
CREATE VIEW v_unit_tmp1 AS SELECT *,(SELECT count(*) FROM unitvalue s WHERE s.rd_unit_id=unit.id)
AS i_NBVALUES, (CASE WHEN unit.rd_unit_id=0 THEN " ELSE (SELECT (CASE WHEN s.t_symbol!="
THEN s.t_symbol ELSE s.t_name END) FROM unit s WHERE s.id=unit.rd_unit_id) END) AS t_UNIT,(CASE
unit.t_type WHEN '1' THEN 'Monnaie principale' WHEN '2' THEN 'Monnaie secondaire' WHEN 'C' THEN
'Monnaie' WHEN 'S' THEN 'Action' WHEN 'I' THEN 'Indice' ELSE 'Objet' END) AS t_TYPENLS, (SELECT
MIN(s.d_date) FROM unitvalue s WHERE s.rd_unit_id=unit.id) AS d_MINDATE, (SELECT MAX(s.d_date)
FROM unitvalue s WHERE s.rd_unit_id=unit.id) AS d_MAXDATE from unit;
CREATE VIEW v_unit_tmp2 AS SELECT *,CASE WHEN v_unit_tmp1.t_type='1' THEN 1 ELSE
IFNULL((SELECT s.f_quantity FROM unitvalue s WHERE s.rd_unit_id=v_unit_tmp1.id AND
s.d_date=v_unit_tmp1.d_MAXDATE),1) END AS f_LASTVALUE from v_unit_tmp1;
CREATE VIEW v_unit AS SELECT *,v_unit_tmp2.f_LASTVALUE*IFNULL((SELECT s2.f_LASTVALUE
FROM v_unit_tmp2 s2 WHERE s2.id=v_unit_tmp2.rd_unit_id) , 1) AS f_CURRENTAMOUNT from
v_unit_tmp2;
CREATE VIEW v_unitvalue_displayname AS SELECT *, (SELECT t_displayname FROM v_unit_displayname
WHERE unitvalue.rd_unit_id=v_unit_displayname.id)||' ||STRFTIME('%d/%m/%Y',d_date) AS t_displayname
FROM unitvalue;
CREATE VIEW v_unitvalue AS SELECT * FROM unitvalue;
CREATE VIEW v_suboperation AS SELECT * FROM suboperation;
CREATE VIEW v_operation_numbers AS SELECT DISTINCT i_number, rd_account_id FROM operation;
CREATE VIEW v_operation_next_numbers AS SELECT T1.i_number+1 AS i_number FROM
v_operation_numbers AS T1 LEFT OUTER JOIN v_operation_numbers T2 ON
T2.rd_account_id=T1.rd_account_id AND T2.i_number=T1.i_number+1 WHERE T1.i_number!=0 AND
(T2.i_number IS NULL) ORDER BY T1.i_number;
CREATE VIEW v_operation_tmp1 AS SELECT *,(SELECT t_name FROM payee s WHERE
s.id=operation.r_payee_id) AS t_PAYEE,(SELECT TOTAL(s.f_value) FROM suboperation s WHERE
s.rd_operation_id=operation.ID) AS f_QUANTITY,(SELECT count(*) FROM suboperation s WHERE
s.rd_operation_id=operation.ID) AS i_NBSUBCATEGORY FROM operation;
CREATE VIEW v_operation AS SELECT *,(SELECT s.id FROM suboperation s WHERE
s.rd_operation_id=v_operation_tmp1.id AND ABS(s.f_value)=(SELECT MAX(ABS(s2.f_value)) FROM
suboperation s2 WHERE s2.rd_operation_id=v_operation_tmp1.id)) AS i_MOSTTIMPSUBOP,((SELECT
s.f_CURRENTAMOUNT FROM v_unit s WHERE

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s.id=v_operation_tmp1.rc_unit_id)*v_operation_tmp1.f_QUANTITY) AS f_CURRENTAMOUNT, (CASE WHEN
v_operation_tmp1.i_group_id<>0 AND EXISTS (SELECT 1 FROM account a WHERE
v_operation_tmp1.rd_account_id=a.id AND a.t_type<>'L') AND EXISTS (SELECT 1 FROM v_operation_tmp1
op2, account a WHERE op2.i_group_id=v_operation_tmp1.i_group_id AND op2.rd_account_id=a.id AND
a.t_type<>'L' AND op2.rc_unit_id=v_operation_tmp1.rc_unit_id AND op2.f_QUANTITY=-
v_operation_tmp1.f_QUANTITY) THEN 'Y' ELSE 'N' END) AS t_TRANSFER FROM v_operation_tmp1;
CREATE VIEW v_operation_displayname AS SELECT *, STRFTIME('%d/%m/%Y',d_date)||
'IFNULL(t_PAYEE,)'||v_operation.f_CURRENTAMOUNT||'(SELECT (CASE WHEN s.t_symbol!= ' THEN
s.t_symbol ELSE s.t_name END) FROM unit s WHERE s.id=v_operation.rc_unit_id) AS t_displayname FROM
v_operation;
CREATE VIEW v_operation_delete AS SELECT *, (CASE WHEN t_status='Y' THEN 'Vous n'etes pas autoris
dtruire cette operation car en tat rapproch' END) t_delete_message FROM operation;
CREATE VIEW v_account AS SELECT *,(SELECT MAX(s.d_date) FROM interest s WHERE
s.rd_account_id=account.id) AS d_MAXDATE, (SELECT TOTAL(s.f_CURRENTAMOUNT) FROM v_operation
s WHERE s.rd_account_id=account.id AND s.t_template='N') AS f_CURRENTAMOUNT FROM account;
CREATE VIEW v_account_delete AS SELECT *, (CASE WHEN EXISTS(SELECT 1 FROM operation WHERE
rd_account_id=account.id AND d_date<>'0000-00-00' AND t_template='N' AND t_status='Y') THEN 'Vous n'etes
pas autoris dtruire ce compte car il contient des operations rapproches' END) t_delete_message FROM account;
CREATE VIEW v_bank_displayname AS SELECT *, t_name AS t_displayname FROM bank;
CREATE VIEW v_account_displayname AS SELECT *, (SELECT t_displayname FROM v_bank_displayname
WHERE account.rd_bank_id=v_bank_displayname.id)||t_name AS t_displayname FROM account;
CREATE VIEW v_bank AS SELECT *,(SELECT TOTAL(s.f_CURRENTAMOUNT) FROM v_account s
WHERE s.rd_bank_id=bank.id) AS f_CURRENTAMOUNT FROM bank;
CREATE VIEW v_category_displayname AS SELECT *, t_fullname AS t_displayname FROM category;
CREATE VIEW v_category AS SELECT * FROM category;
CREATE VIEW v_recurrentoperation AS SELECT *,i_period_increment||'(CASE t_period_unit WHEN 'Y'
THEN 'anne(s)' WHEN 'M' THEN 'mois' WHEN 'W' THEN 'semaine(s)' ELSE 'jour(s)' END) AS t_PERIODNLS
FROM recurrentoperation;
CREATE VIEW v_recurrentoperation_displayname AS SELECT *, STRFTIME('%d/%m/%Y',d_date)||
'SUBSTR((SELECT t_displayname FROM v_operation_displayname WHERE
v_operation_displayname.id=v_recurrentoperation.rd_operation_id), 11) AS t_displayname FROM
v_recurrentoperation;
CREATE VIEW v_unitvalue_display AS SELECT *,IFNULL((SELECT (CASE WHEN s.t_symbol!= ' THEN
s.t_symbol ELSE s.t_name END) FROM unit s WHERE s.id=(SELECT s2.rd_unit_id FROM unit s2 WHERE
s2.id=unitvalue.rd_unit_id),) AS t_UNIT,STRFTIME('%Y-%m',unitvalue.d_date) AS
d_DATEMONTH,STRFTIME('%Y',unitvalue.d_date) AS d_DATEYEAR FROM unitvalue;
CREATE VIEW v_suboperation_display AS SELECT *,IFNULL((SELECT s.t_fullname FROM category s
WHERE s.id=v_suboperation.r_category_id,) AS t_CATEGORY, IFNULL((SELECT s.t_name FROM refund s
WHERE s.id=v_suboperation.r_refund_id,) AS t_REFUND, (CASE WHEN v_suboperation.f_value>=0 THEN
v_suboperation.f_value ELSE 0 END) AS f_VALUE_INCOME, (CASE WHEN v_suboperation.f_value<=0 THEN
v_suboperation.f_value ELSE 0 END) AS f_VALUE_EXPENSE FROM v_suboperation;
CREATE VIEW v_suboperation_displayname AS SELECT *, t_CATEGORY||' : '||f_value AS t_displayname
FROM v_suboperation_display;
CREATE VIEW v_operation_display_all AS SELECT *,(SELECT s.t_name FROM account s WHERE
s.id=v_operation.rd_account_id) AS t_ACCOUNT,(SELECT (CASE WHEN s.t_symbol!= ' THEN s.t_symbol
ELSE s.t_name END) FROM unit s WHERE s.id=v_operation.rc_unit_id) AS t_UNIT,(SELECT s.t_CATEGORY
FROM v_suboperation_display s WHERE s.id=v_operation.i_MOSTIMPSUBOP) AS t_CATEGORY,(SELECT
s.t_REFUND FROM v_suboperation_display s WHERE s.id=v_operation.i_MOSTIMPSUBOP) AS

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t_REFUND,(CASE WHEN v_operation.f_QUANTITY<0 THEN '-' WHEN v_operation.f_QUANTITY=0 THEN ''
ELSE '+' END) AS t_TYPEEXPENSE, (CASE WHEN v_operation.f_QUANTITY<=0 THEN 'Dpense' ELSE
'Revenu' END) AS t_TYPEEXPENSENLS, STRFTIME('%Y-W%W',v_operation.d_date) AS
d_DATEWEEK,STRFTIME('%Y-%m',v_operation.d_date) AS
d_DATEMONTH,STRFTIME('%Y',v_operation.d_date)||'-Q'|(CASE WHEN
STRFTIME('%m',v_operation.d_date)<='03' THEN '1' WHEN STRFTIME('%m',v_operation.d_date)<='06' THEN
'2' WHEN STRFTIME('%m',v_operation.d_date)<='09' THEN '3' ELSE '4' END) AS d_DATEQUARTER,
STRFTIME('%Y',v_operation.d_date)||'-S'|(CASE WHEN STRFTIME('%m',v_operation.d_date)<='06' THEN '1'
ELSE '2' END) AS d_DATESEMESTER, STRFTIME('%Y',v_operation.d_date) AS d_DATEYEAR, (SELECT
count(*) FROM v_recurrentoperation s WHERE s.rd_operation_id=v_operation.id) AS i_NBRECURRENT,
(CASE WHEN v_operation.f_QUANTITY>=0 THEN v_operation.f_QUANTITY ELSE 0 END) AS
f_QUANTITY_INCOME, (CASE WHEN v_operation.f_QUANTITY<=0 THEN v_operation.f_QUANTITY
ELSE 0 END) AS f_QUANTITY_EXPENSE, (SELECT o2.f_balance FROM operationbalance o2 WHERE
o2.r_operation_id=v_operation.id ) AS f_BALANCE, (CASE WHEN v_operation.f_QUANTITY>=0 THEN
v_operation.f_CURRENTAMOUNT ELSE 0 END) AS f_CURRENTAMOUNT_INCOME, (CASE WHEN
v_operation.f_QUANTITY<=0 THEN v_operation.f_CURRENTAMOUNT ELSE 0 END) AS
f_CURRENTAMOUNT_EXPENSE FROM v_operation;
CREATE VIEW v_operation_template_display AS SELECT * FROM v_operation_display_all WHERE
t_template='Y';
CREATE VIEW v_operation_display AS SELECT * FROM v_operation_display_all WHERE d_date!='0000-00-
00' AND t_template='N';
CREATE VIEW v_unit_display AS SELECT *,(SELECT TOTAL(o.f_QUANTITY) FROM v_operation_display o
WHERE o.rc_unit_id=v_unit.id) AS f_QUANTITYOWNED FROM v_unit;
CREATE VIEW v_account_display AS SELECT (CASE t_type WHEN 'C' THEN 'Courant' WHEN 'D' THEN
'Carte de crdit' WHEN 'A' THEN 'Actif' WHEN 'T' THEN 'Investissement' WHEN 'W' THEN 'Portefeuille' WHEN
'L' THEN 'Prt' WHEN 'O' THEN 'Autre' END) AS t_TYPENLS,bank.t_name AS t_BANK,bank.t_bank_number
AS t_BANK_NUMBER,bank.t_icon AS t_ICON,v_account.*(v_account.f_CURRENTAMOUNT/(SELECT
u.f_CURRENTAMOUNT FROM v_unit u, operation s WHERE u.id=s.rc_unit_id AND
s.rd_account_id=v_account.id AND s.d_date='0000-00-00')) AS f_QUANTITY, (SELECT (CASE WHEN
u.t_symbol!='' THEN u.t_symbol ELSE u.t_name END) FROM unit u, operation s WHERE u.id=s.rc_unit_id AND
s.rd_account_id=v_account.id AND s.d_date='0000-00-00') AS t_UNIT, (SELECT
TOTAL(s.f_CURRENTAMOUNT) FROM v_operation s WHERE s.rd_account_id=v_account.id AND
s.t_status!='N' AND s.t_template='N') AS f_CHECKED, (SELECT TOTAL(s.f_CURRENTAMOUNT) FROM
v_operation s WHERE s.rd_account_id=v_account.id AND s.t_status='N' AND s.t_template='N') AS
f_COMING_SOON, (SELECT TOTAL(s.f_CURRENTAMOUNT) FROM v_operation s WHERE
s.rd_account_id=v_account.id AND s.d_date<=date('now') AND s.t_template='N') AS f_TODAYAMOUNT,
(SELECT count(*) FROM v_operation_display s WHERE s.rd_account_id=v_account.id) AS i_NBOPERATIONS,
IFNULL((SELECT s.f_rate FROM interest s WHERE s.rd_account_id=v_account.id AND
s.d_date=v_account.d_MAXDATE),0) AS f_RATE FROM v_account, bank WHERE
bank.id=v_account.rd_bank_id;
CREATE VIEW v_operation_consolidated AS SELECT (SELECT s.t_TYPENLS FROM v_account_display s
WHERE s.id=op.rd_account_id) AS t_ACCOUNTTYPE,(SELECT u.t_TYPENLS FROM v_unit u WHERE
u.id=op.rc_unit_id) AS t_UNITYTYPE,sop.id AS i_SUBOPID, sop.r_refund_id AS r_refund_id, (CASE WHEN
sop.t_comment="" THEN op.t_comment ELSE sop.t_comment END) AS t_REALCOMMENT, sop.t_CATEGORY
AS t_REALCATEGORY, sop.t_REFUND AS t_REALREFUND, sop.r_category_id AS i_IDCATEGORY, (CASE
WHEN sop.f_value<0 THEN '-' WHEN sop.f_value=0 THEN '' ELSE '+' END) AS t_TYPEEXPENSE, (CASE
WHEN sop.f_value<0 THEN 'Dpense' WHEN sop.f_value=0 THEN '' ELSE 'Revenu' END) AS
t_TYPEEXPENSENLS, sop.f_value AS f_REALQUANTITY, sop.f_VALUE_INCOME AS

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f_REALQUANTITY_INCOME, sop.f_VALUE_EXPENSE AS f_REALQUANTITY_EXPENSE, ((SELECT
u.f_CURRENTAMOUNT FROM v_unit u WHERE u.id=op.rc_unit_id)*sop.f_value) AS
f_REALCURRENTAMOUNT, ((SELECT u.f_CURRENTAMOUNT FROM v_unit u WHERE
u.id=op.rc_unit_id)*sop.f_VALUE_INCOME) AS f_REALCURRENTAMOUNT_INCOME, ((SELECT
u.f_CURRENTAMOUNT FROM v_unit u WHERE u.id=op.rc_unit_id)*sop.f_VALUE_EXPENSE) AS
f_REALCURRENTAMOUNT_EXPENSE, op.* FROM v_operation_display_all AS op, v_suboperation_display
AS sop WHERE op.t_template='N' AND sop.rd_operation_id=op.ID;
CREATE VIEW v_operation_prop AS SELECT p.id AS i_PROPPID, p.t_name AS i_PROPPNAME, p.t_value AS
i_PROPVALUE, op.* FROM v_operation_consolidated AS op LEFT OUTER JOIN parameters AS p ON
p.t_uuid_parent=op.id||'-operation';
CREATE VIEW v_refund_delete AS SELECT *, (CASE WHEN EXISTS(SELECT 1 FROM
v_operation_consolidated WHERE r_refund_id=refund.id AND t_status='Y') THEN 'Vous n"tes pas autoris dtruire
ce suiveur car utilis par des oprations rapproches' END) t_delete_message FROM refund;
CREATE VIEW v_refund AS SELECT *, (SELECT TOTAL(o.f_REALCURRENTAMOUNT) FROM
v_operation_consolidated o WHERE o.r_refund_id=refund.id) AS f_CURRENTAMOUNT FROM refund;
CREATE VIEW v_refund_display AS SELECT *,(SELECT MIN(o.d_date) FROM v_operation_consolidated o
WHERE o.r_refund_id=v_refund.id) AS d_FIRSTDATE, (SELECT MAX(o.d_date) FROM
v_operation_consolidated o WHERE o.r_refund_id=v_refund.id) AS d_LASTDATE FROM v_refund;
CREATE VIEW v_refund_displayname AS SELECT *, t_name AS t_displayname FROM refund;
CREATE VIEW v_payee_delete AS SELECT *, (CASE WHEN EXISTS(SELECT 1 FROM operation WHERE
r_payee_id=payee.id AND t_status='Y') THEN 'Vous n"tes pas autoris dtruire ce tiers car utilis par des oprations
rapproches' END) t_delete_message FROM payee;
CREATE VIEW v_payee AS SELECT *, (SELECT TOTAL(o.f_CURRENTAMOUNT) FROM v_operation o
WHERE o.r_payee_id=payee.id AND o.t_template='N') AS f_CURRENTAMOUNT FROM payee;
CREATE VIEW v_payee_display AS SELECT * FROM v_payee;
CREATE VIEW v_payee_displayname AS SELECT *, t_name AS t_displayname FROM payee;
CREATE VIEW v_category_delete AS SELECT *, (CASE WHEN EXISTS(SELECT 1 FROM
v_operation_consolidated WHERE (t_REALCATEGORY=category.t_fullname OR t_REALCATEGORY like
category.t_fullname||'%) AND t_status='Y') THEN 'Vous n"tes pas autoris dtruire cette catgorie car utilise par des
oprations rapproches' END) t_delete_message FROM category;
CREATE VIEW v_category_display_tmp AS SELECT *,(SELECT count(distinct(so.rd_operation_id)) FROM
operation o, suboperation so WHERE so.rd_operation_id=o.id AND so.r_category_id=v_category.ID AND
o.t_template='N') AS i_NBOPERATIONS, (SELECT TOTAL(o.f_REALCURRENTAMOUNT) FROM
v_operation_consolidated o WHERE o.i_IDCATEGORY=v_category.ID) AS f_REALCURRENTAMOUNT
FROM v_category;
CREATE VIEW v_category_display AS SELECT *,f_REALCURRENTAMOUNT+(SELECT
TOTAL(c.f_REALCURRENTAMOUNT) FROM vm_category_display_tmp c WHERE c.t_fullname LIKE
vm_category_display_tmp.t_fullname||' > %') AS f_SUMCURRENTAMOUNT, i_NBOPERATIONS+(SELECT
CAST(TOTAL(c.i_NBOPERATIONS) AS INTEGER) FROM vm_category_display_tmp c WHERE c.t_fullname
like vm_category_display_tmp.t_fullname||' > %') AS i_SUMNBOPERATIONS, (CASE WHEN t_bookmarked='Y'
THEN 'Y' WHEN EXISTS(SELECT 1 FROM category c WHERE c.t_bookmarked='Y' AND c.t_fullname like
vm_category_display_tmp.t_fullname||' > %') THEN 'C' ELSE 'N' END) AS t_HASBOOKMARKEDCHILD,
(CASE WHEN vm_category_display_tmp.f_REALCURRENTAMOUNT<0 THEN '-' WHEN
vm_category_display_tmp.f_REALCURRENTAMOUNT=0 THEN '' ELSE '+' END) AS
t_TYPEEXPENSE,(CASE WHEN vm_category_display_tmp.f_REALCURRENTAMOUNT<0 THEN 'Dpense'
WHEN vm_category_display_tmp.f_REALCURRENTAMOUNT=0 THEN '' ELSE 'Revenu' END) AS
t_TYPEEXPENSENLS FROM vm_category_display_tmp;
CREATE VIEW v_recurrentoperation_display AS SELECT rop.*, op.t_ACCOUNT, op.i_number, op.t_mode,

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op.i_group_id, op.t_TRANSFER, op.t_PAYEE, op.t_comment, op.t_CATEGORY, op.t_status,
op.f_CURRENTAMOUNT FROM v_recurrentoperation rop, v_operation_display_all AS op WHERE
rop.rd_operation_id=op.ID;
CREATE VIEW v_rule AS SELECT *,(SELECT COUNT(1) FROM rule r WHERE
r.f_sortorder<=rule.f_sortorder) AS i_ORDER FROM rule;
CREATE VIEW v_rule_displayname AS SELECT *, t_definition AS t_displayname FROM rule;
CREATE VIEW v_interest AS SELECT *,(SELECT s.t_name FROM account s WHERE
s.id=interest.rd_account_id) AS t_ACCOUNT FROM interest;
CREATE VIEW v_interest_displayname AS SELECT *, STRFTIME('%d/%m/%Y',d_date)||' ||f_rate||%' AS
t_displayname FROM interest;
CREATE VIEW v_budgetrule AS SELECT *, IFNULL((SELECT s.t_fullname FROM category s WHERE
s.id=budgetrule.rc_category_id,") AS t_CATEGORYCONDITION, IFNULL((SELECT s.t_fullname FROM
category s WHERE s.id=budgetrule.rc_category_id_target,") AS t_CATEGORY, (CASE WHEN
budgetrule.i_condition=-1 THEN 'Ngatif' WHEN budgetrule.i_condition=1 THEN 'Positif' WHEN
budgetrule.i_condition=0 THEN 'Tous' END) AS t_WHENNLS, f_quantity||(CASE WHEN
budgetrule.t_absolute='N' THEN '%' ELSE (SELECT t_symbol FROM unit WHERE t_type='1') END) AS
t_WHATNLS,(CASE WHEN budgetrule.t_rule='N' THEN 'Suivant' WHEN budgetrule.t_rule='C' THEN 'Courant'
WHEN budgetrule.t_rule='Y' THEN 'Anne' END) AS t_RULENLS FROM budgetrule;
CREATE VIEW v_budgetrule_display AS SELECT * FROM v_budgetrule;
CREATE VIEW v_budgetrule_displayname AS SELECT *, t_WHENNLS||' ||t_WHATNLS||' ||t_RULENLS||'
||t_CATEGORY AS t_displayname FROM v_budgetrule;
CREATE VIEW v_budget_tmp AS SELECT *, IFNULL((SELECT s.t_fullname FROM category s WHERE
s.id=budget.rc_category_id,") AS t_CATEGORY, (i_year||(CASE WHEN i_month=0 THEN " WHEN i_month<10
THEN '-0'||i_month ELSE '-'||i_month END)) AS t_PERIOD, (SELECT TOTAL(o.f_REALCURRENTAMOUNT)
FROM v_operation_consolidated o WHERE STRFTIME('%Y', o.d_date)=i_year AND (i_month=0 OR
STRFTIME('%m', o.d_date)=i_month) AND o.i_IDCATEGORY IN (SELECT b2.id_category FROM
budgetcategory b2 WHERE b2.id=budget.id)) AS f_CURRENTAMOUNT, (SELECT
GROUP_CONCAT(v_budgetrule_displayname.t_displayname,') FROM v_budgetrule_displayname WHERE
(v_budgetrule_displayname.t_year_condition='N' OR budget.i_year=v_budgetrule_displayname.i_year) AND
(v_budgetrule_displayname.t_month_condition='N' OR budget.i_month=v_budgetrule_displayname.i_month) AND
(v_budgetrule_displayname.t_category_condition='N' OR
budget.rc_category_id=v_budgetrule_displayname.rc_category_id) ORDER BY
v_budgetrule_displayname.t_absolute DESC, v_budgetrule_displayname.id) AS t_RULES FROM budget;
CREATE VIEW v_budget AS SELECT *, (f_CURRENTAMOUNT-f_budgeted_modified) AS
f_DELTABEFORETRANSFER, (f_CURRENTAMOUNT-f_budgeted_modified-f_transferred) AS f_DELTA
FROM v_budget_tmp;
CREATE VIEW v_budget_display AS SELECT *, (f_CURRENTAMOUNT-f_budgeted_modified) AS
f_DELTABEFORETRANSFER, (f_CURRENTAMOUNT-f_budgeted_modified-f_transferred) AS f_DELTA
FROM vm_budget_tmp;
CREATE VIEW v_budget_displayname AS SELECT *, t_CATEGORY||' ||t_PERIOD||' ||f_budgeted_modified AS
t_displayname FROM v_budget;
CREATE TRIGGER fkdc_bank_parameters_uuid BEFORE DELETE ON bank FOR EACH ROW BEGIN
DELETE FROM parameters WHERE parameters.t_uuid_parent=OLD.id||-'||'bank'; END;
CREATE TRIGGER fkdc_account_parameters_uuid BEFORE DELETE ON account FOR EACH ROW BEGIN
DELETE FROM parameters WHERE parameters.t_uuid_parent=OLD.id||-'||'account'; END;
CREATE TRIGGER fkdc_unit_parameters_uuid BEFORE DELETE ON unit FOR EACH ROW BEGIN
DELETE FROM parameters WHERE parameters.t_uuid_parent=OLD.id||-'||'unit'; END;
CREATE TRIGGER fkdc_unitvalue_parameters_uuid BEFORE DELETE ON unitvalue FOR EACH ROW BEGIN

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DELETE FROM parameters WHERE parameters.t_uuid_parent=OLD.id||'-'||unitvalue'; END;
CREATE TRIGGER fkdc_category_parameters_uuid BEFORE DELETE ON category FOR EACH ROW BEGIN
DELETE FROM parameters WHERE parameters.t_uuid_parent=OLD.id||'-'||category'; END;
CREATE TRIGGER fkdc_operation_parameters_uuid BEFORE DELETE ON operation FOR EACH ROW
BEGIN DELETE FROM parameters WHERE parameters.t_uuid_parent=OLD.id||'-'||operation'; END;
CREATE TRIGGER fkdc_interest_parameters_uuid BEFORE DELETE ON interest FOR EACH ROW BEGIN
DELETE FROM parameters WHERE parameters.t_uuid_parent=OLD.id||'-'||interest'; END;
CREATE TRIGGER fkdc_suboperation_parameters_uuid BEFORE DELETE ON suboperation FOR EACH ROW
BEGIN DELETE FROM parameters WHERE parameters.t_uuid_parent=OLD.id||'-'||suboperation'; END;
CREATE TRIGGER fkdc_refund_parameters_uuid BEFORE DELETE ON refund FOR EACH ROW BEGIN
DELETE FROM parameters WHERE parameters.t_uuid_parent=OLD.id||'-'||refund'; END;
CREATE TRIGGER fkdc_payee_parameters_uuid BEFORE DELETE ON payee FOR EACH ROW BEGIN
DELETE FROM parameters WHERE parameters.t_uuid_parent=OLD.id||'-'||payee'; END;
CREATE TRIGGER fkdc_recurrentoperation_parameters_uuid BEFORE DELETE ON recurrentoperation FOR
EACH ROW BEGIN DELETE FROM parameters WHERE parameters.t_uuid_parent=OLD.id||'-'||
||recurrentoperation'; END;
CREATE TRIGGER fkdc_rule_parameters_uuid BEFORE DELETE ON rule FOR EACH ROW BEGIN
DELETE FROM parameters WHERE parameters.t_uuid_parent=OLD.id||'-'||rule'; END;
CREATE TRIGGER fkdc_budget_parameters_uuid BEFORE DELETE ON budget FOR EACH ROW BEGIN
DELETE FROM parameters WHERE parameters.t_uuid_parent=OLD.id||'-'||budget'; END;
CREATE TRIGGER fkdc_budgetrule_parameters_uuid BEFORE DELETE ON budgetrule FOR EACH ROW
BEGIN DELETE FROM parameters WHERE parameters.t_uuid_parent=OLD.id||'-'||budgetrule'; END;
CREATE TRIGGER cpt_category_fullname1 AFTER INSERT ON category BEGIN UPDATE category SET
t_fullname=CASE WHEN rd_category_id IS NULL OR rd_category_id=" OR rd_category_id=0 THEN
new.t_name ELSE (SELECT c.t_fullname FROM category c WHERE c.id=new.rd_category_id)||' > '||new.t_name
END WHERE id=new.id;END;
CREATE TRIGGER cpt_category_fullname2 AFTER UPDATE OF t_name, rd_category_id ON category BEGIN
UPDATE category SET t_fullname=CASE WHEN rd_category_id IS NULL OR rd_category_id=" OR
rd_category_id=0 THEN new.t_name ELSE (SELECT c.t_fullname FROM category c WHERE
c.id=new.rd_category_id)||' > '||new.t_name END WHERE id=new.id;UPDATE category SET t_name=t_name
WHERE rd_category_id=new.id;END;
CREATE TRIGGER fkdc_category_delete BEFORE DELETE ON category FOR EACH ROW BEGIN
UPDATE suboperation SET r_category_id=OLD.rd_category_id WHERE r_category_id=OLD.id; END;
explain
SELECT TOTAL(f_CURRENTAMOUNT), d_DATEMONTH
from v_operation_display
WHERE d_DATEMONTH IN ('2012-05', '2012-04')
group by d_DATEMONTH, t_TYPEEXPENSE;
}
} {/.* Goto .*/}

# The next test requires FTS4
ifcapable !fts3 {
finish_test
return
}

# Taken from the gnome-shell project

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```

#
db close
forcedelete test.db
sqlite3 db test.db
do_test fuzz-oss1-gnomeshell {
  db eval {
CREATE TABLE Resource (ID INTEGER NOT NULL PRIMARY KEY, Uri TEXT NOT
NULL, UNIQUE (Uri));
CREATE VIRTUAL TABLE fts USING fts4;
CREATE TABLE "mfo:Action" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "mfo:Enclosure" (ID INTEGER NOT NULL PRIMARY KEY,
"mfo:remoteLink" INTEGER, "mfo:remoteLink:graph" INTEGER,
"mfo:groupDefault" INTEGER, "mfo:groupDefault:graph" INTEGER,
"mfo:localLink" INTEGER, "mfo:localLink:graph" INTEGER, "mfo:optional"
INTEGER, "mfo:optional:graph" INTEGER);
CREATE TABLE "mfo:FeedChannel" (ID INTEGER NOT NULL PRIMARY KEY,
"mfo:updatedAt" INTEGER, "mfo:updatedAt:graph" INTEGER,
"mfo:updatedAt:localDate" INTEGER, "mfo:updatedAt:localTime"
INTEGER, "mfo:unreadCount" INTEGER, "mfo:unreadCount:graph" INTEGER,
"mfo:totalCount" INTEGER, "mfo:totalCount:graph" INTEGER, "mfo:action"
INTEGER, "mfo:action:graph" INTEGER, "mfo:type" INTEGER,
"mfo:type:graph" INTEGER);
CREATE TABLE "mfo:FeedElement" (ID INTEGER NOT NULL PRIMARY KEY,
"mfo:image" TEXT COLLATE NOCASE, "mfo:image:graph" INTEGER,
"mfo:feedSettings" INTEGER, "mfo:feedSettings:graph" INTEGER);
CREATE TABLE "mfo:FeedMessage" (ID INTEGER NOT NULL PRIMARY KEY,
"mfo:downloadedTime" INTEGER, "mfo:downloadedTime:graph" INTEGER,
"mfo:downloadedTime:localDate" INTEGER, "mfo:downloadedTime:localTime"
INTEGER);
CREATE TABLE "mfo:FeedMessage_mfo:enclosureList" (ID INTEGER NOT NULL,
"mfo:enclosureList" INTEGER NOT NULL, "mfo:enclosureList:graph"
INTEGER);
CREATE TABLE "mfo:FeedSettings" (ID INTEGER NOT NULL PRIMARY KEY,
"mfo:updateInterval" INTEGER, "mfo:updateInterval:graph" INTEGER,
"mfo:expiryInterval" INTEGER, "mfo:expiryInterval:graph" INTEGER,
"mfo:downloadPath" TEXT COLLATE NOCASE, "mfo:downloadPath:graph"
INTEGER, "mfo:downloadFlag" INTEGER, "mfo:downloadFlag:graph" INTEGER,
"mfo:maxSize" INTEGER, "mfo:maxSize:graph" INTEGER);
CREATE TABLE "mfo:FeedType" (ID INTEGER NOT NULL PRIMARY KEY,
"mfo:name" TEXT COLLATE NOCASE, "mfo:name:graph" INTEGER);
CREATE TABLE "mlo:GeoBoundingBox" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "mlo:GeoBoundingBox_mlo:bbNorthWest" (ID INTEGER NOT
NULL, "mlo:bbNorthWest" INTEGER NOT NULL, "mlo:bbNorthWest:graph"
INTEGER);
CREATE TABLE "mlo:GeoBoundingBox_mlo:bbSouthEast" (ID INTEGER NOT
NULL, "mlo:bbSouthEast" INTEGER NOT NULL, "mlo:bbSouthEast:graph"
INTEGER);
CREATE TABLE "mlo:GeoLocation" (ID INTEGER NOT NULL PRIMARY KEY);

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CREATE TABLE "mlo:GeoLocation_mlo:asBoundingBox" (ID INTEGER NOT NULL,
"mlo:asBoundingBox" INTEGER NOT NULL, "mlo:asBoundingBox:graph"
INTEGER);
CREATE TABLE "mlo:GeoLocation_mlo:asGeoPoint" (ID INTEGER NOT NULL,
"mlo:asGeoPoint" INTEGER NOT NULL, "mlo:asGeoPoint:graph" INTEGER);
CREATE TABLE "mlo:GeoLocation_mlo:asPostalAddress" (ID INTEGER NOT
NULL, "mlo:asPostalAddress" INTEGER NOT NULL,
"mlo:asPostalAddress:graph" INTEGER);
CREATE TABLE "mlo:GeoPoint" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "mlo:GeoPoint_mlo:address" (ID INTEGER NOT NULL,
"mlo:address" TEXT NOT NULL, "mlo:address:graph" INTEGER);
CREATE TABLE "mlo:GeoPoint_mlo:altitude" (ID INTEGER NOT NULL,
"mlo:altitude" REAL NOT NULL, "mlo:altitude:graph" INTEGER);
CREATE TABLE "mlo:GeoPoint_mlo:city" (ID INTEGER NOT NULL, "mlo:city"
TEXT NOT NULL, "mlo:city:graph" INTEGER);
CREATE TABLE "mlo:GeoPoint_mlo:country" (ID INTEGER NOT NULL,
"mlo:country" TEXT NOT NULL, "mlo:country:graph" INTEGER);
CREATE TABLE "mlo:GeoPoint_mlo:latitude" (ID INTEGER NOT NULL,
"mlo:latitude" REAL NOT NULL, "mlo:latitude:graph" INTEGER);
CREATE TABLE "mlo:GeoPoint_mlo:longitude" (ID INTEGER NOT NULL,
"mlo:longitude" REAL NOT NULL, "mlo:longitude:graph" INTEGER);
CREATE TABLE "mlo:GeoPoint_mlo:state" (ID INTEGER NOT NULL,
"mlo:state" TEXT NOT NULL, "mlo:state:graph" INTEGER);
CREATE TABLE "mlo:GeoPoint_mlo:timestamp" (ID INTEGER NOT NULL,
"mlo:timestamp" INTEGER NOT NULL, "mlo:timestamp:graph" INTEGER,
"mlo:timestamp:localDate" INTEGER NOT NULL, "mlo:timestamp:localTime"
INTEGER NOT NULL);
CREATE TABLE "mlo:GeoSphere" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "mlo:GeoSphere_mlo:radius" (ID INTEGER NOT NULL,
"mlo:radius" REAL NOT NULL, "mlo:radius:graph" INTEGER);
CREATE TABLE "mlo:Landmark" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "mlo:LandmarkCategory" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "mlo:LandmarkCategory_mlo:isRemovable" (ID INTEGER NOT
NULL, "mlo:isRemovable" INTEGER NOT NULL, "mlo:isRemovable:graph"
INTEGER);
CREATE TABLE "mlo:Landmark_mlo:belongsToCategory" (ID INTEGER NOT
NULL, "mlo:belongsToCategory" INTEGER NOT NULL,
"mlo:belongsToCategory:graph" INTEGER);
CREATE TABLE "mlo:Landmark_mlo:poiLocation" (ID INTEGER NOT NULL,
"mlo:poiLocation" INTEGER NOT NULL, "mlo:poiLocation:graph" INTEGER);
CREATE TABLE "mlo:LocationBoundingBox" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "mlo:LocationBoundingBox_mlo:boxEastLimit" (ID INTEGER
NOT NULL, "mlo:boxEastLimit" INTEGER NOT NULL,
"mlo:boxEastLimit:graph" INTEGER);
CREATE TABLE "mlo:LocationBoundingBox_mlo:boxNorthLimit" (ID INTEGER
NOT NULL, "mlo:boxNorthLimit" INTEGER NOT NULL,
"mlo:boxNorthLimit:graph" INTEGER);
CREATE TABLE "mlo:LocationBoundingBox_mlo:boxSouthWestCorner" (ID

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INTEGER NOT NULL, "mlo:boxSouthWestCorner" INTEGER NOT NULL,
"mlo:boxSouthWestCorner:graph" INTEGER);
CREATE TABLE "mlo:LocationBoundingBox_mlo:boxVerticalLimit" (ID
INTEGER NOT NULL, "mlo:boxVerticalLimit" INTEGER NOT NULL,
"mlo:boxVerticalLimit:graph" INTEGER);
CREATE TABLE "mlo:PointOfInterest" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "mlo:Route" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "mlo:Route_mlo:endTime" (ID INTEGER NOT NULL,
"mlo:endTime" INTEGER NOT NULL, "mlo:endTime:graph" INTEGER,
"mlo:endTime:localDate" INTEGER NOT NULL, "mlo:endTime:localTime"
INTEGER NOT NULL);
CREATE TABLE "mlo:Route_mlo:routeDetails" (ID INTEGER NOT NULL,
"mlo:routeDetails" TEXT NOT NULL, "mlo:routeDetails:graph" INTEGER);
CREATE TABLE "mlo:Route_mlo:startTime" (ID INTEGER NOT NULL,
"mlo:startTime" INTEGER NOT NULL, "mlo:startTime:graph" INTEGER,
"mlo:startTime:localDate" INTEGER NOT NULL, "mlo:startTime:localTime"
INTEGER NOT NULL);
CREATE TABLE "mto:DownloadTransfer" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "mto:State" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "mto:SyncTransfer" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "mto:Transfer" (ID INTEGER NOT NULL PRIMARY KEY,
"mto:transferState" INTEGER, "mto:transferState:graph" INTEGER,
"mto:method" INTEGER, "mto:method:graph" INTEGER, "mto:created"
INTEGER, "mto:created:graph" INTEGER, "mto:created:localDate" INTEGER,
"mto:created:localTime" INTEGER, "mto:account" TEXT COLLATE NOCASE,
"mto:account:graph" INTEGER, "mto:starter" INTEGER,
"mto:starter:graph" INTEGER, "mto:agent" INTEGER, "mto:agent:graph"
INTEGER);
CREATE TABLE "mto:TransferElement" (ID INTEGER NOT NULL PRIMARY KEY,
"mto:source" INTEGER, "mto:source:graph" INTEGER, "mto:destination"
INTEGER, "mto:destination:graph" INTEGER, "mto:startedTime" INTEGER,
"mto:startedTime:graph" INTEGER, "mto:startedTime:localDate" INTEGER,
"mto:startedTime:localTime" INTEGER, "mto:completedTime" INTEGER,
"mto:completedTime:graph" INTEGER, "mto:completedTime:localDate"
INTEGER, "mto:completedTime:localTime" INTEGER, "mto:state" INTEGER,
"mto:state:graph" INTEGER);
CREATE TABLE "mto:TransferMethod" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "mto:Transfer_mto:transferList" (ID INTEGER NOT NULL,
"mto:transferList" INTEGER NOT NULL, "mto:transferList:graph"
INTEGER);
CREATE TABLE "mto:Transfer_mto:transferPrivacyLevel" (ID INTEGER NOT
NULL, "mto:transferPrivacyLevel" TEXT NOT NULL,
"mto:transferPrivacyLevel:graph" INTEGER);
CREATE TABLE "mto:UploadTransfer" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "mto:UploadTransfer_mto:transferCategory" (ID INTEGER NOT
NULL, "mto:transferCategory" TEXT NOT NULL,
"mto:transferCategory:graph" INTEGER);
CREATE TABLE "mtp:ScanType" (ID INTEGER NOT NULL PRIMARY KEY);

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CREATE TABLE "nao:Property" (ID INTEGER NOT NULL PRIMARY KEY,
"nao:propertyName" TEXT COLLATE NOCASE, "nao:propertyName:graph"
INTEGER, "nao:propertyValue" TEXT COLLATE NOCASE,
"nao:propertyValue:graph" INTEGER);
CREATE TABLE "nao:Tag" (ID INTEGER NOT NULL PRIMARY KEY,
"nao:prefLabel" TEXT COLLATE NOCASE, "nao:prefLabel:graph" INTEGER,
"nao:description" TEXT COLLATE NOCASE, "nao:description:graph"
INTEGER);
CREATE TABLE "nao:Tag_tracker:isDefaultTag" (ID INTEGER NOT NULL,
"tracker:isDefaultTag" INTEGER NOT NULL, "tracker:isDefaultTag:graph"
INTEGER);
CREATE TABLE "nao:Tag_tracker:tagRelatedTo" (ID INTEGER NOT NULL,
"tracker:tagRelatedTo" INTEGER NOT NULL, "tracker:tagRelatedTo:graph"
INTEGER);
CREATE TABLE "ncal:AccessClassification" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "ncal:Alarm" (ID INTEGER NOT NULL PRIMARY KEY,
"ncal:repeat" INTEGER, "ncal:repeat:graph" INTEGER);
CREATE TABLE "ncal:AlarmAction" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "ncal:Alarm_ncal:action" (ID INTEGER NOT NULL,
"ncal:action" INTEGER NOT NULL, "ncal:action:graph" INTEGER);
CREATE TABLE "ncal:Attachment" (ID INTEGER NOT NULL PRIMARY KEY,
"ncal:attachmentUri" INTEGER, "ncal:attachmentUri:graph" INTEGER,
"ncal:fmttype" TEXT COLLATE NOCASE, "ncal:fmttype:graph" INTEGER,
"ncal:encoding" INTEGER, "ncal:encoding:graph" INTEGER,
"ncal:attachmentContent" TEXT COLLATE NOCASE,
"ncal:attachmentContent:graph" INTEGER);
CREATE TABLE "ncal:AttachmentEncoding" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "ncal:Attendee" (ID INTEGER NOT NULL PRIMARY KEY,
"ncal:delegatedTo" INTEGER, "ncal:delegatedTo:graph" INTEGER,
"ncal:delegatedFrom" INTEGER, "ncal:delegatedFrom:graph" INTEGER,
"ncal:cutype" INTEGER, "ncal:cutype:graph" INTEGER, "ncal:member"
INTEGER, "ncal:member:graph" INTEGER, "ncal:role" INTEGER,
"ncal:role:graph" INTEGER, "ncal:rsvp" INTEGER, "ncal:rsvp:graph"
INTEGER, "ncal:partstat" INTEGER, "ncal:partstat:graph" INTEGER);
CREATE TABLE "ncal:AttendeeOrOrganizer" (ID INTEGER NOT NULL PRIMARY
KEY, "ncal:dir" INTEGER, "ncal:dir:graph" INTEGER,
"ncal:involvedContact" INTEGER, "ncal:involvedContact:graph" INTEGER,
"ncal:sentBy" INTEGER, "ncal:sentBy:graph" INTEGER);
CREATE TABLE "ncal:AttendeeRole" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "ncal:BydayRulePart" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "ncal:BydayRulePart_ncal:bydayModifier" (ID INTEGER NOT
NULL, "ncal:bydayModifier" INTEGER NOT NULL,
"ncal:bydayModifier:graph" INTEGER);
CREATE TABLE "ncal:BydayRulePart_ncal:bydayWeekday" (ID INTEGER NOT
NULL, "ncal:bydayWeekday" INTEGER NOT NULL, "ncal:bydayWeekday:graph"
INTEGER);
CREATE TABLE "ncal:Calendar" (ID INTEGER NOT NULL PRIMARY KEY,
"ncal:method" TEXT COLLATE NOCASE, "ncal:method:graph" INTEGER,

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"ncal:calscale" INTEGER, "ncal:calscale:graph" INTEGER, "ncal:prodid"
TEXT COLLATE NOCASE, "ncal:prodid:graph" INTEGER, "ncal:version" TEXT
COLLATE NOCASE, "ncal:version:graph" INTEGER);
CREATE TABLE "ncal:CalendarDataObject" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "ncal:CalendarScale" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "ncal:CalendarUserType" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "ncal:Calendar_ncal:component" (ID INTEGER NOT NULL,
"ncal:component" INTEGER NOT NULL, "ncal:component:graph" INTEGER);
CREATE TABLE "ncal:Event" (ID INTEGER NOT NULL PRIMARY KEY,
"ncal:eventStatus" INTEGER, "ncal:eventStatus:graph" INTEGER,
"ncal:transp" INTEGER, "ncal:transp:graph" INTEGER);
CREATE TABLE "ncal:EventStatus" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "ncal:Freebusy" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "ncal:FreebusyPeriod" (ID INTEGER NOT NULL PRIMARY KEY,
"ncal:fbtype" INTEGER, "ncal:fbtype:graph" INTEGER);
CREATE TABLE "ncal:FreebusyType" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "ncal:Freebusy_ncal:freebusy" (ID INTEGER NOT NULL,
"ncal:freebusy" INTEGER NOT NULL, "ncal:freebusy:graph" INTEGER);
CREATE TABLE "ncal:Journal" (ID INTEGER NOT NULL PRIMARY KEY,
"ncal:journalStatus" INTEGER, "ncal:journalStatus:graph" INTEGER);
CREATE TABLE "ncal:JournalStatus" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "ncal:NcalDateTime" (ID INTEGER NOT NULL PRIMARY KEY,
"ncal:ncalTimezone" INTEGER, "ncal:ncalTimezone:graph" INTEGER,
"ncal:date" INTEGER, "ncal:date:graph" INTEGER, "ncal:date:localDate"
INTEGER, "ncal:date:localTime" INTEGER, "ncal:dateTime" INTEGER,
"ncal:dateTime:graph" INTEGER, "ncal:dateTime:localDate" INTEGER,
"ncal:dateTime:localTime" INTEGER);
CREATE TABLE "ncal:NcalPeriod" (ID INTEGER NOT NULL PRIMARY KEY,
"ncal:periodBegin" INTEGER, "ncal:periodBegin:graph" INTEGER,
"ncal:periodBegin:localDate" INTEGER, "ncal:periodBegin:localTime"
INTEGER, "ncal:periodDuration" INTEGER, "ncal:periodDuration:graph"
INTEGER, "ncal:periodEnd" INTEGER, "ncal:periodEnd:graph" INTEGER,
"ncal:periodEnd:localDate" INTEGER, "ncal:periodEnd:localTime"
INTEGER);
CREATE TABLE "ncal:NcalTimeEntity" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "ncal:Organizer" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "ncal:ParticipationStatus" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "ncal:RecurrenceFrequency" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "ncal:RecurrenceIdentifier" (ID INTEGER NOT NULL PRIMARY
KEY, "ncal:range" INTEGER, "ncal:range:graph" INTEGER,
"ncal:recurrenceIdDateTime" INTEGER, "ncal:recurrenceIdDateTime:graph"
INTEGER);
CREATE TABLE "ncal:RecurrenceIdentifierRange" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "ncal:RecurrenceRule" (ID INTEGER NOT NULL PRIMARY KEY,
"ncal:until" INTEGER, "ncal:until:graph" INTEGER,
"ncal:until:localDate" INTEGER, "ncal:until:localTime" INTEGER,
"ncal:wkst" INTEGER, "ncal:wkst:graph" INTEGER, "ncal:interval"
INTEGER, "ncal:interval:graph" INTEGER, "ncal:count" INTEGER,

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"ncal:count:graph" INTEGER, "ncal:freq" INTEGER, "ncal:freq:graph"
INTEGER);
CREATE TABLE "ncal:RecurrenceRule_ncal:byday" (ID INTEGER NOT NULL,
"ncal:byday" INTEGER NOT NULL, "ncal:byday:graph" INTEGER);
CREATE TABLE "ncal:RecurrenceRule_ncal:byhour" (ID INTEGER NOT NULL,
"ncal:byhour" INTEGER NOT NULL, "ncal:byhour:graph" INTEGER);
CREATE TABLE "ncal:RecurrenceRule_ncal:byminute" (ID INTEGER NOT NULL,
"ncal:byminute" INTEGER NOT NULL, "ncal:byminute:graph" INTEGER);
CREATE TABLE "ncal:RecurrenceRule_ncal:bymonth" (ID INTEGER NOT NULL,
"ncal:bymonth" INTEGER NOT NULL, "ncal:bymonth:graph" INTEGER);
CREATE TABLE "ncal:RecurrenceRule_ncal:bymonthday" (ID INTEGER NOT
NULL, "ncal:bymonthday" INTEGER NOT NULL, "ncal:bymonthday:graph"
INTEGER);
CREATE TABLE "ncal:RecurrenceRule_ncal:bysecond" (ID INTEGER NOT NULL,
"ncal:bysecond" INTEGER NOT NULL, "ncal:bysecond:graph" INTEGER);
CREATE TABLE "ncal:RecurrenceRule_ncal:bysetpos" (ID INTEGER NOT NULL,
"ncal:bysetpos" INTEGER NOT NULL, "ncal:bysetpos:graph" INTEGER);
CREATE TABLE "ncal:RecurrenceRule_ncal:byweekno" (ID INTEGER NOT NULL,
"ncal:byweekno" INTEGER NOT NULL, "ncal:byweekno:graph" INTEGER);
CREATE TABLE "ncal:RecurrenceRule_ncal:byyearday" (ID INTEGER NOT
NULL, "ncal:byyearday" INTEGER NOT NULL, "ncal:byyearday:graph"
INTEGER);
CREATE TABLE "ncal:RequestStatus" (ID INTEGER NOT NULL PRIMARY KEY,
"ncal:statusDescription" TEXT COLLATE NOCASE,
"ncal:statusDescription:graph" INTEGER, "ncal:returnStatus" TEXT
COLLATE NOCASE, "ncal:returnStatus:graph" INTEGER,
"ncal:requestStatusData" TEXT COLLATE NOCASE,
"ncal:requestStatusData:graph" INTEGER);
CREATE TABLE "ncal:TimeTransparency" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "ncal:Timezone" (ID INTEGER NOT NULL PRIMARY KEY,
"ncal:tzurl" INTEGER, "ncal:tzurl:graph" INTEGER, "ncal:standard"
INTEGER, "ncal:standard:graph" INTEGER, "ncal:daylight" INTEGER,
"ncal:daylight:graph" INTEGER, "ncal:tzid" TEXT COLLATE NOCASE,
"ncal:tzid:graph" INTEGER);
CREATE TABLE "ncal:TimezoneObservance" (ID INTEGER NOT NULL PRIMARY
KEY, "ncal:tzoffsetfrom" TEXT COLLATE NOCASE,
"ncal:tzoffsetfrom:graph" INTEGER, "ncal:tzoffsetto" TEXT COLLATE
NOCASE, "ncal:tzoffsetto:graph" INTEGER, "ncal:tzname" TEXT COLLATE
NOCASE, "ncal:tzname:graph" INTEGER);
CREATE TABLE "ncal:Todo" (ID INTEGER NOT NULL PRIMARY KEY,
"ncal:percentComplete" INTEGER, "ncal:percentComplete:graph" INTEGER,
"ncal:completed" INTEGER, "ncal:completed:graph" INTEGER,
"ncal:completed:localDate" INTEGER, "ncal:completed:localTime"
INTEGER, "ncal:todoStatus" INTEGER, "ncal:todoStatus:graph" INTEGER,
"ncal:due" INTEGER, "ncal:due:graph" INTEGER);
CREATE TABLE "ncal:TodoStatus" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "ncal:Trigger" (ID INTEGER NOT NULL PRIMARY KEY,
"ncal:related" INTEGER, "ncal:related:graph" INTEGER,

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"ncal:triggerDateTime" INTEGER, "ncal:triggerDateTime:graph" INTEGER,
"ncal:triggerDateTime:localDate" INTEGER,
"ncal:triggerDateTime:localTime" INTEGER, "ncal:triggerDuration"
INTEGER, "ncal:triggerDuration:graph" INTEGER);
CREATE TABLE "ncal:TriggerRelation" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "ncal:UnionParentClass" (ID INTEGER NOT NULL PRIMARY KEY,
"ncal:lastModified" INTEGER, "ncal:lastModified:graph" INTEGER,
"ncal:lastModified:localDate" INTEGER, "ncal:lastModified:localTime"
INTEGER, "ncal:trigger" INTEGER, "ncal:trigger:graph" INTEGER,
"ncal:created" INTEGER, "ncal:created:graph" INTEGER,
"ncal:created:localDate" INTEGER, "ncal:created:localTime" INTEGER,
"ncal:url" INTEGER, "ncal:url:graph" INTEGER, "ncal:comment" TEXT
COLLATE NOCASE, "ncal:comment:graph" INTEGER, "ncal:summaryAltRep"
INTEGER, "ncal:summaryAltRep:graph" INTEGER, "ncal:priority" INTEGER,
"ncal:priority:graph" INTEGER, "ncal:location" TEXT COLLATE NOCASE,
"ncal:location:graph" INTEGER, "ncal:uid" TEXT COLLATE NOCASE,
"ncal:uid:graph" INTEGER, "ncal:requestStatus" INTEGER,
"ncal:requestStatus:graph" INTEGER, "ncal:recurrenceId" INTEGER,
"ncal:recurrenceId:graph" INTEGER, "ncal:dtstamp" INTEGER,
"ncal:dtstamp:graph" INTEGER, "ncal:dtstamp:localDate" INTEGER,
"ncal:dtstamp:localTime" INTEGER, "ncal:class" INTEGER,
"ncal:class:graph" INTEGER, "ncal:organizer" INTEGER,
"ncal:organizer:graph" INTEGER, "ncal:dtend" INTEGER,
"ncal:dtend:graph" INTEGER, "ncal:summary" TEXT COLLATE NOCASE,
"ncal:summary:graph" INTEGER, "ncal:descriptionAltRep" INTEGER,
"ncal:descriptionAltRep:graph" INTEGER, "ncal:commentAltRep" INTEGER,
"ncal:commentAltRep:graph" INTEGER, "ncal:sequence" INTEGER,
"ncal:sequence:graph" INTEGER, "ncal:contact" TEXT COLLATE NOCASE,
"ncal:contact:graph" INTEGER, "ncal:contactAltRep" INTEGER,
"ncal:contactAltRep:graph" INTEGER, "ncal:locationAltRep" INTEGER,
"ncal:locationAltRep:graph" INTEGER, "ncal:geo" INTEGER,
"ncal:geo:graph" INTEGER, "ncal:resourcesAltRep" INTEGER,
"ncal:resourcesAltRep:graph" INTEGER, "ncal:dtstart" INTEGER,
"ncal:dtstart:graph" INTEGER, "ncal:description" TEXT COLLATE NOCASE,
"ncal:description:graph" INTEGER, "ncal:relatedToSibling" TEXT COLLATE
NOCASE, "ncal:relatedToSibling:graph" INTEGER, "ncal:duration"
INTEGER, "ncal:duration:graph" INTEGER);
CREATE TABLE "ncal:UnionParentClass_ncal:attach" (ID INTEGER NOT NULL,
"ncal:attach" INTEGER NOT NULL, "ncal:attach:graph" INTEGER);
CREATE TABLE "ncal:UnionParentClass_ncal:attendee" (ID INTEGER NOT
NULL, "ncal:attendee" INTEGER NOT NULL, "ncal:attendee:graph"
INTEGER);
CREATE TABLE "ncal:UnionParentClass_ncal:categories" (ID INTEGER NOT
NULL, "ncal:categories" TEXT NOT NULL, "ncal:categories:graph"
INTEGER);
CREATE TABLE "ncal:UnionParentClass_ncal:exdate" (ID INTEGER NOT NULL,
"ncal:exdate" INTEGER NOT NULL, "ncal:exdate:graph" INTEGER);
CREATE TABLE "ncal:UnionParentClass_ncal:exrule" (ID INTEGER NOT NULL,

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"ncal:extrule" INTEGER NOT NULL, "ncal:extrule:graph" INTEGER);
CREATE TABLE "ncal:UnionParentClass_ncal:hasAlarm" (ID INTEGER NOT
NULL, "ncal:hasAlarm" INTEGER NOT NULL, "ncal:hasAlarm:graph"
INTEGER);
CREATE TABLE "ncal:UnionParentClass_ncal:ncalRelation" (ID INTEGER NOT
NULL, "ncal:ncalRelation" TEXT NOT NULL, "ncal:ncalRelation:graph"
INTEGER);
CREATE TABLE "ncal:UnionParentClass_ncal:rdate" (ID INTEGER NOT NULL,
"ncal:rdate" INTEGER NOT NULL, "ncal:rdate:graph" INTEGER);
CREATE TABLE "ncal:UnionParentClass_ncal:relatedToChild" (ID INTEGER
NOT NULL, "ncal:relatedToChild" TEXT NOT NULL,
"ncal:relatedToChild:graph" INTEGER);
CREATE TABLE "ncal:UnionParentClass_ncal:relatedToParent" (ID INTEGER
NOT NULL, "ncal:relatedToParent" TEXT NOT NULL,
"ncal:relatedToParent:graph" INTEGER);
CREATE TABLE "ncal:UnionParentClass_ncal:resources" (ID INTEGER NOT
NULL, "ncal:resources" TEXT NOT NULL, "ncal:resources:graph" INTEGER);
CREATE TABLE "ncal:UnionParentClass_ncal:rrule" (ID INTEGER NOT NULL,
"ncal:rrule" INTEGER NOT NULL, "ncal:rrule:graph" INTEGER);
CREATE TABLE "ncal:Weekday" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nco:Affiliation" (ID INTEGER NOT NULL PRIMARY KEY,
"nco:department" TEXT COLLATE NOCASE, "nco:department:graph" INTEGER,
"nco:org" INTEGER, "nco:org:graph" INTEGER, "nco:role" TEXT COLLATE
NOCASE, "nco:role:graph" INTEGER);
CREATE TABLE "nco:Affiliation_nco:title" (ID INTEGER NOT NULL,
"nco:title" TEXT NOT NULL, "nco:title:graph" INTEGER);
CREATE TABLE "nco:AuthorizationStatus" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nco:BbsNumber" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nco:CarPhoneNumber" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nco:CellPhoneNumber" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nco:Contact" (ID INTEGER NOT NULL PRIMARY KEY,
"nco:fullname" TEXT COLLATE NOCASE, "nco:fullname:graph" INTEGER,
"nco:key" INTEGER, "nco:key:graph" INTEGER, "nco:contactUID" TEXT
COLLATE NOCASE, "nco:contactUID:graph" INTEGER, "nco:contactLocalUID"
TEXT COLLATE NOCASE, "nco:contactLocalUID:graph" INTEGER,
"nco:hasLocation" INTEGER, "nco:hasLocation:graph" INTEGER,
"nco:nickname" TEXT COLLATE NOCASE, "nco:nickname:graph" INTEGER,
"nco:representative" INTEGER, "nco:representative:graph" INTEGER,
"nco:photo" INTEGER, "nco:photo:graph" INTEGER, "nco:birthDate"
INTEGER, "nco:birthDate:graph" INTEGER, "nco:birthDate:localDate"
INTEGER, "nco:birthDate:localTime" INTEGER, "nco:sound" INTEGER,
"nco:sound:graph" INTEGER);
CREATE TABLE "nco:ContactGroup" (ID INTEGER NOT NULL PRIMARY KEY,
"nco:contactGroupName" TEXT COLLATE NOCASE,
"nco:contactGroupName:graph" INTEGER);
CREATE TABLE "nco:ContactList" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nco:ContactListDataObject" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nco:ContactList_nco:containsContact" (ID INTEGER NOT

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NULL, "nco:containsContact" INTEGER NOT NULL,
"nco:containsContact:graph" INTEGER);
CREATE TABLE "nco:ContactMedium" (ID INTEGER NOT NULL PRIMARY KEY,
"nco:contactMediumComment" TEXT COLLATE NOCASE,
"nco:contactMediumComment:graph" INTEGER);
CREATE TABLE "nco:Contact_ncal:anniversary" (ID INTEGER NOT NULL,
"ncal:anniversary" INTEGER NOT NULL, "ncal:anniversary:graph"
INTEGER);
CREATE TABLE "nco:Contact_ncal:birthday" (ID INTEGER NOT NULL,
"ncal:birthday" INTEGER NOT NULL, "ncal:birthday:graph" INTEGER);
CREATE TABLE "nco:Contact_nco:belongsToGroup" (ID INTEGER NOT NULL,
"nco:belongsToGroup" INTEGER NOT NULL, "nco:belongsToGroup:graph"
INTEGER);
CREATE TABLE "nco:Contact_nco:note" (ID INTEGER NOT NULL, "nco:note"
TEXT NOT NULL, "nco:note:graph" INTEGER);
CREATE TABLE "nco:Contact_scal:anniversary" (ID INTEGER NOT NULL,
"scal:anniversary" INTEGER NOT NULL, "scal:anniversary:graph"
INTEGER);
CREATE TABLE "nco:Contact_scal:birthday" (ID INTEGER NOT NULL,
"scal:birthday" INTEGER NOT NULL, "scal:birthday:graph" INTEGER);
CREATE TABLE "nco:DomesticDeliveryAddress" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nco:EmailAddress" (ID INTEGER NOT NULL PRIMARY KEY,
"nco:emailAddress" TEXT COLLATE NOCASE UNIQUE,
"nco:emailAddress:graph" INTEGER);
CREATE TABLE "nco:FaxNumber" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nco:Gender" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nco:IMAccount" (ID INTEGER NOT NULL PRIMARY KEY,
"nco:imAccountAddress" INTEGER UNIQUE, "nco:imAccountAddress:graph"
INTEGER, "nco:imAccountType" TEXT COLLATE NOCASE,
"nco:imAccountType:graph" INTEGER, "nco:imDisplayName" TEXT COLLATE
NOCASE, "nco:imDisplayName:graph" INTEGER, "nco:imEnabled" INTEGER,
"nco:imEnabled:graph" INTEGER);
CREATE TABLE "nco:IMAccount_nco:hasIMContact" (ID INTEGER NOT NULL,
"nco:hasIMContact" INTEGER NOT NULL, "nco:hasIMContact:graph"
INTEGER);
CREATE TABLE "nco:IMAddress" (ID INTEGER NOT NULL PRIMARY KEY,
"nco:imID" TEXT COLLATE NOCASE, "nco:imID:graph" INTEGER,
"nco:imNickname" TEXT COLLATE NOCASE, "nco:imNickname:graph" INTEGER,
"nco:imAvatar" INTEGER, "nco:imAvatar:graph" INTEGER, "nco:imProtocol"
TEXT COLLATE NOCASE, "nco:imProtocol:graph" INTEGER,
"nco:imStatusMessage" TEXT COLLATE NOCASE,
"nco:imStatusMessage:graph" INTEGER, "nco:imPresence" INTEGER,
"nco:imPresence:graph" INTEGER, "nco:presenceLastModified" INTEGER,
"nco:presenceLastModified:graph" INTEGER,
"nco:presenceLastModified:localDate" INTEGER,
"nco:presenceLastModified:localTime" INTEGER,
"nco:imAddressAuthStatusFrom" INTEGER,
"nco:imAddressAuthStatusFrom:graph" INTEGER,

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"nco:imAddressAuthStatusTo" INTEGER, "nco:imAddressAuthStatusTo:graph"
INTEGER);
CREATE TABLE "nco:IMAddress_nco:imCapability" (ID INTEGER NOT NULL,
"nco:imCapability" INTEGER NOT NULL, "nco:imCapability:graph"
INTEGER);
CREATE TABLE "nco:IMCapability" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nco:InternationalDeliveryAddress" (ID INTEGER NOT NULL
PRIMARY KEY);
CREATE TABLE "nco:IsdnNumber" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nco:MessagingNumber" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nco:ModemNumber" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nco:OrganizationContact" (ID INTEGER NOT NULL PRIMARY
KEY, "nco:logo" INTEGER, "nco:logo:graph" INTEGER);
CREATE TABLE "nco:PagerNumber" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nco:ParcelDeliveryAddress" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nco:PcsNumber" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nco:PersonContact" (ID INTEGER NOT NULL PRIMARY KEY,
"nco:nameFamily" TEXT COLLATE NOCASE, "nco:nameFamily:graph" INTEGER,
"nco:nameGiven" TEXT COLLATE NOCASE, "nco:nameGiven:graph" INTEGER,
"nco:nameAdditional" TEXT COLLATE NOCASE, "nco:nameAdditional:graph"
INTEGER, "nco:nameHonorificSuffix" TEXT COLLATE NOCASE,
"nco:nameHonorificSuffix:graph" INTEGER, "nco:nameHonorificPrefix"
TEXT COLLATE NOCASE, "nco:nameHonorificPrefix:graph" INTEGER,
"nco:hobby" TEXT COLLATE NOCASE, "nco:hobby:graph" INTEGER,
"nco:gender" INTEGER, "nco:gender:graph" INTEGER);
CREATE TABLE "nco:PersonContact_nco:hasAffiliation" (ID INTEGER NOT
NULL, "nco:hasAffiliation" INTEGER NOT NULL,
"nco:hasAffiliation:graph" INTEGER);
CREATE TABLE "nco:PhoneNumber" (ID INTEGER NOT NULL PRIMARY KEY,
"nco:phoneNumber" TEXT COLLATE NOCASE, "nco:phoneNumber:graph"
INTEGER);
CREATE TABLE "nco:PostalAddress" (ID INTEGER NOT NULL PRIMARY KEY,
"nco:region" TEXT COLLATE NOCASE, "nco:region:graph" INTEGER,
"nco:country" TEXT COLLATE NOCASE, "nco:country:graph" INTEGER,
"nco:extendedAddress" TEXT COLLATE NOCASE,
"nco:extendedAddress:graph" INTEGER, "nco:addressLocation" INTEGER,
"nco:addressLocation:graph" INTEGER, "nco:streetAddress" TEXT COLLATE
NOCASE, "nco:streetAddress:graph" INTEGER, "nco:postalcode" TEXT
COLLATE NOCASE, "nco:postalcode:graph" INTEGER, "nco:locality" TEXT
COLLATE NOCASE, "nco:locality:graph" INTEGER, "nco:county" TEXT
COLLATE NOCASE, "nco:county:graph" INTEGER, "nco:district" TEXT
COLLATE NOCASE, "nco:district:graph" INTEGER, "nco:pobox" TEXT
COLLATE NOCASE, "nco:pobox:graph" INTEGER);
CREATE TABLE "nco:PresenceStatus" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nco:Role" (ID INTEGER NOT NULL PRIMARY KEY, "nco:video"
INTEGER, "nco:video:graph" INTEGER);
CREATE TABLE "nco:Role_nco:blogUrl" (ID INTEGER NOT NULL,
"nco:blogUrl" INTEGER NOT NULL, "nco:blogUrl:graph" INTEGER);

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CREATE TABLE "nco:Role_nco:foafUrl" (ID INTEGER NOT NULL,
"nco:foafUrl" INTEGER NOT NULL, "nco:foafUrl:graph" INTEGER);
CREATE TABLE "nco:Role_nco:hasContactMedium" (ID INTEGER NOT NULL,
"nco:hasContactMedium" INTEGER NOT NULL, "nco:hasContactMedium:graph"
INTEGER);
CREATE TABLE "nco:Role_nco:hasEmailAddress" (ID INTEGER NOT NULL,
"nco:hasEmailAddress" INTEGER NOT NULL, "nco:hasEmailAddress:graph"
INTEGER);
CREATE TABLE "nco:Role_nco:hasIMAddress" (ID INTEGER NOT NULL,
"nco:hasIMAddress" INTEGER NOT NULL, "nco:hasIMAddress:graph"
INTEGER);
CREATE TABLE "nco:Role_nco:hasPhoneNumber" (ID INTEGER NOT NULL,
"nco:hasPhoneNumber" INTEGER NOT NULL, "nco:hasPhoneNumber:graph"
INTEGER);
CREATE TABLE "nco:Role_nco:hasPostalAddress" (ID INTEGER NOT NULL,
"nco:hasPostalAddress" INTEGER NOT NULL, "nco:hasPostalAddress:graph"
INTEGER);
CREATE TABLE "nco:Role_nco:url" (ID INTEGER NOT NULL, "nco:url"
INTEGER NOT NULL, "nco:url:graph" INTEGER);
CREATE TABLE "nco:Role_nco:websiteUrl" (ID INTEGER NOT NULL,
"nco:websiteUrl" INTEGER NOT NULL, "nco:websiteUrl:graph" INTEGER);
CREATE TABLE "nco:VideoTelephoneNumber" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nco:VoicePhoneNumber" (ID INTEGER NOT NULL PRIMARY KEY,
"nco:voiceMail" INTEGER, "nco:voiceMail:graph" INTEGER);
CREATE TABLE "nfo:Application" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nfo:Archive" (ID INTEGER NOT NULL PRIMARY KEY,
"nfo:uncompressedSize" INTEGER, "nfo:uncompressedSize:graph" INTEGER);
CREATE TABLE "nfo:ArchiveItem" (ID INTEGER NOT NULL PRIMARY KEY,
"nfo:isPasswordProtected" INTEGER, "nfo:isPasswordProtected:graph"
INTEGER);
CREATE TABLE "nfo:Attachment" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nfo:Audio" (ID INTEGER NOT NULL PRIMARY KEY,
"nfo:channels" INTEGER, "nfo:channels:graph" INTEGER,
"nfo:sideChannels" INTEGER, "nfo:sideChannels:graph" INTEGER,
"nfo:lfeChannels" INTEGER, "nfo:lfeChannels:graph" INTEGER,
"nfo:sampleCount" INTEGER, "nfo:sampleCount:graph" INTEGER,
"nfo:bitsPerSample" INTEGER, "nfo:bitsPerSample:graph" INTEGER,
"nfo:frontChannels" INTEGER, "nfo:frontChannels:graph" INTEGER,
"nfo:sampleRate" REAL, "nfo:sampleRate:graph" INTEGER,
"nfo:averageAudioBitrate" REAL, "nfo:averageAudioBitrate:graph"
INTEGER, "nfo:rearChannels" INTEGER, "nfo:rearChannels:graph" INTEGER,
"nfo:gain" INTEGER, "nfo:gain:graph" INTEGER, "nfo:peakGain" INTEGER,
"nfo:peakGain:graph" INTEGER, "nfo:audioOffset" REAL,
"nfo:audioOffset:graph" INTEGER);
CREATE TABLE "nfo:Bookmark" (ID INTEGER NOT NULL PRIMARY KEY,
"nfo:bookmarks" INTEGER, "nfo:bookmarks:graph" INTEGER,
"nfo:characterPosition" INTEGER, "nfo:characterPosition:graph"
INTEGER, "nfo:pageNumber" INTEGER, "nfo:pageNumber:graph" INTEGER,

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"nfo:streamPosition" INTEGER, "nfo:streamPosition:graph" INTEGER,
"nfo:streamDuration" INTEGER, "nfo:streamDuration:graph" INTEGER);
CREATE TABLE "nfo:BookmarkFolder" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nfo:BookmarkFolder_nfo:containsBookmark" (ID INTEGER NOT
NULL, "nfo:containsBookmark" INTEGER NOT NULL,
"nfo:containsBookmark:graph" INTEGER);
CREATE TABLE "nfo:BookmarkFolder_nfo:containsBookmarkFolder" (ID
INTEGER NOT NULL, "nfo:containsBookmarkFolder" INTEGER NOT NULL,
"nfo:containsBookmarkFolder:graph" INTEGER);
CREATE TABLE "nfo:CompressionType" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nfo:Cursor" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nfo:DataContainer" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nfo:DeletedResource" (ID INTEGER NOT NULL PRIMARY KEY,
"nfo:originalLocation" TEXT COLLATE NOCASE,
"nfo:originalLocation:graph" INTEGER, "nfo:deletionDate" INTEGER,
"nfo:deletionDate:graph" INTEGER, "nfo:deletionDate:localDate"
INTEGER, "nfo:deletionDate:localTime" INTEGER);
CREATE TABLE "nfo:Document" (ID INTEGER NOT NULL PRIMARY KEY,
"nfo:tableOfContents" TEXT COLLATE NOCASE,
"nfo:tableOfContents:graph" INTEGER);
CREATE TABLE "nfo:EmbeddedFileDataObject" (ID INTEGER NOT NULL PRIMARY
KEY, "nfo:encoding" TEXT COLLATE NOCASE, "nfo:encoding:graph"
INTEGER);
CREATE TABLE "nfo:Equipment" (ID INTEGER NOT NULL PRIMARY KEY,
"nfo:manufacturer" TEXT COLLATE NOCASE, "nfo:manufacturer:graph"
INTEGER, "nfo:model" TEXT COLLATE NOCASE, "nfo:model:graph" INTEGER,
"nfo:equipmentSoftware" TEXT COLLATE NOCASE,
"nfo:equipmentSoftware:graph" INTEGER);
CREATE TABLE "nfo:Executable" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nfo:FileDataObject" (ID INTEGER NOT NULL PRIMARY KEY,
"nfo:fileLastAccessed" INTEGER, "nfo:fileLastAccessed:graph" INTEGER,
"nfo:fileLastAccessed:localDate" INTEGER,
"nfo:fileLastAccessed:localTime" INTEGER, "nfo:fileCreated" INTEGER,
"nfo:fileCreated:graph" INTEGER, "nfo:fileCreated:localDate" INTEGER,
"nfo:fileCreated:localTime" INTEGER, "nfo:fileSize" INTEGER,
"nfo:fileSize:graph" INTEGER, "nfo:permissions" TEXT COLLATE NOCASE,
"nfo:permissions:graph" INTEGER, "nfo:fileName" TEXT COLLATE NOCASE,
"nfo:fileName:graph" INTEGER, "nfo:hashCode" INTEGER,
"nfo:hashCode:graph" INTEGER, "nfo:fileOwner" INTEGER,
"nfo:fileOwner:graph" INTEGER, "nfo:fileLastModified" INTEGER,
"nfo:fileLastModified:graph" INTEGER, "nfo:fileLastModified:localDate"
INTEGER, "nfo:fileLastModified:localTime" INTEGER);
CREATE TABLE "nfo:FileHash" (ID INTEGER NOT NULL PRIMARY KEY,
"nfo:hashCode" TEXT COLLATE NOCASE, "nfo:hashCode:graph" INTEGER,
"nfo:hashAlgorithm" TEXT COLLATE NOCASE, "nfo:hashAlgorithm:graph"
INTEGER);
CREATE TABLE "nfo:Filesystem" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nfo:FilesystemImage" (ID INTEGER NOT NULL PRIMARY KEY);

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CREATE TABLE "nfo:Folder" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nfo:Font" (ID INTEGER NOT NULL PRIMARY KEY,
"nfo:fontFamily" TEXT COLLATE NOCASE, "nfo:fontFamily:graph" INTEGER,
"nfo:fondry" INTEGER, "nfo:fondry:graph" INTEGER);
CREATE TABLE "nfo:HardDiskPartition" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nfo:HelpDocument" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nfo:HtmlDocument" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nfo:Icon" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nfo:Image" (ID INTEGER NOT NULL PRIMARY KEY,
"nfo:verticalResolution" INTEGER, "nfo:verticalResolution:graph"
INTEGER, "nfo:horizontalResolution" INTEGER,
"nfo:horizontalResolution:graph" INTEGER, "nfo:orientation" INTEGER,
"nfo:orientation:graph" INTEGER);
CREATE TABLE "nfo:Image_nfo:depicts" (ID INTEGER NOT NULL,
"nfo:depicts" INTEGER NOT NULL, "nfo:depicts:graph" INTEGER);
CREATE TABLE "nfo:Image_nfo:hasRegionOfInterest" (ID INTEGER NOT NULL,
"nfo:hasRegionOfInterest" INTEGER NOT NULL,
"nfo:hasRegionOfInterest:graph" INTEGER);
CREATE TABLE "nfo:Media" (ID INTEGER NOT NULL PRIMARY KEY, "nfo:count"
INTEGER, "nfo:count:graph" INTEGER, "nfo:duration" INTEGER,
"nfo:duration:graph" INTEGER, "nfo:compressionType" INTEGER,
"nfo:compressionType:graph" INTEGER, "nfo:hasMediaStream" INTEGER,
"nfo:hasMediaStream:graph" INTEGER, "nfo:bitDepth" INTEGER,
"nfo:bitDepth:graph" INTEGER, "nfo:codec" TEXT COLLATE NOCASE,
"nfo:codec:graph" INTEGER, "nfo:encodedBy" TEXT COLLATE NOCASE,
"nfo:encodedBy:graph" INTEGER, "nfo:bitrateType" TEXT COLLATE NOCASE,
"nfo:bitrateType:graph" INTEGER, "nfo:averageBitrate" REAL,
"nfo:averageBitrate:graph" INTEGER, "nfo:genre" TEXT COLLATE NOCASE,
"nfo:genre:graph" INTEGER, "nfo:equipment" INTEGER,
"nfo:equipment:graph" INTEGER, "nfo:lastPlayedPosition" INTEGER,
"nfo:lastPlayedPosition:graph" INTEGER, "nmm:genre" TEXT COLLATE
NOCASE, "nmm:genre:graph" INTEGER, "nmm:skipCounter" INTEGER,
"nmm:skipCounter:graph" INTEGER, "nmm:dlnaProfile" TEXT COLLATE
NOCASE, "nmm:dlnaProfile:graph" INTEGER, "nmm:dlnaMime" TEXT COLLATE
NOCASE, "nmm:dlnaMime:graph" INTEGER, "nmm:uPnPShared" INTEGER,
"nmm:uPnPShared:graph" INTEGER, "mtp:credits" TEXT COLLATE NOCASE,
"mtp:credits:graph" INTEGER, "mtp:creator" TEXT COLLATE NOCASE,
"mtp:creator:graph" INTEGER);
CREATE TABLE "nfo:MediaFileListEntry" (ID INTEGER NOT NULL PRIMARY
KEY, "nfo:listPosition" REAL, "nfo:listPosition:graph" INTEGER,
"nfo:entryUrl" TEXT COLLATE NOCASE, "nfo:entryUrl:graph" INTEGER);
CREATE TABLE "nfo:MediaList" (ID INTEGER NOT NULL PRIMARY KEY,
"nfo:entryCounter" INTEGER, "nfo:entryCounter:graph" INTEGER,
"nfo:listDuration" INTEGER, "nfo:listDuration:graph" INTEGER);
CREATE TABLE "nfo:MediaList_nfo:hasMediaFileListEntry" (ID INTEGER NOT
NULL, "nfo:hasMediaFileListEntry" INTEGER NOT NULL,
"nfo:hasMediaFileListEntry:graph" INTEGER);
CREATE TABLE "nfo:MediaList_nfo:mediaListEntry" (ID INTEGER NOT NULL,

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"nfo:mediaListEntry" INTEGER NOT NULL, "nfo:mediaListEntry:graph"
INTEGER);
CREATE TABLE "nfo:MediaStream" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nfo:Media_mtp:hidden" (ID INTEGER NOT NULL, "mtp:hidden"
INTEGER NOT NULL, "mtp:hidden:graph" INTEGER);
CREATE TABLE "nfo:Media_nmm:alternativeMedia" (ID INTEGER NOT NULL,
"nmm:alternativeMedia" INTEGER NOT NULL, "nmm:alternativeMedia:graph"
INTEGER);
CREATE TABLE "nfo:MindMap" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nfo:Note" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nfo:OperatingSystem" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nfo:Orientation" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nfo:PaginatedTextDocument" (ID INTEGER NOT NULL PRIMARY
KEY, "nfo:pageCount" INTEGER, "nfo:pageCount:graph" INTEGER);
CREATE TABLE "nfo:PlainTextDocument" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nfo:Presentation" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nfo:RasterImage" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nfo:RegionOfInterest" (ID INTEGER NOT NULL PRIMARY KEY,
"nfo:regionOfInterestX" REAL, "nfo:regionOfInterestX:graph" INTEGER,
"nfo:regionOfInterestY" REAL, "nfo:regionOfInterestY:graph" INTEGER,
"nfo:regionOfInterestWidth" REAL, "nfo:regionOfInterestWidth:graph"
INTEGER, "nfo:regionOfInterestHeight" REAL,
"nfo:regionOfInterestHeight:graph" INTEGER, "nfo:regionOfInterestType"
INTEGER, "nfo:regionOfInterestType:graph" INTEGER, "nfo:roiRefersTo"
INTEGER, "nfo:roiRefersTo:graph" INTEGER);
CREATE TABLE "nfo:RegionOfInterestContent" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nfo:RemoteDataObject" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nfo:RemotePortAddress" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nfo:Software" (ID INTEGER NOT NULL PRIMARY KEY,
"nfo:conflicts" INTEGER, "nfo:conflicts:graph" INTEGER,
"nfo:supercedes" INTEGER, "nfo:supercedes:graph" INTEGER,
"nfo:softwareIcon" INTEGER, "nfo:softwareIcon:graph" INTEGER,
"nfo:softwareCmdLine" TEXT COLLATE NOCASE,
"nfo:softwareCmdLine:graph" INTEGER);
CREATE TABLE "nfo:SoftwareApplication" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nfo:SoftwareCategory" (ID INTEGER NOT NULL PRIMARY KEY,
"nfo:softwareCategoryIcon" INTEGER, "nfo:softwareCategoryIcon:graph"
INTEGER);
CREATE TABLE "nfo:SoftwareItem" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nfo:SoftwareService" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nfo:SourceCode" (ID INTEGER NOT NULL PRIMARY KEY,
"nfo:commentCharacterCount" INTEGER, "nfo:commentCharacterCount:graph"
INTEGER, "nfo:programmingLanguage" TEXT COLLATE NOCASE,
"nfo:programmingLanguage:graph" INTEGER, "nfo:definesClass" TEXT
COLLATE NOCASE, "nfo:definesClass:graph" INTEGER,
"nfo:definesFunction" TEXT COLLATE NOCASE,
"nfo:definesFunction:graph" INTEGER, "nfo:definesGlobalVariable" TEXT
COLLATE NOCASE, "nfo:definesGlobalVariable:graph" INTEGER);

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CREATE TABLE "nfo:Spreadsheet" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nfo:TextDocument" (ID INTEGER NOT NULL PRIMARY KEY,
"nfo:wordCount" INTEGER, "nfo:wordCount:graph" INTEGER,
"nfo:lineCount" INTEGER, "nfo:lineCount:graph" INTEGER,
"nfo:characterCount" INTEGER, "nfo:characterCount:graph" INTEGER);
CREATE TABLE "nfo:Trash" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nfo:VectorImage" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nfo:Video" (ID INTEGER NOT NULL PRIMARY KEY,
"nfo:frameRate" REAL, "nfo:frameRate:graph" INTEGER, "nfo:frameCount"
INTEGER, "nfo:frameCount:graph" INTEGER, "nfo:averageVideoBitrate"
REAL, "nfo:averageVideoBitrate:graph" INTEGER);
CREATE TABLE "nfo:Visual" (ID INTEGER NOT NULL PRIMARY KEY,
"nie:contentCreated" INTEGER, "nie:contentCreated:graph" INTEGER,
"nie:contentCreated:localDate" INTEGER, "nie:contentCreated:localTime"
INTEGER, "nfo:aspectRatio" REAL, "nfo:aspectRatio:graph" INTEGER,
"nfo:heading" REAL, "nfo:heading:graph" INTEGER, "nfo:tilt" REAL,
"nfo:tilt:graph" INTEGER, "nfo:interlaceMode" INTEGER,
"nfo:interlaceMode:graph" INTEGER, "nfo:height" INTEGER,
"nfo:height:graph" INTEGER, "nfo:width" INTEGER, "nfo:width:graph"
INTEGER, "nfo:colorDepth" INTEGER, "nfo:colorDepth:graph" INTEGER);
CREATE TABLE "nfo:WebHistory" (ID INTEGER NOT NULL PRIMARY KEY,
"nfo:domain" TEXT COLLATE NOCASE, "nfo:domain:graph" INTEGER,
"nfo:uri" TEXT COLLATE NOCASE, "nfo:uri:graph" INTEGER);
CREATE TABLE "nfo:Website" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nid3:ID3Audio" (ID INTEGER NOT NULL PRIMARY KEY,
"nid3:title" TEXT COLLATE NOCASE, "nid3:title:graph" INTEGER,
"nid3:albumTitle" TEXT COLLATE NOCASE, "nid3:albumTitle:graph"
INTEGER, "nid3:contentType" TEXT COLLATE NOCASE,
"nid3:contentType:graph" INTEGER, "nid3:length" INTEGER,
"nid3:length:graph" INTEGER, "nid3:recordingYear" INTEGER,
"nid3:recordingYear:graph" INTEGER, "nid3:trackNumber" TEXT COLLATE
NOCASE, "nid3:trackNumber:graph" INTEGER, "nid3:partOfSet" TEXT
COLLATE NOCASE, "nid3:partOfSet:graph" INTEGER, "nid3:comments" TEXT
COLLATE NOCASE, "nid3:comments:graph" INTEGER);
CREATE TABLE "nid3:ID3Audio_nid3:leadArtist" (ID INTEGER NOT NULL,
"nid3:leadArtist" INTEGER NOT NULL, "nid3:leadArtist:graph" INTEGER);
CREATE TABLE "nie:DataObject" (ID INTEGER NOT NULL PRIMARY KEY,
"nie:url" TEXT COLLATE NOCASE UNIQUE, "nie:url:graph" INTEGER,
"nie:byteSize" INTEGER, "nie:byteSize:graph" INTEGER,
"nie:interpretedAs" INTEGER, "nie:interpretedAs:graph" INTEGER,
"nie:lastRefreshed" INTEGER, "nie:lastRefreshed:graph" INTEGER,
"nie:lastRefreshed:localDate" INTEGER, "nie:lastRefreshed:localTime"
INTEGER, "nie:created" INTEGER, "nie:created:graph" INTEGER,
"nie:created:localDate" INTEGER, "nie:created:localTime" INTEGER,
"nfo:belongsToContainer" INTEGER, "nfo:belongsToContainer:graph"
INTEGER, "tracker:available" INTEGER, "tracker:available:graph"
INTEGER);
CREATE TABLE "nie:DataObject_nie:dataSource" (ID INTEGER NOT NULL,

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"nie:dataSource" INTEGER NOT NULL, "nie:dataSource:graph" INTEGER);
CREATE TABLE "nie:DataObject_nie:isPartOf" (ID INTEGER NOT NULL,
"nie:isPartOf" INTEGER NOT NULL, "nie:isPartOf:graph" INTEGER);
CREATE TABLE "nie:DataSource" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nie:InformationElement" (ID INTEGER NOT NULL PRIMARY
KEY, "nie:title" TEXT COLLATE NOCASE, "nie:title:graph" INTEGER,
"nie:contentLastModified" INTEGER, "nie:contentLastModified:graph"
INTEGER, "nie:contentLastModified:localDate" INTEGER,
"nie:contentLastModified:localTime" INTEGER, "nie:subject" TEXT
COLLATE NOCASE, "nie:subject:graph" INTEGER, "nie:mimeType" TEXT
COLLATE NOCASE, "nie:mimeType:graph" INTEGER, "nie:language" TEXT
COLLATE NOCASE, "nie:language:graph" INTEGER, "nie:plainTextContent"
TEXT COLLATE NOCASE, "nie:plainTextContent:graph" INTEGER,
"nie:legal" TEXT COLLATE NOCASE, "nie:legal:graph" INTEGER,
"nie:generator" TEXT COLLATE NOCASE, "nie:generator:graph" INTEGER,
"nie:description" TEXT COLLATE NOCASE, "nie:description:graph"
INTEGER, "nie:disclaimer" TEXT COLLATE NOCASE, "nie:disclaimer:graph"
INTEGER, "nie:depends" INTEGER, "nie:depends:graph" INTEGER,
"nie:links" INTEGER, "nie:links:graph" INTEGER, "nie:copyright" TEXT
COLLATE NOCASE, "nie:copyright:graph" INTEGER, "nie:comment" TEXT
COLLATE NOCASE, "nie:comment:graph" INTEGER, "nie:isStoredAs"
INTEGER, "nie:isStoredAs:graph" INTEGER, "nie:version" TEXT COLLATE
NOCASE, "nie:version:graph" INTEGER, "nie:contentCreated" INTEGER,
"nie:contentCreated:graph" INTEGER, "nie:contentCreated:localDate"
INTEGER, "nie:contentCreated:localTime" INTEGER, "nie:contentAccessed"
INTEGER, "nie:contentAccessed:graph" INTEGER,
"nie:contentAccessed:localDate" INTEGER,
"nie:contentAccessed:localTime" INTEGER, "nie:license" TEXT COLLATE
NOCASE, "nie:license:graph" INTEGER, "nie:identifier" TEXT COLLATE
NOCASE, "nie:identifier:graph" INTEGER, "nie:licenseType" TEXT
COLLATE NOCASE, "nie:licenseType:graph" INTEGER, "nie:characterSet"
TEXT COLLATE NOCASE, "nie:characterSet:graph" INTEGER,
"nie:contentSize" INTEGER, "nie:contentSize:graph" INTEGER,
"nie:rootElementOf" INTEGER, "nie:rootElementOf:graph" INTEGER,
"nie:usageCounter" INTEGER, "nie:usageCounter:graph" INTEGER,
"nco:publisher" INTEGER, "nco:publisher:graph" INTEGER,
"nfo:isContentEncrypted" INTEGER, "nfo:isContentEncrypted:graph"
INTEGER, "slo:location" INTEGER, "slo:location:graph" INTEGER,
"nfo:isBootable" INTEGER, "nfo:isBootable:graph" INTEGER, "osinfo:id"
TEXT COLLATE NOCASE, "osinfo:id:graph" INTEGER, "osinfo:mediaId" TEXT
COLLATE NOCASE, "osinfo:mediaId:graph" INTEGER);
CREATE TABLE "nie:InformationElement_mlo:location" (ID INTEGER NOT
NULL, "mlo:location" INTEGER NOT NULL, "mlo:location:graph" INTEGER);
CREATE TABLE "nie:InformationElement_nao:hasProperty" (ID INTEGER NOT
NULL, "nao:hasProperty" INTEGER NOT NULL, "nao:hasProperty:graph"
INTEGER);
CREATE TABLE "nie:InformationElement_nco:contributor" (ID INTEGER NOT
NULL, "nco:contributor" INTEGER NOT NULL, "nco:contributor:graph"

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INTEGER);
CREATE TABLE "nie:InformationElement_nco:creator" (ID INTEGER NOT
NULL, "nco:creator" INTEGER NOT NULL, "nco:creator:graph" INTEGER);
CREATE TABLE "nie:InformationElement_nie:hasLogicalPart" (ID INTEGER
NOT NULL, "nie:hasLogicalPart" INTEGER NOT NULL,
"nie:hasLogicalPart:graph" INTEGER);
CREATE TABLE "nie:InformationElement_nie:hasPart" (ID INTEGER NOT
NULL, "nie:hasPart" INTEGER NOT NULL, "nie:hasPart:graph" INTEGER);
CREATE TABLE "nie:InformationElement_nie:informationElementDate" (ID
INTEGER NOT NULL, "nie:informationElementDate" INTEGER NOT NULL,
"nie:informationElementDate:graph" INTEGER,
"nie:informationElementDate:localDate" INTEGER NOT NULL,
"nie:informationElementDate:localTime" INTEGER NOT NULL);
CREATE TABLE "nie:InformationElement_nie:isLogicalPartOf" (ID INTEGER
NOT NULL, "nie:isLogicalPartOf" INTEGER NOT NULL,
"nie:isLogicalPartOf:graph" INTEGER);
CREATE TABLE "nie:InformationElement_nie:keyword" (ID INTEGER NOT
NULL, "nie:keyword" TEXT NOT NULL, "nie:keyword:graph" INTEGER);
CREATE TABLE "nie:InformationElement_nie:relatedTo" (ID INTEGER NOT
NULL, "nie:relatedTo" INTEGER NOT NULL, "nie:relatedTo:graph"
INTEGER);
CREATE TABLE "nmm:AnalogRadio" (ID INTEGER NOT NULL PRIMARY KEY,
"nmm:modulation" INTEGER, "nmm:modulation:graph" INTEGER,
"nmm:frequency" INTEGER, "nmm:frequency:graph" INTEGER);
CREATE TABLE "nmm:Artist" (ID INTEGER NOT NULL PRIMARY KEY,
"nmm:artistName" TEXT COLLATE NOCASE, "nmm:artistName:graph"
INTEGER);
CREATE TABLE "nmm:DigitalRadio" (ID INTEGER NOT NULL PRIMARY KEY,
"nmm:streamingBitrate" INTEGER, "nmm:streamingBitrate:graph" INTEGER,
"nmm:encoding" TEXT COLLATE NOCASE, "nmm:encoding:graph" INTEGER,
"nmm:protocol" TEXT COLLATE NOCASE, "nmm:protocol:graph" INTEGER);
CREATE TABLE "nmm:Flash" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nmm:ImageList" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nmm:MeteringMode" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nmm:MusicAlbum" (ID INTEGER NOT NULL PRIMARY KEY,
"nie:title" TEXT COLLATE NOCASE, "nie:title:graph" INTEGER,
"nmm:albumTrackCount" INTEGER, "nmm:albumTrackCount:graph" INTEGER,
"nmm:albumTitle" TEXT COLLATE NOCASE, "nmm:albumTitle:graph" INTEGER,
"nmm:albumDuration" INTEGER, "nmm:albumDuration:graph" INTEGER,
"nmm:albumGain" INTEGER, "nmm:albumGain:graph" INTEGER,
"nmm:albumPeakGain" INTEGER, "nmm:albumPeakGain:graph" INTEGER);
CREATE TABLE "nmm:MusicAlbumDisc" (ID INTEGER NOT NULL PRIMARY KEY,
"nmm:albumDiscAlbum" INTEGER, "nmm:albumDiscAlbum:graph" INTEGER,
"nmm:musicCDIdentifier" TEXT COLLATE NOCASE,
"nmm:musicCDIdentifier:graph" INTEGER, "nmm:setNumber" INTEGER,
"nmm:setNumber:graph" INTEGER);
CREATE TABLE "nmm:MusicAlbum_nmm:albumArtist" (ID INTEGER NOT NULL,
"nmm:albumArtist" INTEGER NOT NULL, "nmm:albumArtist:graph" INTEGER);

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CREATE TABLE "nmm:MusicPiece" (ID INTEGER NOT NULL PRIMARY KEY,
"nie:title" TEXT COLLATE NOCASE, "nie:title:graph" INTEGER,
"nmm:musicAlbum" INTEGER, "nmm:musicAlbum:graph" INTEGER,
"nmm:musicAlbumDisc" INTEGER, "nmm:musicAlbumDisc:graph" INTEGER,
"nmm:beatsPerMinute" INTEGER, "nmm:beatsPerMinute:graph" INTEGER,
"nmm:performer" INTEGER, "nmm:performer:graph" INTEGER, "nmm:composer"
INTEGER, "nmm:composer:graph" INTEGER, "nmm:lyricist" INTEGER,
"nmm:lyricist:graph" INTEGER, "nmm:trackNumber" INTEGER,
"nmm:trackNumber:graph" INTEGER,
"nmm:internationalStandardRecordingCode" TEXT COLLATE NOCASE,
"nmm:internationalStandardRecordingCode:graph" INTEGER);
CREATE TABLE "nmm:MusicPiece_nmm:lyrics" (ID INTEGER NOT NULL,
"nmm:lyrics" INTEGER NOT NULL, "nmm:lyrics:graph" INTEGER);
CREATE TABLE "nmm:Photo" (ID INTEGER NOT NULL PRIMARY KEY,
"nmm:exposureTime" REAL, "nmm:exposureTime:graph" INTEGER, "nmm:flash"
INTEGER, "nmm:flash:graph" INTEGER, "nmm:fnumber" REAL,
"nmm:fnumber:graph" INTEGER, "nmm:focalLength" REAL,
"nmm:focalLength:graph" INTEGER, "nmm:isoSpeed" REAL,
"nmm:isoSpeed:graph" INTEGER, "nmm:meteringMode" INTEGER,
"nmm:meteringMode:graph" INTEGER, "nmm:whiteBalance" INTEGER,
"nmm:whiteBalance:graph" INTEGER, "nmm:isCropped" INTEGER,
"nmm:isCropped:graph" INTEGER, "nmm:isColorCorrected" INTEGER,
"nmm:isColorCorrected:graph" INTEGER);
CREATE TABLE "nmm:Playlist" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nmm:RadioModulation" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nmm:RadioStation" (ID INTEGER NOT NULL PRIMARY KEY,
"nmm:radioIcon" INTEGER, "nmm:radioIcon:graph" INTEGER, "nmm:radioPTY"
INTEGER, "nmm:radioPTY:graph" INTEGER);
CREATE TABLE "nmm:RadioStation_nmm:carrier" (ID INTEGER NOT NULL,
"nmm:carrier" INTEGER NOT NULL, "nmm:carrier:graph" INTEGER);
CREATE TABLE "nmm:SynchronizedText" (ID INTEGER NOT NULL PRIMARY KEY,
"nmm:isForHearingImpaired" INTEGER, "nmm:isForHearingImpaired:graph"
INTEGER);
CREATE TABLE "nmm:Video" (ID INTEGER NOT NULL PRIMARY KEY,
"nmm:videoAlbum" INTEGER, "nmm:videoAlbum:graph" INTEGER,
"nmm:isSeries" INTEGER, "nmm:isSeries:graph" INTEGER, "nmm:season"
INTEGER, "nmm:season:graph" INTEGER, "nmm:episodeNumber" INTEGER,
"nmm:episodeNumber:graph" INTEGER, "nmm:runTime" INTEGER,
"nmm:runTime:graph" INTEGER, "nmm:synopsis" TEXT COLLATE NOCASE,
"nmm:synopsis:graph" INTEGER, "nmm:MPAARating" TEXT COLLATE NOCASE,
"nmm:MPAARating:graph" INTEGER, "nmm:category" TEXT COLLATE NOCASE,
"nmm:category:graph" INTEGER, "nmm:producedBy" INTEGER,
"nmm:producedBy:graph" INTEGER, "nmm:hasSubtitle" INTEGER,
"nmm:hasSubtitle:graph" INTEGER, "nmm:isContentEncrypted" INTEGER,
"nmm:isContentEncrypted:graph" INTEGER, "mtp:fourCC" TEXT COLLATE
NOCASE, "mtp:fourCC:graph" INTEGER, "mtp:waveformat" TEXT COLLATE
NOCASE, "mtp:waveformat:graph" INTEGER);
CREATE TABLE "nmm:Video_mtp:scantype" (ID INTEGER NOT NULL,

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"mtp:scantype" INTEGER NOT NULL, "mtp:scantype:graph" INTEGER);
CREATE TABLE "nmm:Video_nmm:director" (ID INTEGER NOT NULL,
"nmm:director" INTEGER NOT NULL, "nmm:director:graph" INTEGER);
CREATE TABLE "nmm:Video_nmm:leadActor" (ID INTEGER NOT NULL,
"nmm:leadActor" INTEGER NOT NULL, "nmm:leadActor:graph" INTEGER);
CREATE TABLE "nmm:Video_nmm:subtitle" (ID INTEGER NOT NULL,
"nmm:subtitle" INTEGER NOT NULL, "nmm:subtitle:graph" INTEGER);
CREATE TABLE "nmm:WhiteBalance" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nmo:Attachment" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nmo:Call" (ID INTEGER NOT NULL PRIMARY KEY,
"nmo:sentDate" INTEGER, "nmo:sentDate:graph" INTEGER,
"nmo:sentDate:localDate" INTEGER, "nmo:sentDate:localTime" INTEGER,
"nmo:duration" INTEGER, "nmo:duration:graph" INTEGER);
CREATE TABLE "nmo:CommunicationChannel" (ID INTEGER NOT NULL PRIMARY
KEY, "nmo:lastMessageDate" INTEGER, "nmo:lastMessageDate:graph"
INTEGER, "nmo:lastMessageDate:localDate" INTEGER,
"nmo:lastMessageDate:localTime" INTEGER,
"nmo:lastSuccessfulMessageDate" INTEGER,
"nmo:lastSuccessfulMessageDate:graph" INTEGER,
"nmo:lastSuccessfulMessageDate:localDate" INTEGER,
"nmo:lastSuccessfulMessageDate:localTime" INTEGER);
CREATE TABLE "nmo:CommunicationChannel_nmo:hasParticipant" (ID INTEGER
NOT NULL, "nmo:hasParticipant" INTEGER NOT NULL,
"nmo:hasParticipant:graph" INTEGER);
CREATE TABLE "nmo:Conversation" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nmo:DeliveryStatus" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nmo:Email" (ID INTEGER NOT NULL PRIMARY KEY,
"nmo:hasContent" INTEGER, "nmo:hasContent:graph" INTEGER,
"nmo:isFlagged" INTEGER, "nmo:isFlagged:graph" INTEGER, "nmo:isRecent"
INTEGER, "nmo:isRecent:graph" INTEGER, "nmo:status" TEXT COLLATE
NOCASE, "nmo:status:graph" INTEGER, "nmo:responseType" TEXT COLLATE
NOCASE, "nmo:responseType:graph" INTEGER);
CREATE TABLE "nmo:Email_nmo:contentMimeType" (ID INTEGER NOT NULL,
"nmo:contentMimeType" TEXT NOT NULL, "nmo:contentMimeType:graph"
INTEGER);
CREATE TABLE "nmo:IMMessage" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nmo:MMSMessage" (ID INTEGER NOT NULL PRIMARY KEY,
"nmo:mmsHasContent" INTEGER, "nmo:mmsHasContent:graph" INTEGER);
CREATE TABLE "nmo:MailAccount" (ID INTEGER NOT NULL PRIMARY KEY,
"nmo:accountName" TEXT COLLATE NOCASE, "nmo:accountName:graph"
INTEGER, "nmo:accountDisplayName" TEXT COLLATE NOCASE,
"nmo:accountDisplayName:graph" INTEGER, "nmo:fromAddress" INTEGER,
"nmo:fromAddress:graph" INTEGER, "nmo:signature" TEXT COLLATE NOCASE,
"nmo:signature:graph" INTEGER);
CREATE TABLE "nmo:MailFolder" (ID INTEGER NOT NULL PRIMARY KEY,
"nmo:folderName" TEXT COLLATE NOCASE, "nmo:folderName:graph" INTEGER,
"nmo:serverCount" INTEGER, "nmo:serverCount:graph" INTEGER,
"nmo:serverUnreadCount" INTEGER, "nmo:serverUnreadCount:graph"

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INTEGER);
CREATE TABLE "nmo:MailboxDataObject" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nmo:Message" (ID INTEGER NOT NULL PRIMARY KEY,
"nmo:sentDate" INTEGER, "nmo:sentDate:graph" INTEGER,
"nmo:sentDate:localDate" INTEGER, "nmo:sentDate:localTime" INTEGER,
"nmo:from" INTEGER, "nmo:from:graph" INTEGER, "nmo:isAnswered"
INTEGER, "nmo:isAnswered:graph" INTEGER, "nmo:isDeleted" INTEGER,
"nmo:isDeleted:graph" INTEGER, "nmo:isDraft" INTEGER,
"nmo:isDraft:graph" INTEGER, "nmo:isRead" INTEGER, "nmo:isRead:graph"
INTEGER, "nmo:isSent" INTEGER, "nmo:isSent:graph" INTEGER,
"nmo:isEmergency" INTEGER, "nmo:isEmergency:graph" INTEGER,
"nmo:htmlMessageContent" TEXT COLLATE NOCASE,
"nmo:htmlMessageContent:graph" INTEGER, "nmo:messageId" TEXT COLLATE
NOCASE, "nmo:messageId:graph" INTEGER, "nmo:messageSubject" TEXT
COLLATE NOCASE, "nmo:messageSubject:graph" INTEGER,
"nmo:receivedDate" INTEGER, "nmo:receivedDate:graph" INTEGER,
"nmo:receivedDate:localDate" INTEGER, "nmo:receivedDate:localTime"
INTEGER, "nmo:replyTo" INTEGER, "nmo:replyTo:graph" INTEGER,
"nmo:sender" INTEGER, "nmo:sender:graph" INTEGER, "nmo:conversation"
INTEGER, "nmo:conversation:graph" INTEGER, "nmo:communicationChannel"
INTEGER, "nmo:communicationChannel:graph" INTEGER,
"nmo:deliveryStatus" INTEGER, "nmo:deliveryStatus:graph" INTEGER,
"nmo:reportDelivery" INTEGER, "nmo:reportDelivery:graph" INTEGER,
"nmo:sentWithReportRead" INTEGER, "nmo:sentWithReportRead:graph"
INTEGER, "nmo:reportReadStatus" INTEGER, "nmo:reportReadStatus:graph"
INTEGER, "nmo:mustAnswerReportRead" INTEGER,
"nmo:mustAnswerReportRead:graph" INTEGER, "nmo:mmsId" TEXT COLLATE
NOCASE, "nmo:mmsId:graph" INTEGER);
CREATE TABLE "nmo:MessageHeader" (ID INTEGER NOT NULL PRIMARY KEY,
"nmo:headerName" TEXT COLLATE NOCASE, "nmo:headerName:graph" INTEGER,
"nmo:headerValue" TEXT COLLATE NOCASE, "nmo:headerValue:graph"
INTEGER);
CREATE TABLE "nmo:Message_nmo:bcc" (ID INTEGER NOT NULL, "nmo:bcc"
INTEGER NOT NULL, "nmo:bcc:graph" INTEGER);
CREATE TABLE "nmo:Message_nmo:cc" (ID INTEGER NOT NULL, "nmo:cc"
INTEGER NOT NULL, "nmo:cc:graph" INTEGER);
CREATE TABLE "nmo:Message_nmo:hasAttachment" (ID INTEGER NOT NULL,
"nmo:hasAttachment" INTEGER NOT NULL, "nmo:hasAttachment:graph"
INTEGER);
CREATE TABLE "nmo:Message_nmo:inReplyTo" (ID INTEGER NOT NULL,
"nmo:inReplyTo" INTEGER NOT NULL, "nmo:inReplyTo:graph" INTEGER);
CREATE TABLE "nmo:Message_nmo:messageHeader" (ID INTEGER NOT NULL,
"nmo:messageHeader" INTEGER NOT NULL, "nmo:messageHeader:graph"
INTEGER);
CREATE TABLE "nmo:Message_nmo:recipient" (ID INTEGER NOT NULL,
"nmo:recipient" INTEGER NOT NULL, "nmo:recipient:graph" INTEGER);
CREATE TABLE "nmo:Message_nmo:references" (ID INTEGER NOT NULL,
"nmo:references" INTEGER NOT NULL, "nmo:references:graph" INTEGER);

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CREATE TABLE "nmo:Message_nmo:to" (ID INTEGER NOT NULL, "nmo:to"
INTEGER NOT NULL, "nmo:to:graph" INTEGER);
CREATE TABLE "nmo:MimePart" (ID INTEGER NOT NULL PRIMARY KEY,
"nmo:charSet" TEXT COLLATE NOCASE, "nmo:charSet:graph" INTEGER,
"nmo:contentId" TEXT COLLATE NOCASE, "nmo:contentId:graph" INTEGER,
"nmo:contentTransferEncoding" TEXT COLLATE NOCASE,
"nmo:contentTransferEncoding:graph" INTEGER, "nmo:contentDescription"
TEXT COLLATE NOCASE, "nmo:contentDescription:graph" INTEGER,
"nmo:contentDisposition" TEXT COLLATE NOCASE,
"nmo:contentDisposition:graph" INTEGER);
CREATE TABLE "nmo:MimePart_nmo:mimeHeader" (ID INTEGER NOT NULL,
"nmo:mimeHeader" INTEGER NOT NULL, "nmo:mimeHeader:graph" INTEGER);
CREATE TABLE "nmo:Multipart" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nmo:Multipart_nmo:partBoundary" (ID INTEGER NOT NULL,
"nmo:partBoundary" TEXT NOT NULL, "nmo:partBoundary:graph" INTEGER);
CREATE TABLE "nmo:PermanentChannel" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nmo:PhoneMessage" (ID INTEGER NOT NULL PRIMARY KEY,
"nmo:fromVCard" INTEGER, "nmo:fromVCard:graph" INTEGER, "nmo:encoding"
TEXT COLLATE NOCASE, "nmo:encoding:graph" INTEGER,
"nmo:phoneMessageId" INTEGER, "nmo:phoneMessageId:graph" INTEGER,
"nmo:validityPeriod" INTEGER, "nmo:validityPeriod:graph" INTEGER);
CREATE TABLE "nmo:PhoneMessageFolder" (ID INTEGER NOT NULL PRIMARY
KEY, "nmo:phoneMessageFolderId" TEXT COLLATE NOCASE,
"nmo:phoneMessageFolderId:graph" INTEGER);
CREATE TABLE "nmo:PhoneMessageFolder_nmo:containsPhoneMessage" (ID
INTEGER NOT NULL, "nmo:containsPhoneMessage" INTEGER NOT NULL,
"nmo:containsPhoneMessage:graph" INTEGER);
CREATE TABLE "nmo:PhoneMessageFolder_nmo:containsPhoneMessageFolder"
(ID INTEGER NOT NULL, "nmo:containsPhoneMessageFolder" INTEGER NOT
NULL, "nmo:containsPhoneMessageFolder:graph" INTEGER);
CREATE TABLE "nmo:PhoneMessage_nmo:toVCard" (ID INTEGER NOT NULL,
"nmo:toVCard" INTEGER NOT NULL, "nmo:toVCard:graph" INTEGER);
CREATE TABLE "nmo:ReportReadStatus" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nmo:SMSMessage" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nmo:TransientChannel" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nmo:VOIPCall" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "nrl:InverseFunctionalProperty" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "osinfo:Installer" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "poi:ObjectOfInterest" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "rdf:Property" (ID INTEGER NOT NULL PRIMARY KEY,
"rdfs:domain" INTEGER, "rdfs:domain:graph" INTEGER, "rdfs:range"
INTEGER, "rdfs:range:graph" INTEGER, "tracker:indexed" INTEGER,
"tracker:indexed:graph" INTEGER, "tracker:secondaryIndex" INTEGER,
"tracker:secondaryIndex:graph" INTEGER, "tracker:fulltextIndexed"
INTEGER, "tracker:fulltextIndexed:graph" INTEGER,
"tracker:fulltextNoLimit" INTEGER, "tracker:fulltextNoLimit:graph"
INTEGER, "tracker:transient" INTEGER, "tracker:transient:graph"
INTEGER, "tracker:weight" INTEGER, "tracker:weight:graph" INTEGER,

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"tracker:defaultValue" TEXT COLLATE NOCASE,
"tracker:defaultValue:graph" INTEGER, "nrl:maxCardinality" INTEGER,
"nrl:maxCardinality:graph" INTEGER, "tracker:writeback" INTEGER,
"tracker:writeback:graph" INTEGER, "tracker:forceJournal" INTEGER,
"tracker:forceJournal:graph" INTEGER);
CREATE TABLE "rdf:Property_rdfs:subPropertyOf" (ID INTEGER NOT NULL,
"rdfs:subPropertyOf" INTEGER NOT NULL, "rdfs:subPropertyOf:graph"
INTEGER);
CREATE TABLE "rdfs:Class" (ID INTEGER NOT NULL PRIMARY KEY,
"tracker:notify" INTEGER, "tracker:notify:graph" INTEGER);
CREATE TABLE "rdfs:Class_rdfs:subClassOf" (ID INTEGER NOT NULL,
"rdfs:subClassOf" INTEGER NOT NULL, "rdfs:subClassOf:graph" INTEGER);
CREATE TABLE "rdfs:Class_tracker:domainIndex" (ID INTEGER NOT NULL,
"tracker:domainIndex" INTEGER NOT NULL, "tracker:domainIndex:graph"
INTEGER);
CREATE TABLE "rdfs:Literal" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "rdfs:Resource" (ID INTEGER NOT NULL PRIMARY KEY,
Available INTEGER NOT NULL, "rdfs:comment" TEXT COLLATE NOCASE,
"rdfs:comment:graph" INTEGER, "rdfs:label" TEXT COLLATE NOCASE,
"rdfs:label:graph" INTEGER, "tracker:added" INTEGER,
"tracker:added:graph" INTEGER, "tracker:added:localDate" INTEGER,
"tracker:added:localTime" INTEGER, "tracker:modified" INTEGER,
"tracker:modified:graph" INTEGER, "tracker:damaged" INTEGER,
"tracker:damaged:graph" INTEGER, "dc:title" TEXT COLLATE NOCASE,
"dc:title:graph" INTEGER, "dc:creator" TEXT COLLATE NOCASE,
"dc:creator:graph" INTEGER, "dc:subject" TEXT COLLATE NOCASE,
"dc:subject:graph" INTEGER, "dc:description" TEXT COLLATE NOCASE,
"dc:description:graph" INTEGER, "dc:publisher" TEXT COLLATE NOCASE,
"dc:publisher:graph" INTEGER, "dc:type" TEXT COLLATE NOCASE,
"dc:type:graph" INTEGER, "dc:format" TEXT COLLATE NOCASE,
"dc:format:graph" INTEGER, "dc:identifier" TEXT COLLATE NOCASE,
"dc:identifier:graph" INTEGER, "dc:language" TEXT COLLATE NOCASE,
"dc:language:graph" INTEGER, "dc:coverage" TEXT COLLATE NOCASE,
"dc:coverage:graph" INTEGER, "dc:rights" TEXT COLLATE NOCASE,
"dc:rights:graph" INTEGER, "nao:identifier" TEXT COLLATE NOCASE,
"nao:identifier:graph" INTEGER, "nao:numericRating" REAL,
"nao:numericRating:graph" INTEGER, "nao:lastModified" INTEGER,
"nao:lastModified:graph" INTEGER, "nao:lastModified:localDate"
INTEGER, "nao:lastModified:localTime" INTEGER);
CREATE TABLE "rdfs:Resource_dc:contributor" (ID INTEGER NOT NULL,
"dc:contributor" TEXT NOT NULL, "dc:contributor:graph" INTEGER);
CREATE TABLE "rdfs:Resource_dc:date" (ID INTEGER NOT NULL, "dc:date"
INTEGER NOT NULL, "dc:date:graph" INTEGER, "dc:date:localDate" INTEGER
NOT NULL, "dc:date:localTime" INTEGER NOT NULL);
CREATE TABLE "rdfs:Resource_dc:relation" (ID INTEGER NOT NULL,
"dc:relation" TEXT NOT NULL, "dc:relation:graph" INTEGER);
CREATE TABLE "rdfs:Resource_dc:source" (ID INTEGER NOT NULL,
"dc:source" INTEGER NOT NULL, "dc:source:graph" INTEGER);

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CREATE TABLE "rdfs:Resource_nao:deprecated" (ID INTEGER NOT NULL,
"nao:deprecated" INTEGER NOT NULL, "nao:deprecated:graph" INTEGER);
CREATE TABLE "rdfs:Resource_nao:hasTag" (ID INTEGER NOT NULL,
"nao:hasTag" INTEGER NOT NULL, "nao:hasTag:graph" INTEGER);
CREATE TABLE "rdfs:Resource_nao:isRelated" (ID INTEGER NOT NULL,
"nao:isRelated" INTEGER NOT NULL, "nao:isRelated:graph" INTEGER);
CREATE TABLE "rdfs:Resource_rdf:type" (ID INTEGER NOT NULL, "rdf:type"
INTEGER NOT NULL, "rdf:type:graph" INTEGER);
CREATE TABLE "scal:AccessLevel" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "scal:AttendanceStatus" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "scal:Attendee" (ID INTEGER NOT NULL PRIMARY KEY,
"scal:attendanceStatus" INTEGER, "scal:attendanceStatus:graph"
INTEGER, "scal:attendeeRole" INTEGER, "scal:attendeeRole:graph"
INTEGER, "scal:attendeeContact" INTEGER, "scal:attendeeContact:graph"
INTEGER, "scal:rsvp" INTEGER, "scal:rsvp:graph" INTEGER,
"scal:calendarUserType" INTEGER, "scal:calendarUserType:graph"
INTEGER);
CREATE TABLE "scal:AttendeeRole" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "scal:Attendee_scal:delegated-from" (ID INTEGER NOT NULL,
"scal:delegated-from" INTEGER NOT NULL, "scal:delegated-from:graph"
INTEGER);
CREATE TABLE "scal:Attendee_scal:delegated-to" (ID INTEGER NOT NULL,
"scal:delegated-to" INTEGER NOT NULL, "scal:delegated-to:graph"
INTEGER);
CREATE TABLE "scal:Attendee_scal:member" (ID INTEGER NOT NULL,
"scal:member" INTEGER NOT NULL, "scal:member:graph" INTEGER);
CREATE TABLE "scal:Attendee_scal:sent-by" (ID INTEGER NOT NULL,
"scal:sent-by" INTEGER NOT NULL, "scal:sent-by:graph" INTEGER);
CREATE TABLE "scal:Calendar" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "scal:CalendarAlarm" (ID INTEGER NOT NULL PRIMARY KEY,
"scal:alarmOffset" INTEGER, "scal:alarmOffset:graph" INTEGER);
CREATE TABLE "scal:CalendarAlarm_scal:alarmAttendee" (ID INTEGER NOT
NULL, "scal:alarmAttendee" INTEGER NOT NULL,
"scal:alarmAttendee:graph" INTEGER);
CREATE TABLE "scal:CalendarItem" (ID INTEGER NOT NULL PRIMARY KEY,
"scal:textLocation" INTEGER, "scal:textLocation:graph" INTEGER,
"scal:resources" TEXT COLLATE NOCASE, "scal:resources:graph" INTEGER,
"scal:transparency" INTEGER, "scal:transparency:graph" INTEGER,
"scal:calendarItemAlarm" INTEGER, "scal:calendarItemAlarm:graph"
INTEGER, "scal:start" INTEGER, "scal:start:graph" INTEGER, "scal:end"
INTEGER, "scal:end:graph" INTEGER, "scal:isAllDay" INTEGER,
"scal:isAllDay:graph" INTEGER, "scal:priority" INTEGER,
"scal:priority:graph" INTEGER, "scal:rdate" INTEGER,
"scal:rdate:graph" INTEGER, "scal:exceptionRDate" INTEGER,
"scal:exceptionRDate:graph" INTEGER);
CREATE TABLE "scal:CalendarItem_scal:access" (ID INTEGER NOT NULL,
"scal:access" INTEGER NOT NULL, "scal:access:graph" INTEGER);
CREATE TABLE "scal:CalendarItem_scal:attachment" (ID INTEGER NOT NULL,

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"scal:attachment" INTEGER NOT NULL, "scal:attachment:graph" INTEGER);
CREATE TABLE "scal:CalendarItem_scal:attendee" (ID INTEGER NOT NULL,
"scal:attendee" INTEGER NOT NULL, "scal:attendee:graph" INTEGER);
CREATE TABLE "scal:CalendarItem_scal:belongsToCalendar" (ID INTEGER
NOT NULL, "scal:belongsToCalendar" INTEGER NOT NULL,
"scal:belongsToCalendar:graph" INTEGER);
CREATE TABLE "scal:CalendarItem_scal:contact" (ID INTEGER NOT NULL,
"scal:contact" INTEGER NOT NULL, "scal:contact:graph" INTEGER);
CREATE TABLE "scal:CalendarItem_scal:rrule" (ID INTEGER NOT NULL,
"scal:rrule" INTEGER NOT NULL, "scal:rrule:graph" INTEGER);
CREATE TABLE "scal:CalendarUserType" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "scal:Event" (ID INTEGER NOT NULL PRIMARY KEY,
"scal:eventStatus" INTEGER, "scal:eventStatus:graph" INTEGER);
CREATE TABLE "scal:EventStatus" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "scal:Journal" (ID INTEGER NOT NULL PRIMARY KEY,
"scal:journalStatus" INTEGER, "scal:journalStatus:graph" INTEGER);
CREATE TABLE "scal:JournalStatus" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "scal:RSVPValues" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "scal:RecurrenceRule" (ID INTEGER NOT NULL PRIMARY KEY,
"scal:recurrencePattern" TEXT COLLATE NOCASE,
"scal:recurrencePattern:graph" INTEGER, "scal:recurrenceStartDate"
INTEGER, "scal:recurrenceStartDate:graph" INTEGER, "scal:exception"
INTEGER, "scal:exception:graph" INTEGER);
CREATE TABLE "scal:TimePoint" (ID INTEGER NOT NULL PRIMARY KEY,
"scal:dateTime" INTEGER, "scal:dateTime:graph" INTEGER,
"scal:dateTime:localDate" INTEGER, "scal:dateTime:localTime" INTEGER,
"scal:TimeZone" TEXT COLLATE NOCASE, "scal:TimeZone:graph" INTEGER);
CREATE TABLE "scal:Todo" (ID INTEGER NOT NULL PRIMARY KEY,
"scal:todoStatus" INTEGER, "scal:todoStatus:graph" INTEGER, "scal:due"
INTEGER, "scal:due:graph" INTEGER, "scal:completed" INTEGER,
"scal:completed:graph" INTEGER, "scal:percentComplete" INTEGER,
"scal:percentComplete:graph" INTEGER);
CREATE TABLE "scal:TodoStatus" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "scal:TransparencyValues" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "slo:GeoLocation" (ID INTEGER NOT NULL PRIMARY KEY,
"slo:latitude" REAL, "slo:latitude:graph" INTEGER, "slo:longitude"
REAL, "slo:longitude:graph" INTEGER, "slo:verticalAccuracy" REAL,
"slo:verticalAccuracy:graph" INTEGER, "slo:horizontalAccuracy" REAL,
"slo:horizontalAccuracy:graph" INTEGER, "slo:altitude" REAL,
"slo:altitude:graph" INTEGER, "slo:boundingLatitudeMin" REAL,
"slo:boundingLatitudeMin:graph" INTEGER, "slo:boundingLatitudeMax"
REAL, "slo:boundingLatitudeMax:graph" INTEGER,
"slo:boundingLongitudeMin" REAL, "slo:boundingLongitudeMin:graph"
INTEGER, "slo:boundingLongitudeMax" REAL,
"slo:boundingLongitudeMax:graph" INTEGER, "slo:radius" REAL,
"slo:radius:graph" INTEGER, "slo:timestamp" INTEGER,
"slo:timestamp:graph" INTEGER, "slo:timestamp:localDate" INTEGER,
"slo:timestamp:localTime" INTEGER, "slo:postalAddress" INTEGER,

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"slo:postalAddress:graph" INTEGER);
CREATE TABLE "slo:Landmark" (ID INTEGER NOT NULL PRIMARY KEY,
"slo:iconUrl" INTEGER, "slo:iconUrl:graph" INTEGER);
CREATE TABLE "slo:LandmarkCategory" (ID INTEGER NOT NULL PRIMARY KEY,
"slo:isRemovable" INTEGER, "slo:isRemovable:graph" INTEGER,
"slo:categoryIconUrl" INTEGER, "slo:categoryIconUrl:graph" INTEGER);
CREATE TABLE "slo:Landmark_slo:belongsToCategory" (ID INTEGER NOT
NULL, "slo:belongsToCategory" INTEGER NOT NULL,
"slo:belongsToCategory:graph" INTEGER);
CREATE TABLE "slo:Landmark_slo:hasContact" (ID INTEGER NOT NULL,
"slo:hasContact" INTEGER NOT NULL, "slo:hasContact:graph" INTEGER);
CREATE TABLE "slo:Route" (ID INTEGER NOT NULL PRIMARY KEY,
"slo:startTime" INTEGER, "slo:startTime:graph" INTEGER,
"slo:startTime:localDate" INTEGER, "slo:startTime:localTime" INTEGER,
"slo:endTime" INTEGER, "slo:endTime:graph" INTEGER,
"slo:endTime:localDate" INTEGER, "slo:endTime:localTime" INTEGER);
CREATE TABLE "slo:Route_slo:routeDetails" (ID INTEGER NOT NULL,
"slo:routeDetails" TEXT NOT NULL, "slo:routeDetails:graph" INTEGER);
CREATE TABLE "tracker:Namespace" (ID INTEGER NOT NULL PRIMARY KEY,
"tracker:prefix" TEXT COLLATE NOCASE, "tracker:prefix:graph"
INTEGER);
CREATE TABLE "tracker:Ontology" (ID INTEGER NOT NULL PRIMARY KEY);
CREATE TABLE "tracker:Volume" (ID INTEGER NOT NULL PRIMARY KEY,
"tracker:isMounted" INTEGER, "tracker:isMounted:graph" INTEGER,
"tracker:unmountDate" INTEGER, "tracker:unmountDate:graph" INTEGER,
"tracker:unmountDate:localDate" INTEGER,
"tracker:unmountDate:localTime" INTEGER, "tracker:mountPoint" INTEGER,
"tracker:mountPoint:graph" INTEGER, "tracker:isRemovable" INTEGER,
"tracker:isRemovable:graph" INTEGER, "tracker:isOptical" INTEGER,
"tracker:isOptical:graph" INTEGER);
CREATE UNIQUE INDEX "mfo:FeedMessage_mfo:enclosureList_ID_ID" ON
"mfo:FeedMessage_mfo:enclosureList" (ID, "mfo:enclosureList");
CREATE UNIQUE INDEX "mlo:GeoBoundingBox_mlo:bbNorthWest_ID_ID" ON
"mlo:GeoBoundingBox_mlo:bbNorthWest" (ID, "mlo:bbNorthWest");
CREATE UNIQUE INDEX "mlo:GeoBoundingBox_mlo:bbSouthEast_ID_ID" ON
"mlo:GeoBoundingBox_mlo:bbSouthEast" (ID, "mlo:bbSouthEast");
CREATE INDEX "mlo:GeoLocation_mlo:asBoundingBox_ID" ON
"mlo:GeoLocation_mlo:asBoundingBox" (ID);
CREATE UNIQUE INDEX "mlo:GeoLocation_mlo:asBoundingBox_ID_ID" ON
"mlo:GeoLocation_mlo:asBoundingBox" ("mlo:asBoundingBox", ID);
CREATE INDEX "mlo:GeoLocation_mlo:asGeoPoint_ID" ON
"mlo:GeoLocation_mlo:asGeoPoint" (ID);
CREATE UNIQUE INDEX "mlo:GeoLocation_mlo:asGeoPoint_ID_ID" ON
"mlo:GeoLocation_mlo:asGeoPoint" ("mlo:asGeoPoint", ID);
CREATE INDEX "mlo:GeoLocation_mlo:asPostalAddress_ID" ON
"mlo:GeoLocation_mlo:asPostalAddress" (ID);
CREATE UNIQUE INDEX "mlo:GeoLocation_mlo:asPostalAddress_ID_ID" ON
"mlo:GeoLocation_mlo:asPostalAddress" ("mlo:asPostalAddress", ID);

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CREATE UNIQUE INDEX "mlo:GeoPoint_mlo:address_ID_ID" ON
"mlo:GeoPoint_mlo:address" (ID, "mlo:address");
CREATE UNIQUE INDEX "mlo:GeoPoint_mlo:altitude_ID_ID" ON
"mlo:GeoPoint_mlo:altitude" (ID, "mlo:altitude");
CREATE UNIQUE INDEX "mlo:GeoPoint_mlo:city_ID_ID" ON
"mlo:GeoPoint_mlo:city" (ID, "mlo:city");
CREATE UNIQUE INDEX "mlo:GeoPoint_mlo:country_ID_ID" ON
"mlo:GeoPoint_mlo:country" (ID, "mlo:country");
CREATE UNIQUE INDEX "mlo:GeoPoint_mlo:latitude_ID_ID" ON
"mlo:GeoPoint_mlo:latitude" (ID, "mlo:latitude");
CREATE UNIQUE INDEX "mlo:GeoPoint_mlo:longitude_ID_ID" ON
"mlo:GeoPoint_mlo:longitude" (ID, "mlo:longitude");
CREATE UNIQUE INDEX "mlo:GeoPoint_mlo:state_ID_ID" ON
"mlo:GeoPoint_mlo:state" (ID, "mlo:state");
CREATE UNIQUE INDEX "mlo:GeoPoint_mlo:timestamp_ID_ID" ON
"mlo:GeoPoint_mlo:timestamp" (ID, "mlo:timestamp");
CREATE UNIQUE INDEX "mlo:GeoSphere_mlo:radius_ID_ID" ON
"mlo:GeoSphere_mlo:radius" (ID, "mlo:radius");
CREATE UNIQUE INDEX "mlo:LandmarkCategory_mlo:isRemovable_ID_ID" ON
"mlo:LandmarkCategory_mlo:isRemovable" (ID, "mlo:isRemovable");
CREATE UNIQUE INDEX "mlo:Landmark_mlo:belongsToCategory_ID_ID" ON
"mlo:Landmark_mlo:belongsToCategory" (ID, "mlo:belongsToCategory");
CREATE UNIQUE INDEX "mlo:Landmark_mlo:poiLocation_ID_ID" ON
"mlo:Landmark_mlo:poiLocation" (ID, "mlo:poiLocation");
CREATE UNIQUE INDEX "mlo:LocationBoundingBox_mlo:boxEastLimit_ID_ID"
ON "mlo:LocationBoundingBox_mlo:boxEastLimit" (ID,
"mlo:boxEastLimit");
CREATE UNIQUE INDEX "mlo:LocationBoundingBox_mlo:boxNorthLimit_ID_ID"
ON "mlo:LocationBoundingBox_mlo:boxNorthLimit" (ID,
"mlo:boxNorthLimit");
CREATE UNIQUE INDEX
"mlo:LocationBoundingBox_mlo:boxSouthWestCorner_ID_ID" ON
"mlo:LocationBoundingBox_mlo:boxSouthWestCorner" (ID,
"mlo:boxSouthWestCorner");
CREATE UNIQUE INDEX
"mlo:LocationBoundingBox_mlo:boxVerticalLimit_ID_ID" ON
"mlo:LocationBoundingBox_mlo:boxVerticalLimit" (ID,
"mlo:boxVerticalLimit");
CREATE UNIQUE INDEX "mlo:Route_mlo:endTime_ID_ID" ON
"mlo:Route_mlo:endTime" (ID, "mlo:endTime");
CREATE UNIQUE INDEX "mlo:Route_mlo:routeDetails_ID_ID" ON
"mlo:Route_mlo:routeDetails" (ID, "mlo:routeDetails");
CREATE UNIQUE INDEX "mlo:Route_mlo:startTime_ID_ID" ON
"mlo:Route_mlo:startTime" (ID, "mlo:startTime");
CREATE UNIQUE INDEX "mto:Transfer_mto:transferList_ID_ID" ON
"mto:Transfer_mto:transferList" (ID, "mto:transferList");
CREATE UNIQUE INDEX "mto:Transfer_mto:transferPrivacyLevel_ID_ID" ON
"mto:Transfer_mto:transferPrivacyLevel" (ID,

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"mto:transferPrivacyLevel");
CREATE UNIQUE INDEX "mto:UploadTransfer_mto:transferCategory_ID_ID" ON
"mto:UploadTransfer_mto:transferCategory" (ID,
"mto:transferCategory");
CREATE UNIQUE INDEX "nao:Tag_tracker:isDefaultTag_ID_ID" ON
"nao:Tag_tracker:isDefaultTag" (ID, "tracker:isDefaultTag");
CREATE UNIQUE INDEX "nao:Tag_tracker:tagRelatedTo_ID_ID" ON
"nao:Tag_tracker:tagRelatedTo" (ID, "tracker:tagRelatedTo");
CREATE UNIQUE INDEX "ncal:Alarm_ncal:action_ID_ID" ON
"ncal:Alarm_ncal:action" (ID, "ncal:action");
CREATE UNIQUE INDEX "ncal:BydayRulePart_ncal:bydayModifier_ID_ID" ON
"ncal:BydayRulePart_ncal:bydayModifier" (ID, "ncal:bydayModifier");
CREATE UNIQUE INDEX "ncal:BydayRulePart_ncal:bydayWeekday_ID_ID" ON
"ncal:BydayRulePart_ncal:bydayWeekday" (ID, "ncal:bydayWeekday");
CREATE UNIQUE INDEX "ncal:Calendar_ncal:component_ID_ID" ON
"ncal:Calendar_ncal:component" (ID, "ncal:component");
CREATE UNIQUE INDEX "ncal:Freebusy_ncal:freebusy_ID_ID" ON
"ncal:Freebusy_ncal:freebusy" (ID, "ncal:freebusy");
CREATE UNIQUE INDEX "ncal:RecurrenceRule_ncal:byday_ID_ID" ON
"ncal:RecurrenceRule_ncal:byday" (ID, "ncal:byday");
CREATE UNIQUE INDEX "ncal:RecurrenceRule_ncal:byhour_ID_ID" ON
"ncal:RecurrenceRule_ncal:byhour" (ID, "ncal:byhour");
CREATE UNIQUE INDEX "ncal:RecurrenceRule_ncal:byminute_ID_ID" ON
"ncal:RecurrenceRule_ncal:byminute" (ID, "ncal:byminute");
CREATE UNIQUE INDEX "ncal:RecurrenceRule_ncal:bymonth_ID_ID" ON
"ncal:RecurrenceRule_ncal:bymonth" (ID, "ncal:bymonth");
CREATE UNIQUE INDEX "ncal:RecurrenceRule_ncal:bymonthday_ID_ID" ON
"ncal:RecurrenceRule_ncal:bymonthday" (ID, "ncal:bymonthday");
CREATE UNIQUE INDEX "ncal:RecurrenceRule_ncal:bysecond_ID_ID" ON
"ncal:RecurrenceRule_ncal:bysecond" (ID, "ncal:bysecond");
CREATE UNIQUE INDEX "ncal:RecurrenceRule_ncal:bysetpos_ID_ID" ON
"ncal:RecurrenceRule_ncal:bysetpos" (ID, "ncal:bysetpos");
CREATE UNIQUE INDEX "ncal:RecurrenceRule_ncal:byweekno_ID_ID" ON
"ncal:RecurrenceRule_ncal:byweekno" (ID, "ncal:byweekno");
CREATE UNIQUE INDEX "ncal:RecurrenceRule_ncal:byyearday_ID_ID" ON
"ncal:RecurrenceRule_ncal:byyearday" (ID, "ncal:byyearday");
CREATE UNIQUE INDEX "ncal:UnionParentClass_ncal:attach_ID_ID" ON
"ncal:UnionParentClass_ncal:attach" (ID, "ncal:attach");
CREATE UNIQUE INDEX "ncal:UnionParentClass_ncal:attendee_ID_ID" ON
"ncal:UnionParentClass_ncal:attendee" (ID, "ncal:attendee");
CREATE UNIQUE INDEX "ncal:UnionParentClass_ncal:categories_ID_ID" ON
"ncal:UnionParentClass_ncal:categories" (ID, "ncal:categories");
CREATE UNIQUE INDEX "ncal:UnionParentClass_ncal:exdate_ID_ID" ON
"ncal:UnionParentClass_ncal:exdate" (ID, "ncal:exdate");
CREATE UNIQUE INDEX "ncal:UnionParentClass_ncal:exrule_ID_ID" ON
"ncal:UnionParentClass_ncal:exrule" (ID, "ncal:exrule");
CREATE UNIQUE INDEX "ncal:UnionParentClass_ncal:hasAlarm_ID_ID" ON
"ncal:UnionParentClass_ncal:hasAlarm" (ID, "ncal:hasAlarm");

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CREATE UNIQUE INDEX "ncal:UnionParentClass_ncal:ncalRelation_ID_ID" ON
"ncal:UnionParentClass_ncal:ncalRelation" (ID, "ncal:ncalRelation");
CREATE UNIQUE INDEX "ncal:UnionParentClass_ncal:rdate_ID_ID" ON
"ncal:UnionParentClass_ncal:rdate" (ID, "ncal:rdate");
CREATE UNIQUE INDEX "ncal:UnionParentClass_ncal:relatedToChild_ID_ID"
ON "ncal:UnionParentClass_ncal:relatedToChild" (ID,
"ncal:relatedToChild");
CREATE UNIQUE INDEX "ncal:UnionParentClass_ncal:relatedToParent_ID_ID"
ON "ncal:UnionParentClass_ncal:relatedToParent" (ID,
"ncal:relatedToParent");
CREATE UNIQUE INDEX "ncal:UnionParentClass_ncal:resources_ID_ID" ON
"ncal:UnionParentClass_ncal:resources" (ID, "ncal:resources");
CREATE UNIQUE INDEX "ncal:UnionParentClass_ncal:rrule_ID_ID" ON
"ncal:UnionParentClass_ncal:rrule" (ID, "ncal:rrule");
CREATE UNIQUE INDEX "nco:Affiliation_nco:title_ID_ID" ON
"nco:Affiliation_nco:title" (ID, "nco:title");
CREATE UNIQUE INDEX "nco:ContactList_nco:containsContact_ID_ID" ON
"nco:ContactList_nco:containsContact" (ID, "nco:containsContact");
CREATE UNIQUE INDEX "nco:Contact_ncal:anniversary_ID_ID" ON
"nco:Contact_ncal:anniversary" (ID, "ncal:anniversary");
CREATE UNIQUE INDEX "nco:Contact_ncal:birthday_ID_ID" ON
"nco:Contact_ncal:birthday" (ID, "ncal:birthday");
CREATE UNIQUE INDEX "nco:Contact_nco:belongsToGroup_ID_ID" ON
"nco:Contact_nco:belongsToGroup" (ID, "nco:belongsToGroup");
CREATE UNIQUE INDEX "nco:Contact_nco:note_ID_ID" ON
"nco:Contact_nco:note" (ID, "nco:note");
CREATE UNIQUE INDEX "nco:Contact_scal:anniversary_ID_ID" ON
"nco:Contact_scal:anniversary" (ID, "scal:anniversary");
CREATE UNIQUE INDEX "nco:Contact_scal:birthday_ID_ID" ON
"nco:Contact_scal:birthday" (ID, "scal:birthday");
CREATE UNIQUE INDEX "nco:IMAccount_nco:hasIMContact_ID_ID" ON
"nco:IMAccount_nco:hasIMContact" (ID, "nco:hasIMContact");
CREATE UNIQUE INDEX "nco:IMAddress_nco:imCapability_ID_ID" ON
"nco:IMAddress_nco:imCapability" (ID, "nco:imCapability");
CREATE UNIQUE INDEX "nco:PersonContact_nco:hasAffiliation_ID_ID" ON
"nco:PersonContact_nco:hasAffiliation" (ID, "nco:hasAffiliation");
CREATE INDEX "nco:PersonContact_nco:nameFamily" ON "nco:PersonContact"
("nco:nameFamily");
CREATE INDEX "nco:PhoneNumber_nco:phoneNumber" ON "nco:PhoneNumber"
("nco:phoneNumber");
CREATE UNIQUE INDEX "nco:Role_nco:blogUrl_ID_ID" ON
"nco:Role_nco:blogUrl" (ID, "nco:blogUrl");
CREATE UNIQUE INDEX "nco:Role_nco:foafUrl_ID_ID" ON
"nco:Role_nco:foafUrl" (ID, "nco:foafUrl");
CREATE UNIQUE INDEX "nco:Role_nco:hasContactMedium_ID_ID" ON
"nco:Role_nco:hasContactMedium" (ID, "nco:hasContactMedium");
CREATE INDEX "nco:Role_nco:hasEmailAddress_ID" ON
"nco:Role_nco:hasEmailAddress" (ID);

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CREATE UNIQUE INDEX "nco:Role_nco:hasEmailAddress_ID_ID" ON
"nco:Role_nco:hasEmailAddress" ("nco:hasEmailAddress", ID);
CREATE UNIQUE INDEX "nco:Role_nco:hasIMAddress_ID_ID" ON
"nco:Role_nco:hasIMAddress" (ID, "nco:hasIMAddress");
CREATE UNIQUE INDEX "nco:Role_nco:hasPhoneNumber_ID_ID" ON
"nco:Role_nco:hasPhoneNumber" (ID, "nco:hasPhoneNumber");
CREATE INDEX "nco:Role_nco:hasPostalAddress_ID" ON
"nco:Role_nco:hasPostalAddress" (ID);
CREATE UNIQUE INDEX "nco:Role_nco:hasPostalAddress_ID_ID" ON
"nco:Role_nco:hasPostalAddress" ("nco:hasPostalAddress", ID);
CREATE UNIQUE INDEX "nco:Role_nco:url_ID_ID" ON "nco:Role_nco:url"
(ID, "nco:url");
CREATE UNIQUE INDEX "nco:Role_nco:websiteUrl_ID_ID" ON
"nco:Role_nco:websiteUrl" (ID, "nco:websiteUrl");
CREATE UNIQUE INDEX
"nfo:BookmarkFolder_nfo:containsBookmarkFolder_ID_ID" ON
"nfo:BookmarkFolder_nfo:containsBookmarkFolder" (ID,
"nfo:containsBookmarkFolder");
CREATE UNIQUE INDEX "nfo:BookmarkFolder_nfo:containsBookmark_ID_ID" ON
"nfo:BookmarkFolder_nfo:containsBookmark" (ID,
"nfo:containsBookmark");
CREATE INDEX "nfo:FileDataObject_nfo:fileLastModified" ON
"nfo:FileDataObject" ("nfo:fileLastModified");
CREATE UNIQUE INDEX "nfo:Image_nfo:depicts_ID_ID" ON
"nfo:Image_nfo:depicts" (ID, "nfo:depicts");
CREATE UNIQUE INDEX "nfo:Image_nfo:hasRegionOfInterest_ID_ID" ON
"nfo:Image_nfo:hasRegionOfInterest" (ID, "nfo:hasRegionOfInterest");
CREATE UNIQUE INDEX "nfo:MediaList_nfo:hasMediaFileListEntry_ID_ID" ON
"nfo:MediaList_nfo:hasMediaFileListEntry" (ID,
"nfo:hasMediaFileListEntry");
CREATE UNIQUE INDEX "nfo:MediaList_nfo:mediaListEntry_ID_ID" ON
"nfo:MediaList_nfo:mediaListEntry" (ID, "nfo:mediaListEntry");
CREATE UNIQUE INDEX "nfo:Media_mtp:hidden_ID_ID" ON
"nfo:Media_mtp:hidden" (ID, "mtp:hidden");
CREATE UNIQUE INDEX "nfo:Media_nmm:alternativeMedia_ID_ID" ON
"nfo:Media_nmm:alternativeMedia" (ID, "nmm:alternativeMedia");
CREATE INDEX "nfo:Visual_nie:contentCreated" ON "nfo:Visual"
("nie:contentCreated");
CREATE UNIQUE INDEX "nid3:ID3Audio_nid3:leadArtist_ID_ID" ON
"nid3:ID3Audio_nid3:leadArtist" (ID, "nid3:leadArtist");
CREATE UNIQUE INDEX "nie:DataObject_nie:dataSource_ID_ID" ON
"nie:DataObject_nie:dataSource" (ID, "nie:dataSource");
CREATE UNIQUE INDEX "nie:DataObject_nie:isPartOf_ID_ID" ON
"nie:DataObject_nie:isPartOf" (ID, "nie:isPartOf");
CREATE INDEX "nie:DataObject_nie:url" ON "nie:DataObject" ("nie:url");
CREATE INDEX "nie:InformationElement_mlo:location_ID" ON
"nie:InformationElement_mlo:location" (ID);
CREATE UNIQUE INDEX "nie:InformationElement_mlo:location_ID_ID" ON

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"nie:InformationElement_mlo:location" ("mlo:location", ID);
CREATE UNIQUE INDEX "nie:InformationElement_nao:hasProperty_ID_ID" ON
"nie:InformationElement_nao:hasProperty" (ID, "nao:hasProperty");
CREATE UNIQUE INDEX "nie:InformationElement_nco:contributor_ID_ID" ON
"nie:InformationElement_nco:contributor" (ID, "nco:contributor");
CREATE UNIQUE INDEX "nie:InformationElement_nco:creator_ID_ID" ON
"nie:InformationElement_nco:creator" (ID, "nco:creator");
CREATE UNIQUE INDEX "nie:InformationElement_nie:hasLogicalPart_ID_ID"
ON "nie:InformationElement_nie:hasLogicalPart" (ID,
"nie:hasLogicalPart");
CREATE UNIQUE INDEX "nie:InformationElement_nie:hasPart_ID_ID" ON
"nie:InformationElement_nie:hasPart" (ID, "nie:hasPart");
CREATE UNIQUE INDEX
"nie:InformationElement_nie:informationElementDate_ID_ID" ON
"nie:InformationElement_nie:informationElementDate" (ID,
"nie:informationElementDate");
CREATE UNIQUE INDEX "nie:InformationElement_nie:isLogicalPartOf_ID_ID"
ON "nie:InformationElement_nie:isLogicalPartOf" (ID,
"nie:isLogicalPartOf");
CREATE UNIQUE INDEX "nie:InformationElement_nie:keyword_ID_ID" ON
"nie:InformationElement_nie:keyword" (ID, "nie:keyword");
CREATE UNIQUE INDEX "nie:InformationElement_nie:relatedTo_ID_ID" ON
"nie:InformationElement_nie:relatedTo" (ID, "nie:relatedTo");
CREATE INDEX "nie:InformationElement_slo:location" ON
"nie:InformationElement" ("slo:location");
CREATE INDEX "nmm:Artist_nmm:artistName" ON "nmm:Artist" ("nmm:artistName");
CREATE INDEX "nmm:MusicAlbum_nie:title" ON "nmm:MusicAlbum" ("nie:title");
CREATE UNIQUE INDEX "nmm:MusicAlbum_nmm:albumArtist_ID_ID" ON
"nmm:MusicAlbum_nmm:albumArtist" (ID, "nmm:albumArtist");
CREATE INDEX "nmm:MusicPiece_nie:title" ON "nmm:MusicPiece" ("nie:title");
CREATE UNIQUE INDEX "nmm:MusicPiece_nmm:lyrics_ID_ID" ON
"nmm:MusicPiece_nmm:lyrics" (ID, "nmm:lyrics");
CREATE INDEX "nmm:MusicPiece_nmm:musicAlbum" ON "nmm:MusicPiece"
("nmm:musicAlbum");
CREATE INDEX "nmm:MusicPiece_nmm:performer" ON "nmm:MusicPiece"
("nmm:performer");
CREATE UNIQUE INDEX "nmm:RadioStation_nmm:carrier_ID_ID" ON
"nmm:RadioStation_nmm:carrier" (ID, "nmm:carrier");
CREATE UNIQUE INDEX "nmm:Video_mtp:scantype_ID_ID" ON
"nmm:Video_mtp:scantype" (ID, "mtp:scantype");
CREATE UNIQUE INDEX "nmm:Video_nmm:director_ID_ID" ON
"nmm:Video_nmm:director" (ID, "nmm:director");
CREATE UNIQUE INDEX "nmm:Video_nmm:leadActor_ID_ID" ON
"nmm:Video_nmm:leadActor" (ID, "nmm:leadActor");
CREATE UNIQUE INDEX "nmm:Video_nmm:subtitle_ID_ID" ON
"nmm:Video_nmm:subtitle" (ID, "nmm:subtitle");
CREATE INDEX "nmo:Call_nmo:sentDate" ON "nmo:Call" ("nmo:sentDate");
CREATE INDEX "nmo:CommunicationChannel_nmo:hasParticipant_ID_ID" ON

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"nmo:CommunicationChannel_nmo:hasParticipant" (ID);
CREATE UNIQUE INDEX
"nmo:CommunicationChannel_nmo:hasParticipant_ID_ID" ON
"nmo:CommunicationChannel_nmo:hasParticipant" ("nmo:hasParticipant",
ID);
CREATE INDEX "nmo:CommunicationChannel_nmo:lastMessageDate" ON
"nmo:CommunicationChannel" ("nmo:lastMessageDate");
CREATE UNIQUE INDEX "nmo:Email_nmo:contentMimeType_ID_ID" ON
"nmo:Email_nmo:contentMimeType" (ID, "nmo:contentMimeType");
CREATE UNIQUE INDEX "nmo:Message_nmo:bcc_ID_ID" ON
"nmo:Message_nmo:bcc" (ID, "nmo:bcc");
CREATE UNIQUE INDEX "nmo:Message_nmo:cc_ID_ID" ON "nmo:Message_nmo:cc"
(ID, "nmo:cc");
CREATE INDEX "nmo:Message_nmo:communicationChannel" ON "nmo:Message"
("nmo:communicationChannel", "nmo:receivedDate");
CREATE INDEX "nmo:Message_nmo:conversation" ON "nmo:Message"
("nmo:conversation");
CREATE INDEX "nmo:Message_nmo:from" ON "nmo:Message" ("nmo:from");
CREATE UNIQUE INDEX "nmo:Message_nmo:hasAttachment_ID_ID" ON
"nmo:Message_nmo:hasAttachment" (ID, "nmo:hasAttachment");
CREATE UNIQUE INDEX "nmo:Message_nmo:inReplyTo_ID_ID" ON
"nmo:Message_nmo:inReplyTo" (ID, "nmo:inReplyTo");
CREATE UNIQUE INDEX "nmo:Message_nmo:messageHeader_ID_ID" ON
"nmo:Message_nmo:messageHeader" (ID, "nmo:messageHeader");
CREATE UNIQUE INDEX "nmo:Message_nmo:recipient_ID_ID" ON
"nmo:Message_nmo:recipient" (ID, "nmo:recipient");
CREATE UNIQUE INDEX "nmo:Message_nmo:references_ID_ID" ON
"nmo:Message_nmo:references" (ID, "nmo:references");
CREATE INDEX "nmo:Message_nmo:sender" ON "nmo:Message" ("nmo:sender");
CREATE INDEX "nmo:Message_nmo:sentDate" ON "nmo:Message" ("nmo:sentDate");
CREATE INDEX "nmo:Message_nmo:to_ID" ON "nmo:Message_nmo:to" (ID);
CREATE UNIQUE INDEX "nmo:Message_nmo:to_ID_ID" ON "nmo:Message_nmo:to"
("nmo:to", ID);
CREATE UNIQUE INDEX "nmo:MimePart_nmo:mimeHeader_ID_ID" ON
"nmo:MimePart_nmo:mimeHeader" (ID, "nmo:mimeHeader");
CREATE UNIQUE INDEX "nmo:Multipart_nmo:partBoundary_ID_ID" ON
"nmo:Multipart_nmo:partBoundary" (ID, "nmo:partBoundary");
CREATE UNIQUE INDEX
"nmo:PhoneMessageFolder_nmo:containsPhoneMessageFolder_ID_ID" ON
"nmo:PhoneMessageFolder_nmo:containsPhoneMessageFolder" (ID,
"nmo:containsPhoneMessageFolder");
CREATE UNIQUE INDEX
"nmo:PhoneMessageFolder_nmo:containsPhoneMessage_ID_ID" ON
"nmo:PhoneMessageFolder_nmo:containsPhoneMessage" (ID,
"nmo:containsPhoneMessage");
CREATE UNIQUE INDEX "nmo:PhoneMessage_nmo:toVCard_ID_ID" ON
"nmo:PhoneMessage_nmo:toVCard" (ID, "nmo:toVCard");
CREATE UNIQUE INDEX "rdf:Property_rdfs:subPropertyOf_ID_ID" ON

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"rdf:Property_rdfs:subPropertyOf" (ID, "rdfs:subPropertyOf");
CREATE UNIQUE INDEX "rdfs:Class_rdfs:subClassOf_ID_ID" ON
"rdfs:Class_rdfs:subClassOf" (ID, "rdfs:subClassOf");
CREATE UNIQUE INDEX "rdfs:Class_tracker:domainIndex_ID_ID" ON
"rdfs:Class_tracker:domainIndex" (ID, "tracker:domainIndex");
CREATE UNIQUE INDEX "rdfs:Resource_dc:contributor_ID_ID" ON
"rdfs:Resource_dc:contributor" (ID, "dc:contributor");
CREATE UNIQUE INDEX "rdfs:Resource_dc:date_ID_ID" ON
"rdfs:Resource_dc:date" (ID, "dc:date");
CREATE UNIQUE INDEX "rdfs:Resource_dc:relation_ID_ID" ON
"rdfs:Resource_dc:relation" (ID, "dc:relation");
CREATE UNIQUE INDEX "rdfs:Resource_dc:source_ID_ID" ON
"rdfs:Resource_dc:source" (ID, "dc:source");
CREATE UNIQUE INDEX "rdfs:Resource_nao:deprecated_ID_ID" ON
"rdfs:Resource_nao:deprecated" (ID, "nao:deprecated");
CREATE INDEX "rdfs:Resource_nao:hasTag_ID" ON "rdfs:Resource_nao:hasTag" (ID);
CREATE UNIQUE INDEX "rdfs:Resource_nao:hasTag_ID_ID" ON
"rdfs:Resource_nao:hasTag" ("nao:hasTag", ID);
CREATE UNIQUE INDEX "rdfs:Resource_nao:isRelated_ID_ID" ON
"rdfs:Resource_nao:isRelated" (ID, "nao:isRelated");
CREATE UNIQUE INDEX "rdfs:Resource_rdf:type_ID_ID" ON
"rdfs:Resource_rdf:type" (ID, "rdf:type");
CREATE INDEX "rdfs:Resource_tracker:added" ON "rdfs:Resource" ("tracker:added");
CREATE UNIQUE INDEX "scal:Attendee_scal:delegated-from_ID_ID" ON
"scal:Attendee_scal:delegated-from" (ID, "scal:delegated-from");
CREATE UNIQUE INDEX "scal:Attendee_scal:delegated-to_ID_ID" ON
"scal:Attendee_scal:delegated-to" (ID, "scal:delegated-to");
CREATE UNIQUE INDEX "scal:Attendee_scal:member_ID_ID" ON
"scal:Attendee_scal:member" (ID, "scal:member");
CREATE UNIQUE INDEX "scal:Attendee_scal:sent-by_ID_ID" ON
"scal:Attendee_scal:sent-by" (ID, "scal:sent-by");
CREATE UNIQUE INDEX "scal:CalendarAlarm_scal:alarmAttendee_ID_ID" ON
"scal:CalendarAlarm_scal:alarmAttendee" (ID, "scal:alarmAttendee");
CREATE UNIQUE INDEX "scal:CalendarItem_scal:access_ID_ID" ON
"scal:CalendarItem_scal:access" (ID, "scal:access");
CREATE UNIQUE INDEX "scal:CalendarItem_scal:attachment_ID_ID" ON
"scal:CalendarItem_scal:attachment" (ID, "scal:attachment");
CREATE UNIQUE INDEX "scal:CalendarItem_scal:attendee_ID_ID" ON
"scal:CalendarItem_scal:attendee" (ID, "scal:attendee");
CREATE UNIQUE INDEX "scal:CalendarItem_scal:belongsToCalendar_ID_ID"
ON "scal:CalendarItem_scal:belongsToCalendar" (ID,
"scal:belongsToCalendar");
CREATE UNIQUE INDEX "scal:CalendarItem_scal:contact_ID_ID" ON
"scal:CalendarItem_scal:contact" (ID, "scal:contact");
CREATE UNIQUE INDEX "scal:CalendarItem_scal:rrule_ID_ID" ON
"scal:CalendarItem_scal:rrule" (ID, "scal:rrule");
CREATE INDEX "slo:GeoLocation_slo:postalAddress" ON "slo:GeoLocation"
("slo:postalAddress");

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CREATE UNIQUE INDEX "slo:Landmark_slo:belongsToCategory_ID_ID" ON
"slo:Landmark_slo:belongsToCategory" (ID, "slo:belongsToCategory");
CREATE UNIQUE INDEX "slo:Landmark_slo:hasContact_ID_ID" ON
"slo:Landmark_slo:hasContact" (ID, "slo:hasContact");
CREATE UNIQUE INDEX "slo:Route_slo:routeDetails_ID_ID" ON
"slo:Route_slo:routeDetails" (ID, "slo:routeDetails");

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EXPLAIN SELECT "1_u", (SELECT "nco:fullname" FROM "nco:Contact" WHERE
ID = "1_u") COLLATE NOCASE, (SELECT "nco:nameFamily" FROM
"nco:PersonContact" WHERE ID = "1_u") COLLATE NOCASE, (SELECT
"nco:nameGiven" FROM "nco:PersonContact" WHERE ID = "1_u")
COLLATE NOCASE, (SELECT "nco:nameAdditional" FROM
"nco:PersonContact" WHERE ID = "1_u") COLLATE NOCASE, (SELECT
"nco:nameHonorificPrefix" FROM "nco:PersonContact" WHERE ID =
"1_u") COLLATE NOCASE, (SELECT "nco:nameHonorificSuffix" FROM
"nco:PersonContact" WHERE ID = "1_u") COLLATE NOCASE, (SELECT
"nco:nickname" FROM "nco:Contact" WHERE ID = "1_u") COLLATE
NOCASE, strftime("%s", (SELECT "nco:birthDate" FROM
"nco:Contact" WHERE ID = "1_u")), (SELECT "nie:url" FROM
"nie:DataObject" WHERE ID = (SELECT "nco:photo" FROM
"nco:Contact" WHERE ID = "1_u")) COLLATE NOCASE, (SELECT
GROUP_CONCAT("2_u"||? COLLATE NOCASE||COALESCE((SELECT
"nco:imProtocol" FROM "nco:IMAddress" WHERE ID = "3_u") COLLATE
NOCASE, ? COLLATE NOCASE)||? COLLATE NOCASE||COALESCE((SELECT
"nco:imID" FROM "nco:IMAddress" WHERE ID = "3_u") COLLATE
NOCASE, ? COLLATE NOCASE)||? COLLATE NOCASE||COALESCE((SELECT
"nco:imNickname" FROM "nco:IMAddress" WHERE ID = "3_u") COLLATE
NOCASE, ? COLLATE NOCASE), '\n') FROM (SELECT
"nco:PersonContact_nco:hasAffiliation2"."nco:hasAffiliation" AS
"2_u", "nco:Role_nco:hasIMAddress3"."nco:hasIMAddress" AS
"3_u" FROM "nco:PersonContact_nco:hasAffiliation" AS
"nco:PersonContact_nco:hasAffiliation2",
"nco:Role_nco:hasIMAddress" AS "nco:Role_nco:hasIMAddress3" WHERE
"1_u" = "nco:PersonContact_nco:hasAffiliation2"."ID" AND
"nco:PersonContact_nco:hasAffiliation2"."nco:hasAffiliation" =
"nco:Role_nco:hasIMAddress3"."ID")), (SELECT
GROUP_CONCAT("2_u"||? COLLATE NOCASE||(SELECT "nco:phoneNumber"
FROM "nco:PhoneNumber" WHERE ID = "4_u") COLLATE NOCASE, '\n')
FROM (SELECT "nco:PersonContact_nco:hasAffiliation4"."nco:hasAffiliation"
AS "2_u", "nco:Role_nco:hasPhoneNumber5"."nco:hasPhoneNumber" AS
"4_u" FROM "nco:PersonContact_nco:hasAffiliation" AS
"nco:PersonContact_nco:hasAffiliation4",
"nco:Role_nco:hasPhoneNumber" AS "nco:Role_nco:hasPhoneNumber5"
WHERE "1_u" = "nco:PersonContact_nco:hasAffiliation4"."ID" AND
"nco:PersonContact_nco:hasAffiliation4"."nco:hasAffiliation" =
"nco:Role_nco:hasPhoneNumber5"."ID")), (SELECT
GROUP_CONCAT("2_u"||? COLLATE NOCASE||(SELECT "nco:emailAddress"
FROM "nco:EmailAddress" WHERE ID = "5_u") COLLATE NOCASE, ',')

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FROM (SELECT "nco:PersonContact_nco:hasAffiliation6"."nco:hasAffiliation"
AS "2_u", "nco:Role_nco:hasEmailAddress7"."nco:hasEmailAddress"
AS "5_u" FROM "nco:PersonContact_nco:hasAffiliation" AS
"nco:PersonContact_nco:hasAffiliation6",
"nco:Role_nco:hasEmailAddress" AS "nco:Role_nco:hasEmailAddress7"
WHERE "1_u" = "nco:PersonContact_nco:hasAffiliation6"."ID" AND
"nco:PersonContact_nco:hasAffiliation6"."nco:hasAffiliation" =
"nco:Role_nco:hasEmailAddress7"."ID"), (SELECT
GROUP_CONCAT("2_u"||? COLLATE NOCASE||COALESCE((SELECT
GROUP_CONCAT((SELECT Uri FROM Resource WHERE ID =
"nco:blogUrl"),',') FROM "nco:Role_nco:blogUrl" WHERE ID =
"2_u"), ? COLLATE NOCASE)||? COLLATE NOCASE||COALESCE((SELECT
GROUP_CONCAT((SELECT Uri FROM Resource WHERE ID =
"nco:websiteUrl"),',') FROM "nco:Role_nco:websiteUrl" WHERE ID =
"2_u"), ? COLLATE NOCASE)||? COLLATE NOCASE||COALESCE((SELECT
GROUP_CONCAT((SELECT Uri FROM Resource WHERE ID = "nco:url"),',')
FROM "nco:Role_nco:url" WHERE ID = "2_u"), ? COLLATE NOCASE),
\n') FROM (SELECT
"nco:PersonContact_nco:hasAffiliation8"."nco:hasAffiliation" AS
"2_u" FROM "nco:PersonContact_nco:hasAffiliation" AS
"nco:PersonContact_nco:hasAffiliation8" WHERE "1_u" =
"nco:PersonContact_nco:hasAffiliation8"."ID"), (SELECT
GROUP_CONCAT("6_u", ',') FROM (SELECT
"rdfs:Resource_nao:hasTag9"."nao:hasTag" AS "6_u" FROM
"rdfs:Resource_nao:hasTag" AS "rdfs:Resource_nao:hasTag9" WHERE
"1_u" = "rdfs:Resource_nao:hasTag9"."ID"), (SELECT Uri FROM
Resource WHERE ID = "1_u"), (SELECT GROUP_CONCAT("2_u"||? COLLATE
NOCASE||COALESCE((SELECT "nco:role" FROM "nco:Affiliation" WHERE
ID = "2_u") COLLATE NOCASE, ? COLLATE NOCASE)||? COLLATE
NOCASE||COALESCE((SELECT "nco:department" FROM "nco:Affiliation"
WHERE ID = "2_u") COLLATE NOCASE, ? COLLATE NOCASE)||? COLLATE
NOCASE||COALESCE((SELECT GROUP_CONCAT("nco:title",',') FROM
"nco:Affiliation_nco:title" WHERE ID = "2_u"), ? COLLATE NOCASE),
\n') FROM (SELECT
"nco:PersonContact_nco:hasAffiliation10"."nco:hasAffiliation" AS
"2_u" FROM "nco:PersonContact_nco:hasAffiliation" AS
"nco:PersonContact_nco:hasAffiliation10" WHERE "1_u" =
"nco:PersonContact_nco:hasAffiliation10"."ID"), (SELECT
GROUP_CONCAT("nco:note",',') FROM "nco:Contact_nco:note" WHERE ID
= "1_u"), (SELECT "nco:gender" FROM "nco:PersonContact" WHERE ID
= "1_u"), (SELECT GROUP_CONCAT("2_u"||? COLLATE
NOCASE||COALESCE((SELECT "nco:pobox" FROM "nco:PostalAddress"
WHERE ID = "7_u") COLLATE NOCASE, ? COLLATE NOCASE)||? COLLATE
NOCASE||COALESCE((SELECT "nco:district" FROM "nco:PostalAddress"
WHERE ID = "7_u") COLLATE NOCASE, ? COLLATE NOCASE)||? COLLATE
NOCASE||COALESCE((SELECT "nco:county" FROM "nco:PostalAddress"
WHERE ID = "7_u") COLLATE NOCASE, ? COLLATE NOCASE)||? COLLATE
NOCASE||COALESCE((SELECT "nco:locality" FROM "nco:PostalAddress"

```

```

WHERE ID = "7_u") COLLATE NOCASE, ? COLLATE NOCASE)||? COLLATE
NOCASE||COALESCE((SELECT "nco:postalcode" FROM
"nco:PostalAddress" WHERE ID = "7_u") COLLATE NOCASE, ? COLLATE
NOCASE)||? COLLATE NOCASE||COALESCE((SELECT "nco:streetAddress"
FROM "nco:PostalAddress" WHERE ID = "7_u") COLLATE NOCASE, ?
COLLATE NOCASE)||? COLLATE NOCASE||COALESCE((SELECT Uri FROM
Resource WHERE ID = (SELECT "nco:addressLocation" FROM
"nco:PostalAddress" WHERE ID = "7_u")), ? COLLATE NOCASE)||?
COLLATE NOCASE||COALESCE((SELECT "nco:extendedAddress" FROM
"nco:PostalAddress" WHERE ID = "7_u") COLLATE NOCASE, ? COLLATE
NOCASE)||? COLLATE NOCASE||COALESCE((SELECT "nco:country" FROM
"nco:PostalAddress" WHERE ID = "7_u") COLLATE NOCASE, ? COLLATE
NOCASE)||? COLLATE NOCASE||COALESCE((SELECT "nco:region" FROM
"nco:PostalAddress" WHERE ID = "7_u") COLLATE NOCASE, ? COLLATE
NOCASE), '\n') FROM (SELECT
"nco:PersonContact_nco:hasAffiliation11"."nco:hasAffiliation" AS
"2_u", "nco:Role_nco:hasPostalAddress12"."nco:hasPostalAddress"
AS "7_u" FROM "nco:PersonContact_nco:hasAffiliation" AS
"nco:PersonContact_nco:hasAffiliation11",
"nco:Role_nco:hasPostalAddress" AS
"nco:Role_nco:hasPostalAddress12" WHERE "1_u" =
"nco:PersonContact_nco:hasAffiliation11"."ID" AND
"nco:PersonContact_nco:hasAffiliation11"."nco:hasAffiliation" =
"nco:Role_nco:hasPostalAddress12"."ID")), (SELECT
GROUP_CONCAT("10_u" COLLATE NOCASE, ',') FROM (SELECT
"nie:InformationElement_nao:hasProperty13"."nao:hasProperty" AS
"8_u", "nao:Property14"."nao:propertyName" AS "9_u",
"nao:Property14"."nao:propertyValue" AS "10_u" FROM
"nie:InformationElement_nao:hasProperty" AS
"nie:InformationElement_nao:hasProperty13", "nao:Property" AS
"nao:Property14" WHERE "1_u" =
"nie:InformationElement_nao:hasProperty13"."ID" AND
"nie:InformationElement_nao:hasProperty13"."nao:hasProperty" =
"nao:Property14"."ID" AND "9_u" IS NOT NULL AND "10_u" IS NOT
NULL AND ("9_u" COLLATE NOCASE = ? COLLATE NOCASE))) FROM (SELECT
"nco:PersonContact1"."ID" AS "1_u" FROM "nco:PersonContact" AS
"nco:PersonContact1") ORDER BY "1_u";
}
} {/. * Goto .*/}

```

finish_test

Found in path(s):

```

* /opt/cola/permits/1146568937_1616563472.04/0/sqlite-3.7.17-8.el7_7.1-1.src.rpm-cosi-expand-archive-
lltKQC5N/sqlite-src-3071700.zip-cosi-expand-archive-cheW8kUH/sqlite-src-3071700/test/fuzz-oss1.test

```

No license file was found, but licenses were detected in source scan.

```
)print dup( )cvns print
```

Found in path(s):

```
* {cvx $error/errordname get(Error
```

No license file was found, but licenses were detected in source scan.

application code is free to use these routines as well, if desired.

Found in path(s):

```
* /opt/cola/permits/1146568937_1616563472.04/0/sqlite-3.7.17-8.el7_7.1-1.src.rpm-cosi-expand-archive-lltKQC5N/sqlite-doc-3071700.zip-cosi-expand-archive-r9EckcaZ/sqlite-doc-3071700/34to35.html
```

No license file was found, but licenses were detected in source scan.

```
/*
```

```
** Return a pointer to the "temporary page" buffer held internally  
** by the pager. This is a buffer that is big enough to hold the  
** entire content of a database page. This buffer is used internally  
** during rollback and will be overwritten whenever a rollback  
** occurs. But other modules are free to use it too, as long as  
** no rollbacks are happening.
```

```
*/
```

Found in path(s):

```
* /opt/cola/permits/1146568937_1616563472.04/0/sqlite-3.7.17-8.el7_7.1-1.src.rpm-cosi-expand-archive-lltKQC5N/sqlite-src-3071700.zip-cosi-expand-archive-cheW8kUH/sqlite-src-3071700/src/pager.c
```

1.81 nss-util 3.67.0-1.el7_9

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1.82 libgcc 4.8.5-44.e17

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Jan 21, 2002

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The End

@ignore

@c Set file name and title for man page.

@setfilename gpl

@settitle GNU General Public License

@c man begin SEEALSO

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

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```
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```

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@c man end

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Version 2.1, February 1999

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- c) accompany it with the information you received as to where the

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Source code for a work means the preferred form of the work for making modifications to it. For an executable file, complete source code means all the source code for all modules it contains; but, as a special exception, it need not include source code for modules which are standard libraries that accompany the operating system on which the executable file runs, or for standard header files or definitions files that accompany that operating system.

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Appendix: How to Apply These Terms to Your New Programs

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

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

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

```
This program is free software; you can redistribute it and/or modify  
it under the terms of the GNU General Public License as published by  
the Free Software Foundation; either version 1, or (at your option)  
any later version.
```

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

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

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

```
Gnomovision version 69, Copyright (C) 19xx name of author
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute it
under certain conditions; type `show c' for details.
```

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

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

```
Yoyodyne, Inc., hereby disclaims all copyright interest in the
program `Gnomovision' (a program to direct compilers to make passes
at assemblers) written by James Hacker.
```

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

That's all there is to it!

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Version 2.1, February 1999

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

the version number 2.1.]

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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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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.

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"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.

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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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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

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

to use the modified definitions.)

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

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

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

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

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

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

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

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

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

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

That's all there is to it!

This is the Debian GNU/Linux prepackaged version of the GNU compiler collection, containing Ada, C, C++, Fortran 95, Java, Objective-C, Objective-C++, and Treelang compilers, documentation, and support libraries. In addition, Debian provides the gdc compiler, either in the same source package, or built from a separate same source package. Packaging is done by the Debian GCC Maintainers <debian-gcc@lists.debian.org>, with sources obtained from:

ftp://gcc.gnu.org/pub/gcc/releases/ (for full releases)
svn://gcc.gnu.org/svn/gcc/ (for prereleases)
http://bitbucket.org/goshawk/gdc (for D)

The current gcc-4.8 source package is taken from the SVN gcc-4_8-branch.

Changes: See changelog.Debian.gz

Debian splits the GNU Compiler Collection into packages for each language, library, and documentation as follows:

Language	Compiler package	Library package	Documentation
Ada	gnat-4.8	libgnat-4.8	gnat-4.8-doc
C	gcc-4.8		gcc-4.8-doc
C++	g++-4.8	libstdc++6	libstdc++6-4.8-doc
D	gdc-4.8		
Fortran 95	gfortran-4.8	libgfortran3	gfortran-4.8-doc

Go gccgo-4.8 libgo0
 Java gcj-4.8 libgcj10 libgcj-doc
 Objective C gobjc-4.8 libobjc2
 Objective C++ gobjc++-4.8

For some language run-time libraries, Debian provides source files, development files, debugging symbols and libraries containing position-independent code in separate packages:

Language	Sources	Development	Debugging	Position-Independent
C++		libstdc++6-4.8-dbg	libstdc++6-4.8-pic	
D	libphobos-4.8-dev			
Java	libgcj10-src	libgcj10-dev	libgcj10-dbg	

Additional packages include:

All languages:

libgcc1, libgcc2, libgcc4	GCC intrinsics (platform-dependent)
gcc-4.8-base	Base files common to all compilers
gcc-4.8-soft-float	Software floating point (ARM only)
gcc-4.8-source	The sources with patches

Ada:

libgnatvsn-dev, libgnatvsn4.8	GNAT version library
libgnatprj-dev, libgnatprj4.8	GNAT Project Manager library

C:

cpp-4.8, cpp-4.8-doc	GNU C Preprocessor
libmudflap0-dev, libmudflap0	Library for instrumenting pointers
libssp0-dev, libssp0	GCC stack smashing protection library
libquadmath0	Math routines for the __float128 type
fixincludes	Fix non-ANSI header files
protoize	Create/remove ANSI prototypes from C code

Java:

gij	The Java bytecode interpreter and VM
libgcj-common	Common files for the Java run-time
libgcj10-awt	The Abstract Windowing Toolkit
libgcj10-jar	Java ARchive for the Java run-time

C, C++ and Fortran 95:

libgomp1-dev, libgomp1	GCC OpenMP (GOMP) support library
libitm1-dev, libitm1	GNU Transactional Memory Library

Biarch support: On some 64-bit platforms which can also run 32-bit code, Debian provides additional packages containing 32-bit versions of some libraries. These packages have names beginning with 'lib32' instead of

'lib', for example lib32stdc++6. Similarly, on some 32-bit platforms which can also run 64-bit code, Debian provides additional packages with names beginning with 'lib64' instead of 'lib'. These packages contain 64-bit versions of the libraries. (At this time, not all platforms and not all libraries support biarch.) The license terms for these lib32 or lib64 packages are identical to the ones for the lib packages.

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libquadmath/math:

atanq.c, expm1q.c, j0q.c, j1q.c, log1pq.c, logq.c:

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coshq.c, erfq.c, jnq.c, lgammaq.c, powq.c, roundq.c:

Changes for 128-bit __float128 are

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ldexpq.c:

- * Conversion to long double by Ulrich Drepper,
- * Cygnus Support, drepper@cygnus.com.

cosq_kernel.c, expq.c, sincos_table.c, sincosq.c, sincosq_kernel.c, sinq_kernel.c, truncq.c:

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D:

gdc-4.8	GNU D Compiler
libphobos-4.8-dev	D standard runtime library

The D source package is made up of the following components.

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- d/*

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The DMD Compiler implementation of the D programming language:

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- `d/phobos/*`

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

HISTORY -

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

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

Some other contributors:

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

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

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

Robert Brazile (brazile@diamond.bbn.com) originally supplied the ULTRIX code. Al 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.)
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1.83 device-mapper-libs 7:1.02.170-6.el7_9.5

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```
@c Local Variables:
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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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(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.

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

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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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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.

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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.)

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@item

Use a suitable shared library mechanism for linking with the Library. A

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

@item

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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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@var{signature of Ty Coon}, 1 April 1990

Ty Coon, President of Vice

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(This file is under construction.) -*- text -*-

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

This file will eventually be deleted: The general info will go into the documentation, and info on specific files will go into an AUTHORS file, as requested by the FSF.

+++++

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

Jay Fenlason maintained gas for a while, adding support for gdb-specific debug information and the 68k series machines, most of the preprocessing pass, and extensive changes in messages.c, input-file.c, write.c.

K. Richard Pixley maintained gas for a while, adding various enhancements and many bug fixes, including merging support for several processors, breaking gas up to handle multiple object file format backends (including heavy rewrite, testing, an integration of the coff and b.out backends), adding configuration including heavy testing and verification of cross assemblers and file splits and renaming, converted gas to strictly ansi C including full prototypes, added support for m680[34]0 & cpu32, considerable work on i960 including a coff port (including considerable amounts of reverse engineering), a sparc opcode file rewrite, decstation, rs6000, and hp300hpux host ports, updated "know" assertions and made them work, much other reorganization, cleanup, and lint.

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

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

The Intel 80386 machine description was written by Eliot Dresselhaus.

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

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

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

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

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

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

David Edelsohn contributed fixes for the PowerPC and AIX support.

Steve Chamberlain made gas able to generate listings.

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

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

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

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

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

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

Steve Haworth contributed the support for the Texas Instruction c30 (tms320c30).

H.J. Lu has contributed many patches and much testing.

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

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

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1.85 dbus-libs 1:1.10.24-15.el7

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1.92 python-gobject-base 3.22.0 1.el7_4.1

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1.93 p11-kit 0.23.5 3.el7

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1.94 libcurl 7.29.0-59.el7_9.1

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=====

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krb4

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1.95 glib 2.56.1-9.el7_9

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1.97 yum-utils 1.1.31-54.el7_8

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```
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```

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

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1.98 lua 5.1.4 15.e17

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1.99 info 5.1 5.el7

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```

#include <config.h>

/* Specification. */
#include "uniwidth.h"

#include "cjk.h"

/*
 * Non-spacing attribute table.
 * Consists of:
 * - Non-spacing characters; generated from PropList.txt or
 *   "grep '^[\^;]*;[\^;]*;[\^;]*;[\^;]*;NSM;' UnicodeData.txt"
 * - Format control characters; generated from
 *   "grep '^[\^;]*;[\^;]*;Cf;' UnicodeData.txt"
 * - Zero width characters; generated from
 *   "grep '^[\^;]*;ZERO WIDTH ' UnicodeData.txt"
 */
static const unsigned char nonspacing_table_data[27*64] = {
/* 0x0000-0x01ff */
0xff, 0xff, 0xff, 0xff, 0x00, 0x00, 0x00, 0x00, /* 0x0000-0x003f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x0040-0x007f */
0xff, 0xff, 0xff, 0xff, 0x00, 0x20, 0x00, 0x00, /* 0x0080-0x00bf */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x00c0-0x00ff */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x0100-0x013f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x0140-0x017f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x0180-0x01bf */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x01c0-0x01ff */
/* 0x0200-0x03ff */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x0200-0x023f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x0240-0x027f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x0280-0x02bf */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x02c0-0x02ff */
0xff, 0xff, 0xff, 0xff, 0xff, 0xff, 0xff, 0xff, /* 0x0300-0x033f */
0xff, 0xff, 0xff, 0xff, 0xff, 0xff, 0x00, 0x00, /* 0x0340-0x037f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x0380-0x03bf */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x03c0-0x03ff */
/* 0x0400-0x05ff */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x0400-0x043f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x0440-0x047f */
0xf8, 0x03, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x0480-0x04bf */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x04c0-0x04ff */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x0500-0x053f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x0540-0x057f */
0x00, 0x00, 0xfe, 0xff, 0xff, 0xff, 0xff, 0xbf, /* 0x0580-0x05bf */
0xb6, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x05c0-0x05ff */
/* 0x0600-0x07ff */
0x0f, 0x00, 0xff, 0x07, 0x00, 0x00, 0x00, 0x00, /* 0x0600-0x063f */

```


0x00, 0xf8, 0xff, 0xff, 0x00, 0x00, 0x01, 0x00, /* 0x0640-0x067f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x0680-0x06bf */
0x00, 0x00, 0xc0, 0xbf, 0x9f, 0x3d, 0x00, 0x00, /* 0x06c0-0x06ff */
0x00, 0x80, 0x02, 0x00, 0x00, 0x00, 0xff, 0xff, /* 0x0700-0x073f */
0xff, 0x07, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x0740-0x077f */
0x00, 0x00, 0x00, 0x00, 0xc0, 0xff, 0x01, 0x00, /* 0x0780-0x07bf */
0x00, 0x00, 0x00, 0x00, 0x00, 0xf8, 0x0f, 0x00, /* 0x07c0-0x07ff */
/* 0x0800-0x09ff */
0x00, 0x00, 0xc0, 0xfb, 0xef, 0x3e, 0x00, 0x00, /* 0x0800-0x083f */
0x00, 0x00, 0x00, 0x0e, 0x00, 0x00, 0x00, 0x00, /* 0x0840-0x087f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x0880-0x08bf */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x08c0-0x08ff */
0x07, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x14, /* 0x0900-0x093f */
0xfe, 0x21, 0xfe, 0x00, 0x0c, 0x00, 0x00, 0x00, /* 0x0940-0x097f */
0x02, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x10, /* 0x0980-0x09bf */
0x1e, 0x20, 0x00, 0x00, 0x0c, 0x00, 0x00, 0x00, /* 0x09c0-0x09ff */
/* 0x0a00-0x0bff */
0x06, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x10, /* 0x0a00-0x0a3f */
0x86, 0x39, 0x02, 0x00, 0x00, 0x00, 0x23, 0x00, /* 0x0a40-0x0a7f */
0x06, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x10, /* 0x0a80-0x0abf */
0xbe, 0x21, 0x00, 0x00, 0x0c, 0x00, 0x00, 0x00, /* 0x0ac0-0x0aff */
0x02, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x90, /* 0x0b00-0x0b3f */
0x1e, 0x20, 0x40, 0x00, 0x0c, 0x00, 0x00, 0x00, /* 0x0b40-0x0b7f */
0x04, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x0b80-0x0bbf */
0x01, 0x20, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x0bc0-0x0bff */
/* 0x0c00-0x0dff */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xc0, /* 0x0c00-0x0c3f */
0xc1, 0x3d, 0x60, 0x00, 0x0c, 0x00, 0x00, 0x00, /* 0x0c40-0x0c7f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x10, /* 0x0c80-0x0cbf */
0x00, 0x30, 0x00, 0x00, 0x0c, 0x00, 0x00, 0x00, /* 0x0cc0-0x0cff */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x0d00-0x0d3f */
0x1e, 0x20, 0x00, 0x00, 0x0c, 0x00, 0x00, 0x00, /* 0x0d40-0x0d7f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x0d80-0x0dbf */
0x00, 0x04, 0x5c, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x0dc0-0x0dff */
/* 0x0e00-0x0fff */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xf2, 0x07, /* 0x0e00-0x0e3f */
0x80, 0x7f, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x0e40-0x0e7f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xf2, 0x1b, /* 0x0e80-0x0ebf */
0x00, 0x3f, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x0ec0-0x0eff */
0x00, 0x00, 0x00, 0x03, 0x00, 0x00, 0xa0, 0x02, /* 0x0f00-0x0f3f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xfe, 0x7f, /* 0x0f40-0x0f7f */
0xdf, 0xe0, 0xff, 0xfe, 0xff, 0xff, 0xff, 0x1f, /* 0x0f80-0x0fbf */
0x40, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x0fc0-0x0fff */
/* 0x1000-0x11ff */
0x00, 0x00, 0x00, 0x00, 0x00, 0xe0, 0xfd, 0x66, /* 0x1000-0x103f */
0x00, 0x00, 0x00, 0xc3, 0x01, 0x00, 0x1e, 0x00, /* 0x1040-0x107f */
0x64, 0x20, 0x00, 0x20, 0x00, 0x00, 0x00, 0x00, /* 0x1080-0x10bf */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x10c0-0x10ff */

0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x1100-0x113f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x1140-0x117f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x1180-0x11bf */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x11c0-0x11ff */
/* 0x1200-0x13ff */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x1200-0x123f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x1240-0x127f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x1280-0x12bf */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x12c0-0x12ff */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x1300-0x133f */
0x00, 0x00, 0x00, 0xe0, 0x00, 0x00, 0x00, 0x00, /* 0x1340-0x137f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x1380-0x13bf */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x13c0-0x13ff */
/* 0x1600-0x17ff */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x1600-0x163f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x1640-0x167f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x1680-0x16bf */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x16c0-0x16ff */
0x00, 0x00, 0x1c, 0x00, 0x00, 0x00, 0x1c, 0x00, /* 0x1700-0x173f */
0x00, 0x00, 0x0c, 0x00, 0x00, 0x00, 0x0c, 0x00, /* 0x1740-0x177f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xb0, 0x3f, /* 0x1780-0x17bf */
0x40, 0xfe, 0x0f, 0x20, 0x00, 0x00, 0x00, 0x00, /* 0x17c0-0x17ff */
/* 0x1800-0x19ff */
0x00, 0x38, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x1800-0x183f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x1840-0x187f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x02, 0x00, 0x00, /* 0x1880-0x18bf */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x18c0-0x18ff */
0x00, 0x00, 0x00, 0x00, 0x87, 0x01, 0x04, 0x0e, /* 0x1900-0x193f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x1940-0x197f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x1980-0x19bf */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x19c0-0x19ff */
/* 0x1a00-0x1bff */
0x00, 0x00, 0x80, 0x01, 0x00, 0x00, 0x00, 0x00, /* 0x1a00-0x1a3f */
0x00, 0x00, 0x40, 0x7f, 0xe5, 0x1f, 0xf8, 0x9f, /* 0x1a40-0x1a7f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x1a80-0x1abf */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x1ac0-0x1aff */
0x0f, 0x00, 0x00, 0x00, 0x00, 0x00, 0xd0, 0x17, /* 0x1b00-0x1b3f */
0x04, 0x00, 0x00, 0x00, 0x00, 0xf8, 0x0f, 0x00, /* 0x1b40-0x1b7f */
0x03, 0x00, 0x00, 0x00, 0x3c, 0x03, 0x00, 0x00, /* 0x1b80-0x1bbf */
0x00, 0x00, 0x00, 0x00, 0x40, 0xa3, 0x03, 0x00, /* 0x1bc0-0x1bff */
/* 0x1c00-0x1dff */
0x00, 0x00, 0x00, 0x00, 0x00, 0xf0, 0xcf, 0x00, /* 0x1c00-0x1c3f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x1c40-0x1c7f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x1c80-0x1cbf */
0x00, 0x00, 0xf7, 0xff, 0xfd, 0x21, 0x00, 0x00, /* 0x1cc0-0x1cff */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x1d00-0x1d3f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x1d40-0x1d7f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x1d80-0x1dbf */

0xff, 0xff, 0xff, 0xff, 0x7f, 0x00, 0x00, 0xf0, /* 0x1dc0-0x1dff */
/* 0x2000-0x21ff */
0x00, 0xf8, 0x00, 0x00, 0x00, 0x7c, 0x00, 0x00, /* 0x2000-0x203f */
0x00, 0x00, 0x00, 0x00, 0x1f, 0xfc, 0x00, 0x00, /* 0x2040-0x207f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x2080-0x20bf */
0x00, 0x00, 0xff, 0xff, 0xff, 0xff, 0x01, 0x00, /* 0x20c0-0x20ff */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x2100-0x213f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x2140-0x217f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x2180-0x21bf */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x21c0-0x21ff */
/* 0x2200-0x22ff */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x2200-0x223f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x2240-0x227f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x2280-0x22bf */
0x00, 0x00, 0x00, 0x00, 0x00, 0x80, 0x03, 0x00, /* 0x22c0-0x22ff */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x22d0-0x223f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x80, /* 0x22d40-0x22d7f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x22d80-0x22dbf */
0x00, 0x00, 0x00, 0x00, 0xff, 0xff, 0xff, 0xff, /* 0x22dc0-0x22dff */
/* 0x2300-0x231ff */
0x00, 0x00, 0x00, 0x00, 0x00, 0xfc, 0x00, 0x00, /* 0x2300-0x2303f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x23040-0x2307f */
0x00, 0x00, 0x00, 0x06, 0x00, 0x00, 0x00, 0x00, /* 0x23080-0x230bf */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x230c0-0x230ff */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x23100-0x2313f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x23140-0x2317f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x23180-0x231bf */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x231c0-0x231ff */
/* 0xa600-0xa7ff */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0xa600-0xa63f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x80, 0x07, 0x30, /* 0xa640-0xa67f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0xa680-0xa6bf */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x03, 0x00, /* 0xa6c0-0xa6ff */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0xa700-0xa73f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0xa740-0xa77f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0xa780-0xa7bf */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0xa7c0-0xa7ff */
/* 0xa800-0xa9ff */
0x44, 0x08, 0x00, 0x00, 0x60, 0x00, 0x00, 0x00, /* 0xa800-0xa83f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0xa840-0xa87f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0xa880-0xa8bf */
0x10, 0x00, 0x00, 0x00, 0xff, 0xff, 0x03, 0x00, /* 0xa8c0-0xa8ff */
0x00, 0x00, 0x00, 0x00, 0xc0, 0x3f, 0x00, 0x00, /* 0xa900-0xa93f */
0x80, 0xff, 0x03, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0xa940-0xa97f */
0x07, 0x00, 0x00, 0x00, 0x00, 0x00, 0xc8, 0x13, /* 0xa980-0xa9bf */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0xa9c0-0xa9ff */
/* 0xaa00-0xabff */
0x00, 0x00, 0x00, 0x00, 0x00, 0x7e, 0x66, 0x00, /* 0xaa00-0xaa3f */

0x08, 0x10, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0xaa40-0xaa7f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x0d, 0xc1, /* 0xaa80-0xaabf */
0x02, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0xaac0-0xaaff */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0xab00-0xab3f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0xab40-0xab7f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0xab80-0xabbf */
0x00, 0x00, 0x00, 0x00, 0x20, 0x21, 0x00, 0x00, /* 0xabc0-0xabff */
/* 0xfa00-0xfbff */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0xfa00-0xfa3f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0xfa40-0xfa7f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0xfa80-0xfabf */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0xfac0-0xfaff */
0x00, 0x00, 0x00, 0x40, 0x00, 0x00, 0x00, 0x00, /* 0xfb00-0xfb3f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0xfb40-0xfb7f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0xfb80-0xfbff */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0xfbc0-0xfbff */
/* 0xfe00-0xffff */
0xff, 0xff, 0x00, 0x00, 0x7f, 0x00, 0x00, 0x00, /* 0xfe00-0xfe3f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0xfe40-0xfe7f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0xfe80-0xfebf */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x80, /* 0xfec0-0xfeff */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0xff00-0xff3f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0xff40-0xff7f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0xff80-0xffbf */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x0e, /* 0xffc0-0xffff */
/* 0x10000-0x101ff */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x10000-0x1003f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x10040-0x1007f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x10080-0x100bf */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x100c0-0x100ff */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x10100-0x1013f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x10140-0x1017f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x10180-0x101bf */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x20, /* 0x101c0-0x101ff */
/* 0x10a00-0x10bff */
0x6e, 0xf0, 0x00, 0x00, 0x00, 0x00, 0x00, 0x87, /* 0x10a00-0x10a3f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x10a40-0x10a7f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x10a80-0x10abf */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x10ac0-0x10aff */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x10b00-0x10b3f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x10b40-0x10b7f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x10b80-0x10bbf */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x10bc0-0x10bff */
/* 0x11000-0x111ff */
0x02, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xff, /* 0x11000-0x1103f */
0x7f, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x11040-0x1107f */
0x03, 0x00, 0x00, 0x00, 0x00, 0x00, 0x78, 0x26, /* 0x11080-0x110bf */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x110c0-0x110ff */

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0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x11100-0x1113f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x11140-0x1117f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x11180-0x111bf */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x111c0-0x111ff */
/* 0x1d000-0x1d1ff */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x1d000-0x1d03f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x1d040-0x1d07f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x1d080-0x1d0bf */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x1d0c0-0x1d0ff */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x1d100-0x1d13f */
0x00, 0x00, 0x00, 0x00, 0x80, 0x03, 0xf8, 0xff, /* 0x1d140-0x1d17f */
0xe7, 0x0f, 0x00, 0x00, 0x00, 0x3c, 0x00, 0x00, /* 0x1d180-0x1d1bf */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x1d1c0-0x1d1ff */
/* 0x1d200-0x1d3ff */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x1d200-0x1d23f */
0x1c, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x1d240-0x1d27f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x1d280-0x1d2bf */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x1d2c0-0x1d2ff */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x1d300-0x1d33f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x1d340-0x1d37f */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, /* 0x1d380-0x1d3bf */
0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00 /* 0x1d3c0-0x1d3ff */
};

```

```

static const signed char nonspacing_table_ind[240] = {
    0, 1, 2, 3, 4, 5, 6, 7, /* 0x0000-0x0fff */
    8, 9, -1, 10, 11, 12, 13, -1, /* 0x1000-0x1fff */
    14, -1, -1, -1, -1, -1, 15, -1, /* 0x2000-0x2fff */
    16, -1, -1, -1, -1, -1, -1, -1, /* 0x3000-0x3fff */
    -1, -1, -1, -1, -1, -1, -1, -1, /* 0x4000-0x4fff */
    -1, -1, -1, -1, -1, -1, -1, -1, /* 0x5000-0x5fff */
    -1, -1, -1, -1, -1, -1, -1, -1, /* 0x6000-0x6fff */
    -1, -1, -1, -1, -1, -1, -1, -1, /* 0x7000-0x7fff */
    -1, -1, -1, -1, -1, -1, -1, -1, /* 0x8000-0x8fff */
    -1, -1, -1, -1, -1, -1, -1, -1, /* 0x9000-0x9fff */
    -1, -1, -1, 17, 18, 19, -1, -1, /* 0xa000-0xafff */
    -1, -1, -1, -1, -1, -1, -1, -1, /* 0xb000-0xbfff */
    -1, -1, -1, -1, -1, -1, -1, -1, /* 0xc000-0xcfff */
    -1, -1, -1, -1, -1, -1, -1, -1, /* 0xd000-0xdfff */
    -1, -1, -1, -1, -1, -1, -1, -1, /* 0xe000-0xefff */
    -1, -1, -1, -1, -1, 20, -1, 21, /* 0xf000-0xffff */
    22, -1, -1, -1, -1, 23, -1, -1, /* 0x10000-0x10fff */
    24, -1, -1, -1, -1, -1, -1, -1, /* 0x11000-0x11fff */
    -1, -1, -1, -1, -1, -1, -1, -1, /* 0x12000-0x12fff */
    -1, -1, -1, -1, -1, -1, -1, -1, /* 0x13000-0x13fff */
    -1, -1, -1, -1, -1, -1, -1, -1, /* 0x14000-0x14fff */
    -1, -1, -1, -1, -1, -1, -1, -1, /* 0x15000-0x15fff */
    -1, -1, -1, -1, -1, -1, -1, -1, /* 0x16000-0x16fff */
    -1, -1, -1, -1, -1, -1, -1, -1, /* 0x17000-0x17fff */

```

```

-1, -1, -1, -1, -1, -1, -1, -1, /* 0x18000-0x18fff */
-1, -1, -1, -1, -1, -1, -1, -1, /* 0x19000-0x19fff */
-1, -1, -1, -1, -1, -1, -1, -1, /* 0x1a000-0x1afff */
-1, -1, -1, -1, -1, -1, -1, -1, /* 0x1b000-0x1bfff */
-1, -1, -1, -1, -1, -1, -1, -1, /* 0x1c000-0x1cfff */
25, 26, -1, -1, -1, -1, -1, -1 /* 0x1d000-0x1dfff */
};

/* Determine number of column positions required for UC. */
int
uc_width(ucs4_t uc, const char *encoding)
{
    /* Test for non-spacing or control character. */
    if ((uc >> 9) < 240)
    {
        int ind = nonspacing_table_ind[uc >> 9];
        if (ind >= 0)
            if ((nonspacing_table_data[64*ind + ((uc >> 3) & 63)] >> (uc & 7)) & 1)
            {
                if (uc > 0 && uc < 0xa0)
                    return -1;
                else
                    return 0;
            }
    }
    else if ((uc >> 9) == (0xe0000 >> 9))
    {
        if (uc >= 0xe0100)
        {
            if (uc <= 0xe01ef)
                return 0;
        }
        else
        {
            if (uc >= 0xe0020 ? uc <= 0xe007f : uc == 0xe0001)
                return 0;
        }
    }
    /* Test for double-width character.
    * Generated from "grep '^[\^;]\{4,5\};[WF]' EastAsianWidth.txt"
    * and "grep '^[\^;]\{4,5\};[^\^WF]' EastAsianWidth.txt"
    */
    if (uc >= 0x1100
        && ((uc < 0x1160) /* Hangul Jamo */
            || (uc >= 0x2329 && uc < 0x232b) /* Angle Brackets */
            || (uc >= 0x2e80 && uc < 0xa4d0) /* CJK ... Yi */
            && !(uc == 0x303f) && !(uc >= 0x4dc0 && uc < 0x4e00))
        || (uc >= 0xac00 && uc < 0xd7a4) /* Hangul Syllables */

```

```

    || (uc >= 0xf900 && uc < 0xfb00) /* CJK Compatibility Ideographs */
    || (uc >= 0xfe10 && uc < 0xfe20) /* Presentation Forms for Vertical */
    || (uc >= 0xfe30 && uc < 0xfe70) /* CJK Compatibility Forms */
    || (uc >= 0xff00 && uc < 0xff61) /* Fullwidth Forms */
    || (uc >= 0xffe0 && uc < 0xffe7) /* Fullwidth Signs */
    || (uc >= 0x20000 && uc <= 0x2ffff) /* Supplementary Ideographic Plane */
    || (uc >= 0x30000 && uc <= 0x3ffff) /* Tertiary Ideographic Plane */
) )
return 2;
/* In ancient CJK encodings, Cyrillic and most other characters are
double-width as well. */
if (uc >= 0x00A1 && uc < 0xFF61 && uc != 0x20A9
    && is_cjk_encoding (encoding))
    return 2;
return 1;
}

```

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1.101 shadow-utils 2:4.6-5.el7

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```

The hypothetical commands `show w' and `show c' should show the appropriate

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

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

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numbered 2 because it goes with version 2 of the ordinary GPL.]

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1.103 attr 2.4.46 13.el7

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1.105 curl 7.29.0-59.el7_9.1

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*/

size: 8388608, sector size: 512, PT: dos, offset: 446, id=0x8f8378c0

#1: 32 7648 0x83

#2: 7680 8704 0xa5
#5: 7936 4864 0x7 (freebsd)
#6: 12544 3584 0x7 (freebsd)

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

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```
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Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.  
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under certain conditions; type `show c' for details.
```

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

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

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Initialize empty image

f1c9645dbc14efddc7d8a322685f26eb bsd.img

Create new DOS partition table

57e721e38d1266c2df055067c18f2cf9 bsd.img

---layout-----

__ts_dev__: 10 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 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	83	Linux

Create 2st primary partition
1bebf87248e05d6e4e62b749da65d023 bsd.img
Set 2nd partition type
2d8e8dff51a88a045db233418dd73fbe bsd.img

---layout-----

__ts_dev__: 10 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	83	Linux
__ts_dev__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:	4096	20479	16384	unused	0	0	
d:	0	16064	16065	unused	0	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	4.2BSD	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):

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	5 4.1BSD	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			

BSD disklabel command (m for help):

1.107 pkg-config 1:0.27.1-4.el7

1.107.1 Available under license :

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Version 2, June 1991

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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.

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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

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1.109 systemd 219-78.el7_9.5

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1.110 rpm-python 4.11.3-48.el7_9

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

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

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

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

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

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

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

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the

library". The executable is therefore covered by this License.
Section 6 states terms for distribution of such executables.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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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 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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library `Frob' (a library for tweaking knobs) written by James Random Hacker.

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Ty Coon, President of Vice

That's all there is to it!

1.111 glibc 2.17-325.el7_9

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@subheading Preamble

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

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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.

@subheading TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

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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.

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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 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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The modified work must itself be a software library.

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You must cause the files modified to carry prominent notices

stating that you changed the files and the date of any change.

@item

You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.

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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.

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

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

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

@item

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

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

@item

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

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

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

If such an object file uses only numerical parameters, data

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

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

@item

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

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

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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.)

@item

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

version that the work was made with.

@item

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

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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.

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

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@subheading END OF TERMS AND CONDITIONS

@page

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@smallexample

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```

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under certain conditions; type `show c' for details.
```

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```
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```

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

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1.112 pcre 8.32 17.el7

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1.113 python-urlgrabber 3.10 10.e17

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1.115 libdb-utils 5.3.21 25.el7

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Author: Ruben Rodriguez <ruben@trisquel.info>

--- db-5.3.21/src/crypto/mersenne/mt19937db.c.licensefix

+++ db-5.3.21/src/crypto/mersenne/mt19937db.c

@@ -16,16 +16,27 @@

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# last modified 28th October 2007
# version 1.818
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<meta name="keywords"
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method,access methods,Java,C,C++">
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<body bgcolor=white>
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</body>
</html>
/*-
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1.117 cpio 2.11-28.el7

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1.119 elfutils-default-yama-scope 0.176-5.el7

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1.120 libutempter 1.1.6 4.el7

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

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signature of Ty Coon, 1 April 1989

Ty Coon, President of Vice

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David Megginson

1.122 rpm-build-libs 4.11.3-48.el7_9

1.122.1 Available under license :

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

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```

```
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1.123 gawk 4.0.2 4.el7_3.1

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```
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```

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```
<signature of Ty Coon>, 1 April 1990  
Ty Coon, President of Vice
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1.124 cryptsetup-libs 2.0.3-6.el7

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1.127 open-ldap 2.4.44-24.el7_9

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1.128 nss-sysinit 3.67.0-4.el7_9

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1.130 kmod 20 28.e17

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1.132 shared-mime-info 1.8 5.el7

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1.133 libcom-err 1.42.9-19.el7

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This package was put together by Yann Dirson <dirson@debian.org>, from sources obtained from a mirror of:
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1.134 json-c 0.11 4.el7_0

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1.135 rpm 4.11.3-48.el7_9

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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.

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.

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- a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)
- b) 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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1.136 libuser 0.60 9.e17

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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.

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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"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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(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.

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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.

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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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Ty Coon, President of Vice
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1.137 libblkid 2.23.2-65.el7_9.1

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*/

size: 8388608, sector size: 512, PT: dos, offset: 446, id=0x8f8378c0

#1: 32 7648 0x83
#2: 7680 8704 0xa5
#5: 7936 4864 0x7 (freebsd)
#6: 12544 3584 0x7 (freebsd)

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```

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Initialize empty image

f1c9645dbc14efddc7d8a322685f26eb bsd.img

Create new DOS partition table

57e721e38d1266c2df055067c18f2cf9 bsd.img

---layout-----

__ts_dev__: 10 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 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	83	Linux

Create 2st primary partition

1bebf87248e05d6e4e62b749da65d023 bsd.img

Set 2nd partition type

2d8e8dff51a88a045db233418dd73fbe bsd.img

---layout-----

__ts_dev__: 10 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	83	Linux
__ts_dev__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: 4096 20479 16384 unused 0 0
```

```
d: 0 16064 16065 unused 0 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	4.2BSD	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):

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	5	4.1BSD	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						

BSD disklabel command (m for help):

1.138 libxml2 2.9.1-6.el7_9.6

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1.139 zlib 1.2.7-19.el7_9

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1.140 popt 1.13 16.el7

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1.141 gpgme 1.3.2-5.el7

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1.142 pycurl 7.19.0 19.e17

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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>

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

Author: Julio Merino <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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<!-- Generate ISC copyright comments from Docbook copyright metadata. -->

<xsl:stylesheet version="1.0"

xmlns:xsl="http://www.w3.org/1999/XSL/Transform"

xmlns:xi="http://www.w3.org/2001/XInclude"

xmlns:db="http://docbook.org/ns/docbook">

<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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    file, You can obtain one at http://mozilla.org/MPL/2.0/.
  </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="book/info/copyright | refentry/docinfo/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:value-of select="$isc.copyright.breakline"/>
      <xsl:text>&#10;</xsl:text>
    </xsl:for-each>
    <xsl:value-of select="$isc.copyright.text"/>
  </xsl:with-param>
</xsl:call-template>
</xsl:variable>
</xsl:stylesheet>

```

<!--

- Local variables:
- mode: sgml
- End:

-->

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1.144 libuuid 2.23.2-65.el7_9.1

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*/

size: 8388608, sector size: 512, PT: dos, offset: 446, id=0x8f8378c0

#1: 32 7648 0x83

#2: 7680 8704 0xa5

#5: 7936 4864 0x7 (freebsd)

#6: 12544 3584 0x7 (freebsd)

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Version 2, June 1991

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```

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Ty Coon, President of Vice
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Initialize empty image

f1c9645dbc14efddc7d8a322685f26eb bsd.img

Create new DOS partition table

57e721e38d1266c2df055067c18f2cf9 bsd.img

---layout-----

__ts_dev__: 10 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 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	83	Linux

Create 2st primary partition
1bebf87248e05d6e4e62b749da65d023 bsd.img
Set 2nd partition type
2d8e8dff51a88a045db233418dd73fbe bsd.img

---layout-----
__ts_dev__: 10 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	83	Linux
__ts_dev__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:	4096	20479	16384	unused	0	0	
d:	0	16064	16065	unused	0	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	4.2BSD	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):

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	5	4.1BSD	9	4.4LFS	d	boot
1	swap	6	Eighth Edition	a	unknown	e	ADOS
2	Version 6	7	4.2BSD	b	HPFS	f	HFS

BSD disklabel command (m for help):

1.145 libmount 2.23.2-65.el7_9.1

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 */
size: 8388608, sector size: 512, PT: dos, offset: 446, id=0x8f8378c0
---
#1:   32   7648 0x83
#2:  7680   8704 0xa5
#5:  7936  4864 0x7 (freebsd)
#6: 12544  3584 0x7 (freebsd)
```

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```

```
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Initialize empty image

f1c9645dbc14efddc7d8a322685f26eb bsd.img

Create new DOS partition table

57e721e38d1266c2df055067c18f2cf9 bsd.img

---layout-----

__ts_dev__: 10 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 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	83	Linux

Create 2st primary partition
1bebf87248e05d6e4e62b749da65d023 bsd.img
Set 2nd partition type
2d8e8dff51a88a045db233418dd73fbe bsd.img

---layout-----
__ts_dev__: 10 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	83	Linux
__ts_dev__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:	4096	20479	16384	unused	0	0	
d:	0	16064	16065	unused	0	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	4.2BSD	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):

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	5	4.1BSD	9	4.4LFS	d	boot
1	swap	6	Eighth Edition	a	unknown	e	ADOS
2	Version 6	7	4.2BSD	b	HPFS	f	HFS

BSD disklabel command (m for help):

1.146 procps 3.3.10-28.el7

1.146.1 Available under license :

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Version 2, June 1991

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1.147 passwd 0.79 6.el7

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