

**NAME**

How to build Tardy

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**tardy** *a.*, slow to act, behind time.

**BEFORE YOU START**

There are a few pieces of software you may want to fetch and install before you proceed with your installation of Tardy.

**Boost Library**

You will need the C++ Boost Library. If you are using a package based system, you will need the libboost-devel package, or one named something very similar.

<http://boost.org/>

**BZ2 library**

You will need the bzip2 library. If you are using a package based system, you will need the libbz2-devel package, or one named something very similar.

**LZMA library**

You will need the lzma library, for .xz compression. If you are using a package based system, you will need the liblzma-devel package, or one named something very similar.

**cpio**

The test suite uses the *cpio*(1) command to create CPIO archives for testing.

**GNU Groff**

The documentation for the *Tardy* package was prepared using the GNU Groff package (version 1.14 or later). This distribution includes full documentation, which may be processed into PostScript or DVI files at install time – if GNU Groff has been installed.

**GCC**

You may also want to consider fetching and installing the GNU C Compiler if you have not done so already. This is not essential. Tardy was developed using the GNU C++ compiler, and the GNU C++ libraries.

**libexplain**

The *libexplain* project provides a library of system-call-specific sterror(3) replacements, for more informative error messages.

<http://libexplain.sourceforge.net/>

**zlib**

zlib is a library implementing the deflate compression method (and inflate decompression method) found in *gzip*(1) and PKZIP.

<http://zlib.net/>

**SITE CONFIGURATION**

The **tardy** program is configured using the *configure* shell script included in this distribution.

The *configure* shell script attempts to guess correct values for various system-dependent variables used during compilation, and creates the *Makefile* and *libtardy/config.h* files. It also creates a shell script *config.status* that you can run in the future to recreate the current configuration.

Normally, you just *cd* to the directory containing *tardy*'s source code and type

```
% ./configure
```

```
...lots of output...
```

```
%
```

If you're using *csh* on an old version of System V, you might need to type

```
% sh configure
```

```
...lots of output...
```

```
%
```

instead to prevent *csh* from trying to execute *configure* itself.

Running *configure* takes a minute or two. While it is running, it prints some messages that tell what it is doing. If you don't want to see the messages, run *configure* using the `--quiet` option; for example,

```
% ./configure --quiet
%
```

By default, *configure* will arrange for the *make install* command to install the **tardy** program's files in `/usr/local/bin` and `/usr/local/man`. You can specify an installation prefix other than `/usr/local` by giving *configure* the option `--prefix=PATH`.

You can specify separate installation prefixes for architecture-specific files and architecture-independent files. If you give *configure* the option `--exec-prefix=PATH` the **tardy** package will use *PATH* as the prefix for installing programs and libraries. Data files and documentation will still use the regular prefix. Normally, all files are installed using the same prefix.

*configure* ignores any other arguments that you give it.

On systems that require unusual options for compilation or linking that the *tardy* package's *configure* script does not know about, you can give *configure* initial values for variables by setting them in the environment. In Bourne-compatible shells, you can do that on the command line like this:

```
$ CC='gcc -traditional' LIBS=-lposix ./configure
...lots of output...
$
```

Here are the *make* variables that you might want to override with environment variables when running *configure*.

Variable: CC

C compiler program. The default is *cc*.

Variable: INSTALL

Program to use to install files. The default is *install* if you have it, *cp* otherwise.

Variable: LIBS

Libraries to link with, in the form `-lfoo -lbar`. The *configure* script will append to this, rather than replace it.

If you need to do unusual things to compile the package, the author encourages you to figure out how *configure* could check whether to do them, and mail diffs or instructions to the author so that they can be included in the next release.

## BUILDING TARDY

All you should need to do is use the

```
% make
...lots of output...
%
```

command and wait. When this finishes you should see a directory called *bin* containing one file: *tardy*. The *tardy* program is a tar post-processor.

You can remove the program binaries and object files from the source directory by using the

```
% make clean
...lots of output...
%
```

command. To remove all of the above files, and also remove the *Makefile* and *libtardy/config.h* and *config.status* files, use the

```
% make distclean
...lots of output...
%
```

command.

The file *etc/configure.ac* is used to create *configure* by a GNU program called *autoconf*. You only need to know this if you want to regenerate *configure* using a newer version of *autoconf*.

## TESTING TARDY

The *tardy* program comes with a test suite. To run this test suite, use the command

```
% make sure
...lots of output...
Passed All Tests
%
```

The tests take a about a minute each, with a few very fast, and a couple very slow, but it varies greatly depending on your CPU.

## INSTALLING TARDY

The *tardy* program is installed under the */usr/local* tree by default. Use the `--prefix=PATH` option to *configure* if you want some other path.

All that is required to install the *tardy* program is to use the

```
% make install
...lots of output...
%
```

command. Control of the directories used may be found in the first few lines of the *Makefile* file if you want to bypass the *configure* script.

The above procedure assumes that the *soelim(1)* command is somewhere in the command search *PATH*. The *soelim(1)* command is available as part of the *GNU Roff* package.

The above procedure also assumes that the *\$(prefix)/man/man1* and *\$(prefix)/man/man5* directories already exist. If they do not, you will need to *mkdir* them manually.

## PRINTED MANUALS

This distribution contains the sources to all of the documentation for *tardy*. The author used the GNU *groff* package and a postscript printer to prepare the documentation. If you do not have this software, you will need to substitute commands appropriate to your site.

To print copies of the *README*, and *BUILDING* files, the following commands may be used

```
% groff -t -man etc/*.man | lpr
%
```

This will produce about 4 pages. The "-t" flag means preprocess with *tbl(1)*.

To print copies of the manual entry, the following commands may be used

```
% cd man1
% groff -s -t -man *.1 | lpr
% cd ..
%
```

This will produce about 3 pages. The "-s" flag means preprocess with *soelim(1)*, and the "-t" flag means preprocess with *tbl(1)*.

## GETTING HELP

If you need assistance with the *tardy* program, please do not hesitate to contact the author at

Peter Miller <pmiller@opensource.org.au>

Any and all feedback is welcome.

When reporting problems, please include the version number given by the

```
% tardy -version
tardy version a.b.cccc
```

```
...
%
```

command.

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It should be in the *LICENSE* file included in this distribution.

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