GNU Hello

for version 2.2, 23 November 2006

GNU Hello Developers (bug-hello@gnu.org)

This manual is for GNU Hello (version 2.2, 23 November 2006), which prints a friendly greeting (and serves as an example GNU package).

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1 Overview

The GNU `hello` program produces a familiar, friendly greeting. It allows nonprogrammers to use a classic computer science tool which would otherwise be unavailable to them. Because it is protected by the GNU General Public License, users are free (in perpetuity) to share and change it.

For the latest updates and other information, please visit the GNU Hello home page at `http://www.gnu.org/software/hello/`.

Not to spoil the joke, but of course the practical purpose of GNU Hello is to serve as a minimal example of a GNU package. So, although most manuals don't need to discuss the implementation of the programs they document, that is part of the goal here.

First, GNU Hello follows the GNU coding standards (see section "Preface" in *GNU Coding Standards*) and GNU maintainer standards (see section "Preface" in *Information for GNU Maintainers*). These are the basic documents which all GNU packages should adhere to.

The Hello package also implements recommended development practices not embodied in the standards, using other GNU packages and features:

- It uses Automake (see section "Introduction" in *GNU Automake*) and hence also Autoconf (see section "Introduction" in *GNU Autoconf*) for configuration.
- It uses Gnulib (see section "Gnulib" in *GNU Gnulib*) to enhance portability and avoid duplication of common sources.
- GNU Gettext (see section "Introduction" in *GNU Gettext*) is used for internationalization support. Hello's greeting has been translated into many languages.
- Internally, Hello uses the GNU `getopt_long` function (see section "Getopt Long Options" in *GNU C Library*) to parse options, thus supporting GNU-style long options such as '`--help`'.
- Man pages are generated with GNU `help2man` (see section "Overview" in *GNU* `help2man`) from the '`--help`' output. This relieves the maintainers of the burden of maintaining man documentation separately, yet provides a reasonable overview for man devotees.
- Finally, Texinfo (see section "Introduction" in *Texinfo*) is the documentation format for this manual. It supports output in Info, HTML, PDF, DVI, plain text, XML, and other formats.

GNU Hello is implemented in C. GNU Gettext contains "hello world" examples in a variety of other programming languages; see the Gettext home page at `http://www.gnu.org/software/gettext/`.

GNU `hello` was written by Mike Haertel, David MacKenzie, Jan Brittenson, Charles Hannum, Roland McGrath, Noah Friedman, Karl Eichwalder, Karl Berry, and The King.

2 Sample output

Here are some realistic examples of running GNU `hello`.

This is the output of the command '`hello`':

```
Hello, world!
```

This is the output of the command '`hello --traditional`':

```
hello, world
```

This is the output of the command '`hello --greeting=hi`':

```
hi
```

3 Invoking `hello`

The format for running the `hello` program is:

```
hello option ...
```

`hello` supports the following options:

‘`--greeting=`*text*’
‘`-g` *text*’ Output *text*.

‘`--help`’
‘`-h`’ Print an informative help message on standard output and exit successfully.

For the ‘`--help`’ output of GNU programs, it’s strongly encouraged to include a brief (one or two sentences) description of what the program does, as well as the synopsis of how to run the program. Any environment variables which affect execution should also be mentioned (Hello doesn’t have any).

‘`--next-generation`’
‘`-n`’ Output a modern greeting, possibly including box-drawing characters or other fancy stuff, using the Unicode UTF-8 locale.

‘`--traditional`’
‘`-t`’ Use the traditional greeting message ‘`hello, world`’ rather than the more modern ‘`Hello, world!`’.

‘`--version`’
‘`-v`’ Print the version number and licensing information of `hello` on standard output and then exit successfully.

4 Reporting bugs

To report bugs or suggest enhancements for GNU `hello`, please send electronic mail to `bug-hello@gnu.org`.

For bug reports, please include enough information for the maintainers to reproduce the problem. Generally speaking, that means:

- The version numbers of Hello (which you can find by running '`hello --version`') and any other program(s) or manual(s) involved.
- Hardware and operating system names and versions.
- The contents of any input files necessary to reproduce the bug.
- The expected behavior and/or output.
- A description of the problem and samples of any erroneous output.
- Options you gave to `configure` other than specifying installation directories.
- Anything else that you think would be helpful.

When in doubt whether something is needed or not, include it. It's better to include too much than to leave out something important.

Patches are welcome; if possible, please make them with '`diff -c`' (see section "Overview" in *Comparing and Merging Files*) and include '`ChangeLog`' entries (see section "Change Log" in *The GNU Emacs Manual*). Please follow the existing coding style.

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Version 1.2, November 2002

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