

NAME

man – format and display the on-line manual pages

SYNOPSIS

man [**-acdfFhkKtwW**] [**--path**] [**-m** *system*] [**-p** *string*] [**-C** *config_file*] [**-M** *pathlist*] [**-P** *pager*] [**-B** *browser*] [**-H** *htmlpager*] [**-S** *section_list*] [*section*] *name* ...

DESCRIPTION

man formats and displays the on-line manual pages. If you specify *section*, **man** only looks in that section of the manual. *name* is normally the name of the manual page, which is typically the name of a command, function, or file. However, if *name* contains a slash (/) then **man** interprets it as a file specification, so that you can do **man ./foo.5** or even **man /cd/foo/bar.1.gz**.

See below for a description of where **man** looks for the manual page files.

MANUAL SECTIONS

The standard sections of the manual include:

- 1** User Commands
- 2** System Calls
- 3** C Library Functions
- 4** Devices and Special Files
- 5** File Formats and Conventions
- 6** Games et. Al.
- 7** Miscellanea
- 8** System Administration tools and Daemons

Distributions customize the manual section to their specifics, which often include additional sections.

OPTIONS**-C config_file**

Specify the configuration file to use; the default is **/etc/man.config**. (See **man.config(5)**.)

-M path

Specify the list of directories to search for man pages. Separate the directories with colons. An empty list is the same as not specifying **-M** at all. See **SEARCH PATH FOR MANUAL PAGES**.

-P pager

Specify which pager to use. This option overrides the **MANPAGER** environment variable, which in turn overrides the **PAGER** variable. By default, **man** uses **/usr/bin/less -is**.

-B

Specify which browser to use on HTML files. This option overrides the **BROWSER** environment variable. By default, **man** uses **/usr/bin/less-is**,

-H

Specify a command that renders HTML files as text. This option overrides the **HTMLPAGER** environment variable. By default, **man** uses **/bin/cat**,

-S section_list

List is a colon separated list of manual sections to search. This option overrides the **MANSECT** environment variable.

-a

By default, **man** will exit after displaying the first manual page it finds. Using this option forces **man** to display all the manual pages that match **name**, not just the first.

-c

Reformat the source man page, even when an up-to-date cat page exists. This can be meaningful if the cat page was formatted for a screen with a different number of columns, or if the

preformatted page is corrupted.

- d** Don't actually display the man pages, but do print gobs of debugging information.
 - D** Both display and print debugging info.
 - f** Equivalent to **what**is.
 - F** or **--preformat**
Format only - do not display.
 - h** Print a help message and exit.
 - k** Equivalent to **apropos**.
 - K** Search for the specified string in ***all*** man pages. Warning: this is probably very slow! It helps to specify a section. (Just to give a rough idea, on my machine this takes about a minute per 500 man pages.)
 - m system**
Specify an alternate set of man pages to search based on the system name given.
 - p string**
Specify the sequence of preprocessors to run before **nroff** or **troff**. Not all installations will have a full set of preprocessors. Some of the preprocessors and the letters used to designate them are: eqn (e), grap (g), pic (p), tbl (t), vgrind (v), refer (r). This option overrides the **MANROFFSEQ** environment variable.
 - t** Use **/usr/bin/groff -Tps -mandoc** to format the manual page, passing the output to **stdout**. The default output format of **/usr/bin/groff -Tps -mandoc** is Postscript, refer to the manual page of **/usr/bin/groff -Tps -mandoc** for ways to pick an alternate format.
- Depending on the selected format and the availability of printing devices, the output may need to be passed through some filter or another before being printed.
- w** or **--path**
Don't actually display the man pages, but do print the location(s) of the files that would be formatted or displayed. If no argument is given: display (on **stdout**) the list of directories that is searched by **man** for man pages. If **manpath** is a link to **man**, then "manpath" is equivalent to "man --path".
 - W** Like **-w**, but print file names one per line, without additional information. This is useful in shell commands like **man -aW man | xargs ls -l**

CAT PAGES

Man will try to save the formatted man pages, in order to save formatting time the next time these pages are needed. Traditionally, formatted versions of pages in **DIR/manX** are saved in **DIR/catX**, but other mappings from **man dir** to **cat dir** can be specified in **/etc/man.config**. No cat pages are saved when the required cat directory does not exist. No cat pages are saved when they are formatted for a line length different from 80. No cat pages are saved when **man.config** contains the line **NOCACHE**.

It is possible to make **man** **suid** to a user **man**. Then, if a cat directory has owner **man** and mode 0755 (only writable by **man**), and the cat files have owner **man** and mode 0644 or 0444 (only writable by **man**, or not writable at all), no ordinary user can change the cat pages or put other files in the cat directory. If **man** is not made **suid**, then a cat directory should have mode 0777 if all users should be able to leave cat pages there.

The option **-c** forces reformatting a page, even if a recent cat page exists.

HTML PAGES

Man will find HTML pages if they live in directories named as expected to be ".html", thus a valid name for an HTML version of the **ls(1)** man page would be **/usr/share/man/htmlman1/ls.1.html**.

SEARCH PATH FOR MANUAL PAGES

man uses a sophisticated method of finding manual page files, based on the invocation options and environment variables, the `/etc/man.config` configuration file, and some built in conventions and heuristics.

First of all, when the *name* argument to **man** contains a slash (*/*), **man** assumes it is a file specification itself, and there is no searching involved.

But in the normal case where *name* doesn't contain a slash, **man** searches a variety of directories for a file that could be a manual page for the topic named.

If you specify the **-M** *pathlist* option, *pathlist* is a colon-separated list of the directories that **man** searches.

If you don't specify **-M** but set the **MANPATH** environment variable, the value of that variable is the list of the directories that **man** searches.

If you don't specify an explicit path list with **-M** or **MANPATH**, **man** develops its own path list based on the contents of the configuration file `/etc/man.config`. The **MANPATH** statements in the configuration file identify particular directories to include in the search path.

Furthermore, the **MANPATH_MAP** statements add to the search path depending on your command search path (i.e. your **PATH** environment variable). For each directory that may be in the command search path, a **MANPATH_MAP** statement specifies a directory that should be added to the search path for manual page files. **man** looks at the **PATH** variable and adds the corresponding directories to the manual page file search path. Thus, with the proper use of **MANPATH_MAP**, when you issue the command **man xyz**, you get a manual page for the program that would run if you issued the command **xyz**.

In addition, for each directory in the command search path (we'll call it a "command directory") for which you do *not* have a **MANPATH_MAP** statement, **man** automatically looks for a manual page directory "nearby" namely as a subdirectory in the command directory itself or in the parent directory of the command directory.

You can disable the automatic "nearby" searches by including a **NOAUTOPATH** statement in `/etc/man.config`.

In each directory in the search path as described above, **man** searches for a file named *topic.section*, with an optional suffix on the section number and possibly a compression suffix. If it doesn't find such a file, it then looks in any subdirectories named **manN** or **catN** where *N* is the manual section number. If the file is in a **catN** subdirectory, **man** assumes it is a formatted manual page file (cat page). Otherwise, **man** assumes it is unformatted. In either case, if the filename has a known compression suffix (like **.gz**), **man** assumes it is gzipped.

If you want to see where (or if) **man** would find the manual page for a particular topic, use the **--path (-w)** option.

ENVIRONMENT

MANPATH

If **MANPATH** is set, **man** uses it as the path to search for manual page files. It overrides the configuration file and the automatic search path, but is overridden by the **-M** invocation option. See **SEARCH PATH FOR MANUAL PAGES**.

MANPL

If **MANPL** is set, its value is used as the display page length. Otherwise, the entire man page will occupy one (long) page.

MANROFFSEQ

If **MANROFFSEQ** is set, its value is used to determine the set of preprocessors run before running **nroff** or **troff**. By default, pages are passed through the **tbl** preprocessor before **nroff**.

MANSECT

If **MANSECT** is set, its value is used to determine which manual sections to search.

MANWIDTH

If **MANWIDTH** is set, its value is used as the width manpages should be displayed. Otherwise the pages may be displayed over the whole width of your screen.

MANPAGER

If **MANPAGER** is set, its value is used as the name of the program to use to display the man page. If not, then **PAGER** is used. If that has no value either, **/usr/bin/less -is** is used.

BROWSER

The name of a browser to use for displaying HTML manual pages. If it is not set, **/usr/bin/less -is** is used.

HTMLPAGER

The command to use for rendering HTML manual pages as text. If it is not set, **/bin/cat** is used.

LANG If **LANG** is set, its value defines the name of the subdirectory where man first looks for man pages. Thus, the command **'LANG=dk man 1 foo'** will cause man to look for the foo man page in **.../dk/man1/foo.1**, and if it cannot find such a file, then in **.../man1/foo.1**, where **...** is a directory on the search path.

NLSPATH, LC_MESSAGES, LANG

The environment variables **NLSPATH** and **LC_MESSAGES** (or **LANG** when the latter does not exist) play a role in locating the message catalog. (But the English messages are compiled in, and for English no catalog is required.) Note that programs like **col(1)** called by man also use e.g. **LC_CTYPE**.

PATH **PATH** helps determine the search path for manual page files. See **SEARCH PATH FOR MANUAL PAGES**.

SYSTEM

SYSTEM is used to get the default alternate system name (for use with the **-m** option).

BUGS

The **-t** option only works if a troff-like program is installed.

If you see blinking **\255** or **<AD>** instead of hyphens, put **'LESSCHARSET=latin1'** in your environment.

TIPS

If you add the line

```
(global-set-key [(f1)] (lambda () (interactive) (manual-entry (current-word))))
```

to your **.emacs** file, then hitting **F1** will give you the man page for the library call at the current cursor position.

To get a plain text version of a man page, without backspaces and underscores, try

```
# man foo | col -b > foo.mantxt
```

AUTHOR

John W. Eaton was the original author of **man**. Zeyd M. Ben-Halim released man 1.2, and Andries Brouwer followed up with versions 1.3 thru 1.5p. Federico Lucifredi <flucifredi@acm.org> is the current maintainer.

SEE ALSO

apropos(1), **whatis(1)**, **less(1)**, **groff(1)**, **man.config(5)**.