

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.

OPTIONS**-C config_file**

Specify the configuration file to use; the default is **/private/etc/man.conf**. (See **man.conf(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 **whatis**.

-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 -c** to format the manual page, passing the output to **stdout**. The default output format of **/usr/bin/groff -Tps -mandoc -c** is Postscript, refer to the manual page of **/usr/bin/groff -Tps -mandoc -c** 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 **/private/etc/man.conf**. 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.conf** 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 **/private/etc/man.conf** 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 **/private/etc/man.conf**. 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 **/private/etc/man.conf**.

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.conf(5)**.