

NAME

man - an interface to the on-line reference

SYNOPSIS

```
man [-C file] [-d] [-D] [- -warnings
path] [-S list] [-e extension] [-i|-l]
[-P pager] [-r prompt] [-7] [-E encoding]
[-T[device]] [-H[browser]] [-X[dpi]] [-
man -k [apropos options] regexp ...
man -K [-w|-W] [-S list] [-i|-l] [- -reg
man -f [whatis options] page ...
man -l [-C file] [-d] [-D] [- -warnings
[-7] [-E encoding] [-p string] [-t] [-
man -w|-W [-C file] [-d] [-D] page ...
man -c [-C file] [-d] [-D] page ...
man [-?V]
```

DESCRIPTION

man is the system's manual pager. Each program, utility or function. The manual and displayed. A section, if provided. The default action is to search in all 1 8 3 2 3posix 3pm 3perl 3am 5 4 9 6 /etc/manpath.config), and to show only tions.

The table below shows the section number

1	Executable programs or shell commands
2	System calls (functions provided by the kernel)
3	Library calls (functions within user programs)
4	Special files (usually found in /dev)
5	File formats and conventions eg /etc/passwd
6	Games
7	Miscellaneous (including macro packages and conventions)
8	System administration commands (usually only for root)
9	Kernel routines [Non standard]

A manual page consists of several sections

Conventional section names include NAME, SYNOPSIS, DESCRIPTION, RETURN VALUE, ERRORS, ENVIRONMENT, FILES, and SEE ALSO.

The following conventions apply to
tions.

bold text type exactly as shown.
italic text replace with appropriate
[-abc] any or all arguments within
-a|-b options delimited by | cannot
argument ... argument is repeatable.
[expression] ... entire expression w

Exact rendering may vary depending on
to render italics when running in a
instead.

The command or function illustration is
some cases it is advisable to illust
section of this manual page.

EXAMPLES

```
man ls
```

Display the manual page for the item (prog

```
man man.7
```

Display the manual page for macro package

```
man -a intro
```

Display, in succession, all of the available
is possible to quit between successive dis

```
man -t alias | lpr -Pps
```

Format the manual page referenced by `a
troff or groff format and pipe it to the p
ally PostScript. man --help should advise

```
man -l -Tdvi ./foo.1x.gz > ./foo.1x.dv
```

This command will decompress and format
independent (dvi) file. The redirection
directed to stdout with no pager. The
further processed into PostScript using a

```
man -k printf
```

Search the short descriptions and manual p
sion. Print out any matches. Equivalent

```
man -f smail
Lookup the manual pages referenced by smail.
Equivalent to whatis smail.
```

OVERVIEW

Many options are available to man in order to customize its operation. Changes can be made to the search path, the format of the output, and other operations detailed below.

If set, various environment variables are available to customize man's operation. It is possible to set the 'catch all' variable to catch any exception that any spaces used as part of the search string (slash). man will parse \$MANOPT prior to parsing the command argument will be overridden by the same options set in \$MANOPT, -D can be specified to 'forget' about the options specified in the environment.

The manual pager utilities packaged as mandb contain information such as whatis whatis (short one line description of a command or file) if it had to search the filesystem for the file. Using the -u option, man will ensure that the database is up to date to manually run software to update the database.

If man cannot find a mandb initiated search, it will still search for the requested manual page within that hierarchy. If whatis or apropos is used to find a page from a traditional whatis database, it will not search the hierarchy.

These utilities support compressed source files and .gz. It is possible to deal with compressed files at compile time. Also, by default, any manual page hierarchy such as /usr/src/man or /usr/man page hierarchy. Traditionally the cat pager was used but for reasons such as those specified in the standard, store them elsewhere. For details on how to do this, read the standard.

International support is available with the use of locale (if available on your system) via use of the LC_MESSAGES, \$LANG environment variable to set either \$LC_MESSAGES, \$LANG or the language locale, usually specified in the environment.

<language>[_<territory>[.<character-set>]

If the desired page is available in your locally American English) page.

Support for international message catalogs in the same way, again if available. If supplied with this package are not available, please contact the maintainer who will

For information regarding other features, read the documents supplied with the package.

DEFAULTS

man will search for the desired manual page. If given, a cache consistency check is performed on the filesystem. If this option is always on, caches are initially created, unless a cache is found. This can be slow on systems with many manual pages. System administrators may wish to run manoffseq to forestall problems caused by outdated caches. If fails, just as it would if no cache was found.

Once a manual page has been located, a cache file 'cat' file already exists and is newer than the file is (usually) decompressed and then displayed in a number of ways, or else will fail. If no cat is found or is older than the nroff file, the nroff is shown immediately.

If a cat file can be produced (a relative path is given), will compress and store the cat file in the cache.

The filters are deciphered by a number of environment variables. \$MANROFFSEQ is interpreted. If not set, the initial line of the nroff file is the preprocessor string, the first line must be

'¥" <string>

where string can be any combination of characters.

If none of the above methods provide an answer, the nroff file is shown.

A formatting pipeline is formed from the filters (man -t) and executed. Alternatively, if an environment variable is in the man tree root, it is executed in the man tree root.

source string, and optionally the device source

OPTIONS

Non argument options that are duplicated are considered harmful. For options that require an argument, a value.

General options

-C file, --config-file=file

Use this user configuration file rather than the default.

-d, --debug

Print debugging information.

-D, --default

This option is normally issued as the first option. Its use is to reset those options that follow -D will have their usual effect.

--warnings[=warnings]

Enable warnings from groff. This may be useful for manual pages. warnings is a comma-separated list of warning names. The default is "mac". See the "Warning names" section.

Main modes of operation

-f, --what-is

Equivalent to what-is. Display a short summary of what-is(1) for details.

-k, --apropos

Equivalent to apropos. Search the short summary for any matches. See apropos(1) for details.

-K, --global-apropos

Search for text in all manual pages. This may take some time; if you can, you should specify the sources to be searched. Search terms may be specified. The --regex option is used.

Note that this searches the sources of the manual pages, which include false positives due to things that would be much slower.

-l, --local-file

Activate 'local' mode. Format and display the system's manual collection. Each source file in the correct format. No arguments, input will be taken from find the page required, before display option was supplied, using the name as

-w, --where, --path, --location

Don't actually display the manual pages files that would be formatted.

-W, --where-cat, --location-cat

Don't actually display the manual pages would be displayed. If -w and -W are both

-c, --catman

This option is not for general use and

-R encoding, --recode=encoding

Instead of formatting the manual pages specified encoding. If you already know manconv(1) directly. However, this is a single encoding without having to explain were already installed in a structure s

Finding manual pages

-L locale, --locale=locale

man will normally determine your locale which interrogates various environment To temporarily override the determination directly to man. Note that it will not begins. Output such as the help message locale.

-m system[,...], --systems=system[,...]

If this system has access to other operating using this option. To search for a manual option -m NewOS.

The system specified can be a combination include a search of the native operating in the argument string. This option will

-M path, --manpath=path

Specify an alternate manpath to use. If

the path to search. This option
option -m to be ignored.

A path specified as a manpath must be
sections as described in the man-db man
pages outside such hierarchies, see the

-S list, -s list, --sections=list
List is a colon- or comma-separated list
option overrides the \$MANSECT environ
with System V.)

-e sub-extension, --extension=sub-exten
Some systems incorporate large packages
package, into the main manual page hier
pages with the same name such as exit(3)
l. As this is unfortunate, it is now
to assign a specific 'extension' to the
man will display exit(3) in preferen
avoid having to know which section the
give man a sub-extension string indica
above example, supplying the option -e
extension of *tcl.

-i, --ignore-case
Ignore case when searching for manual p

-l, --match-case
Search for manual pages case-sensitive

--regex
Show all pages with any part of either
argument as a regular expression, as w
way to pick a "best" page when searchin

--wildcard
Show all pages with any part of either
argument using shell-style wildcards, a
match the entire name or description,
there is usually no reasonable way to p
option implies -a.

--names-only
If the --regex or --wildcard option is
with whatis(1). Otherwise, no effect.

-a, --all

By default, man will exit after displaying this option forces man to display all criteria.

-u, --update

This option causes man to perform an update to ensure that they are an accurate and useful effect if man is installed with

--no-subpages

By default, man will try to interpret page names equivalent to a single manual page name the common pattern of programs that provide manual pages for each that can invoke the subcommands themselves. For

```
$ man -aw git diff
/usr/share/man/man1/git-diff.1.gz
```

To disable this behaviour, use the --no-

```
$ man -aw --no-subpages git diff
/usr/share/man/man1/git.1.gz
/usr/share/man/man3/Git.3pm.gz
/usr/share/man/man1/diff.1.gz
```

Controlling formatted output

-P pager, --pager=pager

Specify which output pager to use. By default, less is used if it is not found or is not executable. The --pager option which in turn overrides the \$PAGER environment variable or -k.

The value may be a simple command name (backslashes, single quotes, or double quotes); if you need that, use a wrapper command as an argument or on standard input.

-r prompt, --prompt=prompt

If a recent version of less is used as the pager, the -r option is a sensible option. The default prompt is

Manual page name(sec) line x

where name denotes the manual page name
current line number. This is achieved

Supplying -r with a string will override
\$MAN_PN which will be expanded to the
surrounded by `(' and `)'. The string

```
¥ Manual¥ page¥ ¥$MAN_PN¥ ?ltline¥ %lt  
byte¥ %bB?s/%s..?¥ (END):?pB¥ %pB¥¥%..  
(press h for help or q to quit)
```

It is broken into three lines here for
less(1) manual page. The prompt string
back-quotes and backslashes in the prompt
prompt string may end in an escaped \$
default man sets the -ix8 options.

The \$MANLESS environment variable describes
if none is supplied on the command line

-7, --ascii
When viewing a pure ascii(7) manual page
characters may not display correctly when u
This option allows pure ascii manual
It will not translate any latin1 text.
some parts of it may only be displayed

Description	Octal	latin1	ascii
continuation hyphen		255	
bullet (middle dot)		267	
acute accent	264		
multiplication sign		327	x

If the latin1 column displays correctly
and this option is not necessary. If
reading this page using this option
description. If the latin1 column is not
with this option.

This option is ignored when using
other than GNU's.

-E encoding, --encoding=encoding

Generate output for a character encoding. The encoding may be an nroff device such as troff, or a character encoding such as UTF-8.

--no-hyphenation, --nh

Normally, nroff will automatically hyphenate words that contain hyphens, if it is necessary to break a line of spacing. This option disables automatic hyphenation if they already contain hyphens.

If you are writing a manual page and want to use an inappropriate point, do not use this option. For instance, you can put "¥%" inside a paragraph point, or put "¥%" at the start of a word.

--no-justification, --nj

Normally, nroff will automatically justify text. This option disables justification, leaving justified on the line.

If you are writing a manual page and want to use paragraphs, do not use this option. For instance, you can use the ".na", ".nf" and ".ad" options adjusting and filling.

-p string, --preprocessor=string

Specify the sequence of preprocessors. The sequence of preprocessors will have a full set of preprocessors. The options to designate them are: eqn (e), groff (g), and man (m). The option overrides the \$MANROFFSEQ environment variable. The first preprocessor.

-t, --troff

Use groff -mandoc to format the manual page. The junction with -H, -T, or -Z.

-T[device], --troff-device[=device]

This option is used to change groff (or other) than the default. It implies latin1, ps, utf8, X75 and X100.

-H[browser], --html[=browser]

This option will cause groff to produce HTML output. The choice of browser is determined by the browser option.

vided, by the \$BROWSER environment variable (usually lynx). This option implies -

-X[dpi], --gxditview[=dpi]

This option displays the output of groff on the chosen device. The dpi (dots per inch) may be 75, 75-12, or 120. This option uses a 12-point base font. This option suppresses the use of a post-processor.

-Z, --ditroff

groff will run troff and then use an appropriate post-processor for the chosen device. If groff -mandoc is used, it will suppress the use of a post-processor.

Getting help

-?, --help

Print a help message and exit.

--usage

Print a short usage message and exit.

-V, --version

Display version information.

EXIT STATUS

0 Successful program execution.

1 Usage, syntax or configuration error.

2 Operational error.

3 A child process returned a non-zero exit status.

16 At least one of the pages/files was not found.

ENVIRONMENT

MANPATH

If \$MANPATH is set, its value is used as the path to the man files.

MANROFFOPT

The contents of \$MANROFFOPT are added to the command line (nroff, troff, or groff).

MANROFFSEQ

If \$MANROFFSEQ is set, its value is used as the sequence of files to be processed.

manual page through. The default prep

MANSECT

If \$MANSECT is set, its value is a colon
mine which manual sections to search
3pm 3perl 3am 5 4 9 6 7", unless overr

MANPAGER, PAGER

If \$MANPAGER or \$PAGER is set (\$MANPAGE
name of the program used to display the
to cat if pager is not found or is not

The value may be a simple command name
(backslashes, single quotes, or dou
commands; if you need that, use a wrap
as an argument or on standard input.

MANLESS

If \$MANLESS is set, its value will be
as if it had been passed using the -r o
expanded in the same way). For example
to "my prompt string", set \$MANLESS to
this environment variable.

BROWSER

If \$BROWSER is set, its value is a colon
used to try to start a web browser for
filename containing the HTML output fro
and %c is replaced by a colon (:).

SYSTEM If \$SYSTEM is set, it will have
to the -m option.

MANOPT If \$MANOPT is set, it will be
similar format. As all of the other ma
command line options, and are thus o
that they will become obsolete. N.B.
option's argument must be escaped.

MANWIDTH

If \$MANWIDTH is set, its value is us
formatted. If it is not set, manual pa
to the current terminal (using the va
back to 80 characters if neither is ava
default formatting can be used, that

characters.

MAN_KEEP_FORMATTING

Normally, when output is not being directed to a terminal, formatting characters are discarded to make the output more readable. However, if `$MAN_KEEP_FORMATTING` is set, all formatting characters are retained. This may be useful for viewing the output of `man` on a terminal.

MAN_KEEP_STDERR

Normally, when output is being directed to a file, error messages from the command used to produce the output are discarded to avoid interfering with the pager's display. If `$MAN_KEEP_STDERR` is set, error messages about typographical problems are retained. These are generally confusing when displayed along with the output, so, if `$MAN_KEEP_STDERR` is set, error messages are displayed as usual.

LANG, LC_MESSAGES

Depending on system and implementation, the locale is interrogated for the current message catalog (if available). See `setlocale(3)` for more details.

FILES

`/etc/manpath.config`
man-db configuration file.

`/usr/share/man`
A global manual page hierarchy.

`/usr/share/man/index.(bt|db|dir|pag)`
A traditional global index database catalog.

`/var/cache/man/index.(bt|db|dir|pag)`
An FHS compliant global index database catalog.

SEE ALSO

`apropos(1)`, `groff(1)`, `less(1)`, `manpath(1)`, `manpath(5)`, `ascii(7)`, `latin1(7)`, `man(7)`

HISTORY

1990, 1991 ? Originally written by John J. Leach.

Dec 23 1992: Rik Faith (faith@cs.cmu.edu)
(wkasdo@nikhef.k.nikef.nl).

30th April 1994 ? 23rd February 2000: V
maintaining this package with the help

30th October 1996 ? 30th March 2001: R
this package for the Debian project, w

31st March 2001 ? present day: Colin Wa
man-db.

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MAN (1)