

man Pages

coursera.org/learn/linux-for-developers/supplement/L2auV/man-pages

man is the workhorse of Linux documentation, as it has been on all UNIX-like operating systems since their inception. Its name is short for manual. In fact, the first edition of the UNIX Programmer's Manual was released in 1971 and was probably the first case of online documentation.

It is most often invoked from the command line in a terminal window. For a random example (with a short man page!):

```
student@ubuntu:/tmp$ man zgrep | cat
ZGREP(1)                                General Commands Manual                                ZGREP(1)

NAME
    zgrep - search possibly compressed files for a regular expression

SYNOPSIS
    zgrep [ grep_options ] [ -e ] pattern filename...

DESCRIPTION
    Zgrep invokes grep on compressed or gzipped files. All options specified are passed directly to grep. If no file is specified, then the standard input is decompressed if necessary and fed to grep. Otherwise the given files are uncompressed if necessary and fed to grep.

    If the GREP environment variable is set, zgrep uses it as the grep program to be invoked.

EXIT STATUS
    Exit status is 0 for a match, 1 for no matches, and 2 if trouble.

BUGS
    The following grep options are not supported: --dereference-recursive (-R), --directories (-d), --exclude, --exclude-from, --exclude-dir, --include, --null (-Z), --null-data (-z), and --recursive (-r).

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SEE ALSO
    grep(1), gzexe(1), gzip(1), zdiff(1), zforce(1), zmore(1), znew(1)

student@ubuntu:/tmp$
```

The above screenshot displays the most common standard sections: **NAME**, **SYNOPSIS**, **DESCRIPTION**, **OPTIONS**, **SEE ALSO**, and **BUGS**. Other sections that might appear include: **RETURN VALUE**, **ERRORS**, **CONFORMING TO**, **RESTRICTIONS**, **AUTHOR**, **COPYRIGHT**, **REPORTING BUGS**, and **EXAMPLES**.

When you invoke man at a terminal window, it will automatically pipe its output into your pager, which on most Linux systems is **less**; on older systems, it may be **more**. You can change this by altering the value of the **PAGER** environment variable.

You will notice that man pages are referenced by chapter number, e.g. **gzip(1)** is in the first chapter. What chapter a given man page belongs in depends on its subject:

Chapter	Description
1	User commands (standard commands)

Chapter	Description
2	System calls
3	Subroutines (library functions)
4	Devices
5	File formats, and files used by a program
6	Games
7	Miscellaneous
8	System administration
9	Kernel documentation
n	New, mainly used by Tcl/Tk

In addition, there are sometimes chapters with a **p** or **x** suffix, such as **1p**, or **3x**, where the **p** stands for the **POSIX** standard specifications, and **x** stands for X Window System documentation. Other subsections may be present as well on your system.

One complication is that many keywords can have more than one man page. For instance, **socket** has at least two different man pages, in chapters 2 and 7. You can look at any one of them by specifying the particular chapter, as in:

```
$ man 7 socket
```

or you can see all of them in sequence by doing:

```
$ man -a socket
```

man has a lot of options (do **man man**), some of which have utility short hand forms. For example, by doing either of these commands:

```
$ whatis socket
```

```
$ man -f socket
```

you will get a list of all man pages that have socket in their name. Likewise, if you do either of the commands:

```
$ apropos socket
```

```
$ man -k socket
```

you will get a list of all man pages that discuss sockets, whether or not it is in their name.