Getting Help

The Man Pages

The man (manual) pages are very structured documentation source, as you will see from the example below:

Type the command like this at the prompt, and press Enter:

```
man ls
```

The documentation for ls will be displayed on your screen after you press Enter:

```
LS(1)                   User Commands                          LS(1)

NAME
       ls - list directory contents

SYNOPSIS
       ls [OPTION]... [FILE]...

DESCRIPTION
       List  information  about the FILEs (the current directory by default).
Sort entries alphabetically if none of
       -cftuvSUX nor --sort is specified.

       Mandatory arguments to long options are mandatory for short options too.

       -a, --all
              do not ignore entries starting with .

       -A, --almost-all
              do not list implied . and ..
```

Browse to the next page using the space bar. You can go back to the previous page using the b-key. When you reach the end, man will usually quit and you get the prompt back. Type q if you want to leave the man page before reaching the end, or if the viewer does not quit automatically at the end of the page.

Each man page usually contains a couple of standard sections, as we can see from the man ls example:

- The first line contains the name of the command you are reading about and the id of the section in which this man page is located. The man pages are ordered in chapters.

- The name of the command and a short description are given, which is used for building an index of the man pages.

- The synopsis of the command provides a technical notation of all the options and/or arguments this command can take. You can think of an option as a way of executing the command. The argument is what you execute it on.

- A longer description of the command is given.

- Options with their descriptions are listed. Options can usually be combined.

- There might also be author and copyright information.

- A reference to other man pages is given in the "SEE ALSO" section.

- Usually, there is also information about known bugs (anomalies) and where to report new bugs you may find.

The Info Pages

You can also read the Info pages about a command in addition to the man pages, using the info command.

Start by typing info ls in a terminal window.

```
info ls
```

The documentation for ls will be displayed on your screen after you press Enter:

```
Next: dir invocation,  Up: Directory listing

10.1 'ls': List directory contents
==================================

The 'ls' program lists information about files (of any type, including
directories).  Options and file arguments can be intermixed arbitrarily,
as usual.

     For non-option command-line arguments that are directories, by
default 'ls' lists the contents of directories, not recursively, and
omitting files with names beginning with '.'.  For other non-option
arguments, by default 'ls' lists just the file name.  If no non-option
argument is specified, 'ls' operates on the current directory, acting as
if it had been invoked with a single argument of '.'.

  Also see *note Common options::.
* Menu:
* Which files are listed::
* What information is listed::
* Sorting the output::
* Details about version sort::
* General output formatting::
* Formatting file timestamps::
* Formatting the file names::
```

Use the arrow keys to browse through the text and move the cursor on a line starting with an asterisk, containing the keyword about which you want info, then hit Enter. Use the P and N keys to go to the previous or next subject. The space bar will move you one page further, no matter whether this starts a new subject or an Info page for another command. Use Q to quit.

The whatis Command

A short index of explanations for commands is available using the `whatis` command, like in the examples below:

```
user@clarusway:~$ whatis whatis
whatis (1)           - display one-line manual page descriptions
```

```
whatis ls
```

```
ls (1)                - list directory contents
```

This displays short information about a command, and the first section in the collection of man pages that contains an appropriate page.

The apropos Command

If you don't know where to get started and which man page to read, apropos gives more information. apropos searches the manual pages for a keyword or regular expression.

```
user@clarusway:~$ whatis apropos
apropos (1)           - search the manual page names and descriptions
```

For example:

```
apropos find
```

Display all manual entries with the word "find" in the page name or description. The output will resemble the following:

```
btrfs-find-root (8)   - filter to find btrfs root
ffs (3)               - find first bit set in a word
ffsl (3)              - find first bit set in a word
ffsll (3)             - find first bit set in a word
find (1)              - search for files in a directory hierarchy
findfs (8)            - find a filesystem by label or UUID
findmnt (8)           - find a filesystem
git-bisect (1)        - Use binary search to find the commit that introduced a bug
git-cherry (1)        - Find commits yet to be applied to upstream
git-merge-base (1)    - Find as good common ancestors as possible for a merge
git-name-rev (1)      - Find symbolic names for given revs
git-pack-redundant (1) - Find redundant pack files
glob (3)              - find pathnames matching a pattern, free memory from glob()
globfree (3)          - find pathnames matching a pattern, free memory from glob()
lfind (3)             - linear search of an array
locate (1)            - find files by name
mlocate (1)           - find files by name
pidof (8)             - find the process ID of a running program.
systemd-delta (1)     - Find overridden configuration files
tfind (3)             - manage a binary tree
ttyslot (3)           - find the slot of the current user's terminal in some file
xdg-user-dir (1)      - Find an XDG user dir
```

The --help Option

Most GNU commands support the --help, which gives a short explanation about how to use the command and a list of available options. Below is the output of this option with the ls command:

```
ls --help
```

```
Usage: ls [OPTION]... [FILE]...
List information about the FILEs (the current directory by default).
Sort entries alphabetically if none of -cftuvSUX nor --sort is specified.

Mandatory arguments to long options are mandatory for short options too.
  -a, --all                  do not ignore entries starting with .
  -A, --almost-all           do not list implied . and ..
      --author               with -l, print the author of each file
  -b, --escape               print C-style escapes for nongraphic characters
      --block-size=SIZE      scale sizes by SIZE before printing them; e.g.,
                               '--block-size=M' prints sizes in units of
                               1,048,576 bytes; see SIZE format below
  -B, --ignore-backups       do not list implied entries ending with ~
```

> ❝ Q: You want to do something from Linux command line but you have some doubts. How can you search a command or take information about a command from linux **terminal**?
> A: There are many ways of searching information for commands. The **man** command gives you to very structured documentation for commands. You can also read the information about a command in addition to the man pages, using the **info** command. The shortest index of explanations for commands is available using the **whatis** command.
> The parameter of the **--help** gives a short explanation about how to use the command and a list of available options (parameters).
> If you don't know where to get started and **apropos** searches the manual pages for a keyword or regular expression.
>
> — - Interview Q&A ❞