

Online Documentation

Linux System Administration
COMP2018 Summer 2017

Basic Help

- Most Linux commands support a common command line option to get some very brief usage help
- The `-h` or `--help` option gives you command syntax and sometimes some details on what options you have when running commands
- Most configuration files provide comments in the file describing the file purpose, and some minimal information about the choices you have in the file
- Some configuration files provide, as comments, full documentation for the service/command supported by that file
- For more detailed help, you have to go the manuals

UNIX Manuals

- The original UNIX reference manuals were distributed in a multi-volume set usually as part of vendor documentation when you purchased a UNIX workstation or server
- The UNIX reference manuals were separated into sections in order to make it easier for the reader to find what they were looking for
- Each section has a separate page, or set of pages, for each command/file/whatever the page covered so that you could look for the page for a command/file/whatever and learn everything you might find useful about that command/file/whatever
- There are sections for commands and configuration files, as well as programming references, and general topics for all users
- Over time, the command man became a generic term to refer to the documentation leading to the common phrases, **check the man page**, and **rtfm**

Manual Sections

- The original section splits were driven by the fact that manuals were printed and distributed on paper
- This is an obsolete concept for documentation and the section divisions are purely for convention now
- Linux manuals follow the same conventions as the UNIX manuals

SECTION	CONTENTS
1	User commands
2	System calls
3	Library functions
4	Devices and protocols
5	File formats
6	Games and demos
7	General topics
8	Admin commands
9	Kernel stuff (mythical)

Manual Page Content

- Some commands and topics appear in more than one section of the manual, use `man -k keyword` or `whatis keyword` to list relevant pages for that keyword and `man # topic` to view a specific section document
- Different pages have content specific to their topic, but some parts are usually present
- These are the main things you might typically look for
 - syntax diagram
 - description which might be split into many subsections
 - command or file options which might be split into many subsections
 - see also

Manual Availability

- Manual pages are also distributed in source form with most versions of Linux
- The `man` command is used to access and display man pages if you have them installed on your system (try `man man` for more detail)
- You can choose not to install them and instead use online versions from any of many web sites
- Most major Linux vendors and communities maintain web-based documentation for their distros (e.g. manpages.ubuntu.com)
- The simple installed man pages are useful for working on problems when you are not online to the internet, or for quick lookup of documentation

Info Docs

- Before the web became what is today, there was another attempt to create a more interactive and navigable form of documentation
- The **info** command was created and quite a few manual pages were converted to info docs which supported the idea of navigating the manuals while reading them
- It is kind of a text-only manual-only web installed on your system (try **info** for more details)
- With the advent of the modern web, this project sort of stalled and has not really made very much useful progress since

Other Manuals

- Many applications and system services were more complex than could be adequately documented in distinct manual pages
- Sometimes more sophisticated documentation and digital books were created for these and distributed with the software
- Developer and contributor documentation also fit this description of being documentation for atypical users
- These types of documents may be found in the [/usr/share/doc](#) hierarchy and may also be installed in directories specific to the software being documented
- Much of this type of documentation has moved to the web

Web Docs

- The reference documentation for the GNU software in Linux is at GNU project website (see <http://www.gnu.org/software/coreutils/manual/>)
- The Linux Documentation Project (tldp.org)
- Linux Tutorials (howtoforge.com)
- Linux General Help (linux.com tecmint.com linuxcommand.org)
- <https://www.tecmint.com/10-useful-free-linux-ebooks-for-newbies-and-administrators/>
- user forums and many many many many many many more online resources - very easy to find
- Linux Kernel Documentation, primarily for programmers is at <https://www.kernel.org/doc/>