Help Getting Help

Whatever the newest user needs to know

by Stan Reichardt

https://newlug.sluug.org/
Goals

- This will be a survey of finding help, within Linux Operating System Distributions and outside.
- Intended for newcomers, the true beginners.
- Some useful examples, certainly not everything.
- Some example commands needed installation.
- We will first explore help available within the command line terminal, which will then lead us into the richly abundant graphical help resources of the LinuxMint MATE Desktop Environment.
POSIX

https://en.wikipedia.org/wiki/POSIX

• "POSIX defines the application programming interface (API), along with command line shells and utility interfaces, for software compatibility with variants of Unix and other operating systems."

https://en.wikipedia.org/wiki/Unix_shell

Users type commands into the shell.

• POSIX does not standardize help for new users. (AFAIK)

Not intuitive ~ User has to know commands.

Not intuitive with unix
Not intuitive with linux
 CLI vs GUI


- "A command-line interface or command language interpreter (CLI), also known as command-line user interface,... ...is a means of interacting with a computer program where the user (or client) issues commands to the program in the form of successive lines of text (command lines)."

- "Today, many end users rarely, if ever, use command-line interfaces and instead rely upon graphical user interfaces (GUI) and menu-driven interactions."
CLI – Command Line Interface

1. $ a_command (without options) (sometimes)
2. $ a_command ? (old method) \n3. $ a_command -? (old method) /
4. $ a_command --?
5. $ a_command -h (sometimes used for some other feature)
6. $ a_command --help
7. $ a_command help (function-name)

★ $ help # (when using the bash shell)
$ man

$ man man

$ whatis man whatis

  man (1)          - an interface to the on-line reference manuals
  man (7)          - macros to format man pages
  whatis (1)       - display one-line manual page descriptions

$ whatis apropos

  apropos (1)      - search the manual page names and descriptions

$ apropos

$ whatis info pinfo

  info (1)         - read Info documents
  info (5)         - readable online documentation
  pinfo (1)        - curses based lynx-style info browser
More Commands

★ $ info
★ $ pinfo (I prefer using pinfo, instead of info)
★ $ pinfo bash

$ whatis find locate which

find (1) - search for files in a directory hierarchy
locate (1) - find files by name
which (1) - locate a command

★ $ find
★ $ locate
★ $ which
Bash Shell Builtins

- $ pinfo builtins
- $ whatis type
  
  type: nothing appropriate
- $ type type
  
  type is a shell builtin
- $ type command
  
  command is a shell builtin
- $ type cd dirs which
  
  cd is a shell builtin
dirs is a shell builtin
which is /usr/bin/which
$ whatis file

file (1) - determine file type (…is it something you can edit?)

$ whatis nano

nano (1) - Nano's ANOther editor, an enhanced free Pico clone

$ nano (an excellent example of an event driven application)

(I prefer to use the VIM editor rather than nano)

$ whatis view vim vimdiff vimtutor

view (1) - Vi IMproved, a programmer's text editor

vim (1) - Vi IMproved, a programmer's text editor

vimdiff (1) - edit two, three or four versions of a file with Vim and show differences

vimtutor (1) – The VIM Tutor
Unix System Resources

$ ls /usr/share/doc

$ cd /usr/share/doc/manpages
Bad Help

# rm -rf /  (NEVER DO THIS)

Wallpaper ~ Linux and VIM  (evil)
http://wallpaperswide.com/abbreviation-wallpapers.html

fork bomb  (evil)
https://en.wikipedia.org/wiki/Fork_bomb

# :(){ :|:& };:

Sticker  (evil)
...So, we have surveyed using the Command Line Interface.

Now on to the Graphical,

But, first...
Not Quite Graphical

From curses => pcurses => ncurses and terminfo and termcap

https://en.wikipedia.org/wiki/Ncurses
https://www.linuxjournal.com/content/getting-started-ncurses
https://invisible-island.net/ncurses/ncurses.faq.html

$ whatis aptitude mc ranger

aptitude (8) - high-level interface to the package manager
mc (1) - Visual shell for Unix-like systems.
ranger (1) - visual file manager

$ aptitude

$ mc

$ ranger

MANY OTHERS: lynx, mutt, emacs, htop, less, minicom, screen, tmux, vim
GUI lookback to CLI

$ whatis xman gman

xman (1) - Manual page display program for the X Window System

gman (1x) - GTK+ based front-end for man, a good replacement for xman.

$ xman

$ gman
GUI Welcome Screens

These are presented upon user login

LinuxMint MATE

Ubuntu-MATE
More GUI Help

$ whatis yelp

yelp (1) - browse system documentation

$ yelp

- This is the GNOME Help Browser
LinuxMint.com Documentation

- Announcements, News
  https://blog.linuxmint.com/

- Release Notes ~ Technical information on each edition ~ **read ahead!**
  https://linuxmint.com/rel_tessa.php ~ example of current 19.1 release

- Installation Guide

- Troubleshooting Guide

- User Guides
  PDF for Desktop Environments (Cinnamon, MATE, Xfce, etc.)
Additional Help - Training

- **Introduction to Linux (LFS101) ~ Free Training Course**
  https://training.linuxfoundation.org/training/introduction-to-linux/

- **Free Linux course ~ How to work with Linux**
  https://geek-university.com/course/free-linux-course/

- **Free Linux Professional Institute (LPI) Training Materials**
  https://www.lpi.org/how-to-get-certified/free-training-materials

- **Ten Free Linux Courses**
  https://study.com/articles/10_Sites_Offering_Free_Linux_Courses_Online.html

- **Certification and Non-Certification Training (My Paid Subscription)**
  https://www.itpro.tv/courses/linux/linuxbeginners/ Free Preview
  https://www.itpro.tv/courses/linux/ Subscriber Levels and Linux+
Distribution Screen Shots

*Useful for comparing visually*

- **Debian**
  - [http://screenshots.debian.net/](http://screenshots.debian.net/)

- **Linux Mint**
  - [https://linuxmint.com/](https://linuxmint.com/) (a few right on home page)

- **Ubuntu-Mate**
  - [http://ubuntu-mate.org/](http://ubuntu-mate.org/) (a few right on home page)

- **Other distribution screen shots available thru DistroWatch pages**
Internet Podcasts

- Podcasts (Netcasts)
  - http://goinglinux.com  General Linux Topics
  - https://mintcast.org/ One LinuxMint Community
  - https://www.ezeelinux.com/ Switching People to Linux
  - https://switchedtolinux.com/ Another Linux Advocate
  - https://www.professormesser.com/ A+ and other topics
  - https://Twit.TV Numerous weekly shows
    - https://twit.tv/shows/security-now  Hot topics in Security
    - https://twit.tv/shows/floss-weekly FOSS application projects
  - http://www.asknoahshow.com/ Every Tuesday @ 6PM Central (UTC-6)
  - https://www.jupiterbroadcasting.com/ Linux and BSD
Community Support Forums

- LinuxMint Forum ~ Their best place to find **LinuxMint** help
  https://forums.linuxmint.com/

- Ezeelinux.com EzeeTalk (Forum) **LinuxMint** and more
  https://www.ezeelinux.com/talk/

- Ubuntu-MATE (Forum)
  https://ubuntu-mate.community/
St. Louis Unix Users Group

STL/unix/usr/group

• SLUUG Web Page
  - https://www.sluug.org/

• SLUUG Sponsored Resources
  - ANNOUNCE email
  - DISCUSS email
  - Wiki
  - IRC
SLUUG Sponsored Groups

*Loosely Affiliated Special Interest Groups*

**SLACC ~ Saint Louis Area Computer Club**
https://slacc.sluug.org/

**STLLUG ~ Saint Louis Linux User Group**
https://stllug.sluug.org/

**NEWLUG ~ Newcomer Linux User Group**
https://newlug.sluug.org/
More Internet Resources

• More About Linux
  - https://en.wikipedia.org/wiki/Linux

• For information on hundreds of Linux distributions
  - https://distrowatch.com/

• Search Engines
  - DuckDuckGo https://duckduckgo.com/
  - Google https://www.google.com/
  - Call Phil…
Read The Friendly Manual

- The Linux Documentation Project
  http://TLDP.org/
  https://en.wikipedia.org/wiki/Linux_Documentation_Project
- The Linux man-pages project
  https://www.kernel.org/doc/man-pages
- RTFM
  https://en.wikipedia.org/wiki/RTFM
Tools

- Unix Tool Box
  http://cb.vu/unixtoolbox.xhtml

- Cheat Sheets
  http://cht.sh
  http://www.cheat-sheets.org/
  https://devhints.io/
Alternative Software

- Crowdsourced software recommendations
  - https://alternativeto.net/
- Even more sites, listed under Finding Application Software section...
  - https://newlug.sluug.org/cdrom.html#finding_apps
- **REMEMBER:**
  - $ apropos (or man -k)
  - $ aptitude
  - $ info (or **pinfo**)
  - $ man man
  - $ **xman** (or gman)
  - $ synaptic
Remote Desktop Assistance

- **Gitso** ~ a frontend to reverse VNC connections
  
  https://code.google.com/archive/p/gitso/

- **Remote Desktop Viewer (Vinagre/Vino)** ~ Gnome offering
  
  https://en.wikipedia.org/wiki/Vino_(VNC_server)

- **Remmina** ~ client/server for GNOME desktop environment
  
  https://en.wikipedia.org/wiki/Remmina

- **X2go** ~ access a graphical desktop of a computer over a low bandwidth (or high bandwidth) connection.
  
  https://wiki.x2go.org/doku.php

- **TeamViewer** ~ Commercial with free single personal use
  
  https://www.teamviewer.com/en-us/
The Linux Command Line

A Complete Introduction by William E. Shotts Jr.

4th Internet Edition Available Now

Hard Copy printed by No Starch Press


$39.95 USD or less

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PRO: Free online content available
Free PDF download available

http://linuxcommand.org/index.php

CON: ???????????????????
Another Book for CLI

**Linux Phrasebook** by Scott Granneman

1st Edition *Essential Code and Commands*

$6 USD (many used available for less)

Copyright © 2006 by Sams Publishing

ISBN 0-672-32838-0

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**PRO**: Invaluable, **Must Have for CLI**

**CON**: Example wrapping hard to read

**Book for GUI**

**Linux in easy steps** by Mike McGrath

6th Edition

fully illustrated using Linux Mint

$15.99 USD or less

ISBN-13 978-1840788082

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- **PROS**: Primarily good graphic examples
  - Minimal command line coverage

- **CONS**: Graphics are just relatively small
  - Desktop Environment is Cinnamon
  - (I recommend MATE environment)
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