

LINUX TERMINAL

Created by @Manz (<https://twitter.com/Manz>)

<https://terminaldelinux.com/>

h Help Manual & information

- * **--help** fast & short help
- HELP COMMANDS
- man** manual page (wide)
- whatis** short description
- apropos** related help

u Users Info about users

CHANGE AND INFO

- whoami** current user
- su** switch to user [root]
- sudo** run command as [root]
- visudo** edit sudoers [vi+sudo]

SYSTEM USERS

- useradd** create/update user
- adduser** friendly add user
- userdel** delete user
- deluser** friendly del user
- usermod** modify user account
- groups** group members
- passwd** change password
- lslogins** show known users

LOGGED USERS

- who** current logged users
- w** current logged users & data
- users** current logged users
- last** last logged users & reboots
- lastb** last bad logins (btmp)
- lastlog** recent login users

n Network Internet & net related

NET CONFIGURATION

- ifconfig** config ip/net features
- ip** new ifconfig tool
- dhclient** DHCP client

DNS AND DOMAINS

- ping** send ICMP to hosts
- nslookup** query DNS lookup
- dig** DNS lookup utility
- whois** whois domain name or ip

TRACE ROUTE

- traceroute** print route packets
- tracpath** trace path
- mtr** network diagnostic tool

NETWORK TOOLS

- nmap** network security scanner
- nc** cat via network connection
- ss** show sockets statistics

NETWORK MONITORING

- bmon** bandwidth monitor
- iftop** interface network monitor
- netnogs** net monitor by process
- wondershaper** bandwidth limit
- iptraf-ng** network monitor
- tcpdump** network activity dump
- netstat** print network statistics

MAC ADDRESS

- arp** show mac/ip address cache
- arping** ping mac address

FIREWALL

- iptables** ip packet filter & NAT
- shorewall** firewall for iptables
- ufw** firewall for iptables

f Files & Folders

FOLDERS (DIRECTORIES)

- mkdir** create dir
- pwd** current dir
- ls** list files & dirs
- exa** enhanced ls
- cd** change to dir
- pushd / popd** directory stack
- autojump** smart jump to dirs
- tree** list files in tree format

FILE HANDLING

- file** show file type
- touch** update/create
- mv** move/rename files
- cp** copy files
- rm** remove files
- ln** make link to file
- stat** filesystem stats

FILE MANAGERS

- mc** midnight commander
- lfm** last file manager
- ytree** unix file manager
- ranger** visual file manager

FIND FILES

- type** display command type
- find** search files in a dir
- locate** search files in database
- updatedb** update file database
- whereis** locate binary/manpage
- which** get binary file pathname

v Version Control

GIT CLIENT

- git** fast/scalable control version
- tig** text-mode interface for git

OTHER CLIENTS

- svn** subversion cv client
- hg** mercurial cv client
- cvs** concurrent control version
- bzr** bazaar cv client

b Browser & Downloads

BROWSER

- lynx** text browser
- elinks** text mode browser
- w3m** text browser/pager

DOWNLOAD

- wget** network downloader
- curl** transfer a URL
- axel** download accelerator
- puf** parallel downloader
- youtube-dl** download vids
- cclive** media downloader

r Remote SCP/SSH SYNTAX

CONNECTION

- scp** user@ip:/folder remote
- telnet** telnet connection
- ftp** file transfer connect
- ssh** remote connection
- sftp** connect ftp via ssh
- sshfs** connect disk via ssh

COPY

- scp** remote cp via ssh
- rsync** remote sync files

PERMISSIONS

OWNER GROUP OTHERS

drwxr-xr-x -rw-r--r--

DIRECTORY REGULAR FILE

r READ w WRITE x EXEC/OPEN - NO PERMISSION

SYM. LINK | NAMED PIPE p SOCKET S CHAR DEV c BLOCK DEV b

APT-GET

- update** clean remove
- install** purge download
- upgrade** autoremove

e Editors

EDITORS

- vi** programmer editor
- vim** vi improved
- pico** another editor
- nano** pico improved
- emacs** gnu emacs
- jed** programmers editor
- micro** micro editor
- mcedit** midnight editor

d Differences

DIFF TOOLS

- diff** find differences
- sdiff** side-by-side diff
- wdiff** word differences
- colordiff** colorize diff

GIT

START

- init**
- clone**
- remote**

WORK

- status**
- add**
- mv/rm**
- reset**
- log**

REPO

- fetch**
- pull**
- push**

MANIPULATE

- checkout**
- branch**
- merge**
- rebase**
- commit**

GIT FAST CHEAT

- git remote add** origin <server>
- git push** origin master send

p Permissions

OWNER/GROUPS

- chown** set owner
- chgrp** set group

PERMISSIONS

- chmod** set file permission
- umask** set permission mask

CHMOD

0 none=-	3 wx
1 exec=x	5 rx
2 write=w	6 rw
4 read=r	7 rw
COMMON	
777	755 644 655

TMUX

- ^B+** split horiz
- ^B+%** split vert
- ^D** close term
- ^B+→** move to
- ^B+↔** resize
- ^B+O** rotate

p Packages Install & uninstall

INSTALL/UNINSTALL PACKAGES

- apt-get** package manager
- apt** friendly apt-get
- aptitude** friendly apt-get
- wajig** friendly apt-get

SEARCH/LIST PACKAGES

- apt-cache search** packages
- apt-file list** package contents

MANUAL MANAGE PACKAGES

- dpkg** manage .deb package

VIM

- :q!** exit w/o save
- :wq!** save & exit
- :5** jump to line 5
- :colorscheme** set color
- :shell** temp shell / **exit**=return
- :split / :vsplit** open horiz/vert
- :set** number number lines
- :set mouse=a** enable mouse / word find word (n find next)
- :tabnew** open file in new tab
- :%s/old/new/g** repl. old -> new

DPKG

- i** install
- r** remove
- c** contents

c Compressor

ARCHIVE PACKAGING

- tar** archive tool
- split** file into pieces

LINUX TOOLS

- gzip** handle .gz file
- gunzip** uncompress .gz
- bzip2** handle .bz2 file
- bunzip2** uncompress .bz2
- xz** handle .xz file
- unxz** uncompress .xz

TAR

- c** create
- v** show
- f** fname
- x** extract
- t** list
- r** append

TAR

- z** gzip
- j** bzip2
- J** xz

GENERAL TOOLS

- zip** handle .zip file
- unzip** uncompress .zip file
- rar** handle .rar file
- unrar** uncompress .rar file
- 7z** handle .7z file
- cabextract** extract .cab files

EXECUTABLE COMPRESSOR

- upx** compress exec files
- gzexe** compress exec files

s Session control & Terminal

- clear** empty to clean screen
- reset** reinitialize terminal
- history** show prev commands
- fuck** corrects prev commands

CONTROL

- exit / logout** end shell session
- reboot** reboot the machine
- poweroff / shutdown** switch off
- init** send control init level

MULTIPLEXORS

- screen** multiplexor & manager
- tcvt** 2-cols virtual terminal
- tmate** multiplex & term sharing
- tmux** terminal multiplexer
- byobu** screen/tmux wrapper

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t Text manipulation

MAIN CONTENT

echo print line of text
cat print or concatenate files
tac reverse cat

PAGINATE TOOLS

more classic pager
less enhanced pager
most enhanced less pager

COMPRESS FILTERING CAT/LESS TOOLS

zcat .gz **bzcat .bz2** **xzcat .xz**
zless .gz **bzless .bz2** **xzless .xz**

GENERAL FILTERING TOOLS

head print first part
tail print last part
rev reverse line characterwise
nl number lines
sort reorder lines
wc count bytes/chars/words/lines
uniq count or omit repeated lines

TRANSFORM TOOLS

iconv convert to diff encoding
tr translate or delete chars
expand convert tabs to spaces
unexpand convert spaces to tabs

FRAGMENT FILTERING TOOLS

cut remove sections or fragments
paste merge lines

POWERFUL FILTERING/TRANSFORM TOOLS

grep print lines matching pattern
gawk pattern scanner & process
sed stream editor for filtering
xargs build & execute commands

t Time

date print or set date/time

CALENDARS

cal display an calendar
ncal display an alternative cal
pal display an event calendar

TIMERS

timeout run cmd w/time limit
time benchmark command
sleep delay specified time
watch exec program repeatedly

SCHEDULE COMMANDS

at queue jobs for later exec
cron exec scheduled cmds

CRONTAB

MINUTE (0-59) DAY (1-31) WEEKDAY (0-6)
 HOUR (0-23) MONTH (1-12)
 * / * * * * command sample line

c Checksum

CHECKSUM BASE

sum checksum & count blocks
cksum checksum & count bytes

COMPUTE & CHECK MESSAGE DIGGEST

b2sum **BLAKE2** **sha224sum** **SHA224**
md5sum **MD5** **sha256sum** **SHA256**
shasum **SHA** **sha384sum** **SHA384**
sha1sum **SHA1** **sha512sum** **SHA512**

d Disks & Partitions

PARTITIONS / BLOCK DEVICES

parted manipulate partitions
fdisk manipulate partition table
cgfdisk enhanced fdisk
mkfs make/create a filesystem
dd low level data duplicator

RECOVERY/REPAIR

fsck check & repair filesystem
testdisk scan & repair partitions
photorec recover lost files/data

MOUNT

mount enable a filesystem
umount disable a filesystem

DISKSPACE

df show disk free
du show disk used
ncdu enhanced disk used
fdupes find duplicate files

g Games & Fun

FUN

fortune print rnd fortune cookie
sl aim to correct sl instead ls
cowsay configurable thinking cow
toilet / figlet display large chars
cmatrix simulate matrix screen

GAMES

ninvaders ncurses space invaders
bastet bastard tetris clone
moon-buggy drive across moon
nsnake ncurses snake game
pacman4console pacman clone
greed erase number grid game
nethack-console explore mazes
freesweep minesweeper clone
nettoe network tic tac toe clone
asciijump ascii ski jump game
bombardier gnu bombing game

m Image Handling

LOSSY (JPEG RELATED)

jpeginfo show jpeg information
jpegoptim optimize jpeg images
jpegtran jig jpeg transform
mozjpeg mozilla jpeg optimizer
jhead exif header manipulator
webp webpicture google format

LOSSLESS (PNG RELATED)

pngmeta extract png metadata
optipng optimize png images
pngquant png compressor
pngcrush optimize png files
pngnq quantize png images

ANIMATED (GIF RELATED)

gifsicle manipulation gif tool
apngopt apng otimizador

IMAGEMAGICK

convert transform/convert image
identify describe format image
composite overlaps images
mogrify convert (overwrite src)
montage combine mult. images
stream stream 1+ components
import save visible region to file
compare math/visual diff image

p Processes & threads

PROCESSES VIEWERS

ps show active processes
pstree tree-format version of ps
atop system/process monitor
top show top processes & info
htop enhanced top

BACKGROUND & FOREGROUND

jobs list jobs (bg or stopped)
bg move process to background
fg move process to foreground

PRIORITY PROCESS

nice run with custom priority
renice change priority

KILL PROCESSES

kill send signal to process
killall kill all processes by name

h Hardware & System

SYSTEM SOFTWARE INFO

uname show distro/kernel info
lsb_release show distro info
uptime data uptime, users & load

HARDWARE

nmon sysadmin monitor tool
gtop system monitor dashboard
iostat input/output monitor
iotop report cpu & i/o stats
mpstat report multiprocess stats
glances system monitoring tool
hwinfo hardware information
inxi hardware information

MEMORY

free show free & used memory
vmstat virtual memory stats
pmap show memory map process

DEVICES

lspci list PCI devices
lsusb list USB devices
lscpu list CPU features
lsblk list block devices
lsdf list open files
lslocks list local system locks

KERNEL & MODULES

dmesg diagnostic messages
lsmod list kernel modules status
depmod gen dep/map mod files
modinfo show info about a mod
modprobe add/remove modules
insmod insert mod into kernel
rmmod remove mod from kernel

m Audio / Video

MEDIA PLAYER

mplayer cli media player
mpv media player enhanced
vlc videolan media player
mplayer youtube media player

MUSIC

music123 play sound files
id3tool mp3 editor id3 tags
arecord ALSA sound recorder
aplay ALSA sound player

MEDIA CONVERTER

ffmpeg media converter

s Services & Daemons

SERVICES

/etc/init.d/* sysvinit
service service wrapper
systemctl systemd
journalctl systemd logs

WEB SERVER

apachectl apache control
nginx http reverse proxy
htpasswd gen auth pass

LOGS

ccze robust log colorizer
lnav ncurses log viewer
goaccess fast log viewer

SYSTEMCTL

status service status
start / stop service
restart stop & start
reload reload config

APACHE

a2enconf enable config
a2disconf disable config
a2ensite enable site
a2dissite disable site
a2enmod disable mod
a2dismod disable mod

NGINX

nginx-conf enable site
ngx-conf disable site
ngx-conf remove site
ngx-conf list list all conf

DOCKER

search find image on hub
run exec cmd container
images / ps list img/cont
start / stop container
rmi / rm remove img/cont
pull get image from reg
push put image to reg

FFMPEG

-i input file/information
-vcodec video codec
-acodec audio codec
-b:a bitrate audio 192k
-b:v bitrate video
-vn remove video
-an remove audio
-vol change volume 256
-r set frame rate (fps)
-ss start at N:N time
-to ends at N:N time
-t vid duration N secs
-vf hflip horizontal flip
-vf vflip vertical flip
-vf scale=W:H resize vid
-vf crop=W:H:X:Y crop
-vf vignette=PI/4 effects
-vf fade=t=in:st=0:d=5,
 fade=t=out:st=25:d=5
-vf setpts=0.02*PTS
-pix_fmt yuv420p / rgb24