

UNIX/LINUX REFERENCE CARD

Basic File and Directory Manipulation

ls List directory contents
cp Copy files
mv Move/rename files
rm Remove files
shred Destroy data in files
ln Link files
cd Change directory
pwd Print present working directory
mkdir Make directory
rmdir Remove directory

File Viewing

cat Concatenate files and print to stdout
more Page through files
less Page through files
nl Number lines of files
od Prints file in octal and other formats

File Text Manipulation

grep Search text for matching patterns
cut Remove sections from each line of files
paste Merge lines of files
tr Translate or delete characters
join Join lines of files on a common field
split Split file into pieces
csplit Split file into sections by context lines
sort Sort lines
uniq Remove duplicate lines from sorted file
fmt Simple optimal text formatter

File Properties

stat Display file status
wc Count bytes/words/lines
du Estimate disk usage
file Manipulate file attributes
touch Change file timestamps
chown Change file owner
chgrp Change file group
chmod Change file protections

File and Commands Location and Help

find Locate files
locate Locate files via index
which Locate commands
apropos Locate commands by keyword lookup
man Find and display online help page
whereis ... Locate bin, src and man files for command

File Compression

gzip Compress/decompress files (LZ77)
bzip2 Compress/decompress files (BWT)
[un]zip (De-)Compress files (PKZIP compatible)

File Comparison and Patching

diff Compare files line by line
patch Apply changes from a diff file
comm Compare sorted files
cmp Compare files byte by byte
md5sum Compute and check MD5 message digest

Disks and Filesystems

df Show free disk space
mount Make a disk accessible
fck Check a disk for errors
sync Synchronizes filesystem buffers and disk
quota Check disk quota for current user

Backups and Remote Storage

mt Control a tape drive
dump Back up a disk
restore Restore a dump
tar Read/write (compressed) tape archives
rsync Mirror a set of files
dar Archive a disk

Environment

env Display environment variables
echo Print variable
export Write environment variables (Bash)
set ... Write environment variables with more options
unset Unset environment variables

Scheduling Jobs

sleep Delay for specified time
watch Run programs at set intervals
at Schedule a job
cron Clock daemon
crontab Schedule repeated jobs for cron
expect ... Automates tasks using interactive programs

Printing

lpr Print files
lpq View print queue
lprm Remove print jobs

Processes

ps List all processes
w List users' processes
uptime View system uptime
top Monitor processes
xload Monitor system load
kill Terminate processes
nice Run process with modified priority
renice Alter running process' priority

Hosts

uname Print system information
hostname Print the system's hostname
ifconfig Set/display network information
host Look up DNS
whois Look up domain registrants
ping ... Check reachability and response time of a host
traceroute View network path to a host

File Editing

vim Text editor
gvim Forks a GUI version of ViM
emacs Text editor
sed GNU stream text editor

Spelling Operations

ispell Check spelling interactively
look Look up spelling

Networking

ssh.....Securely log into remote hosts
scp.....Securely copy files between hosts
sftp.....Securely copy files between hosts
wget.....Retrieve a url to disk
curl.....Retrieve a url to disk
gaim.....Instant messaging
talk.....Linux/Unix Chat
write.....Send messages to a terminal
mesg.....Enable/prohibit talk/write
finger.....Display information about users
who.....Show who is logged in
last.....Displays login and logout information

Email, News and Web Browsing

pine.....Terminal-based email and news program
mutt.....Terminal-based email program
mail.....Minimal mail client
links.....Text-only web browser
firefox.....GUI web browser

Text Processors and Viewers

latex.....Compiles LaTeX → TeX DVI
pdflatex.....Compiles LaTeX → PDF
bibtex.....Compiles BiBTeX files
gv.....View Postscript/PDF files
xdvi.....View TeX DVI files
dvips.....Prints/converts TeX DVI files
ps2pdf.....Converts Postscript → PDF
antiword.....Converts MS Word → ASCII

Image Manipulation/Display

xv.....Image viewer for X
qiv.....Fast gdk/imlib image viewer for X
feh.....Fast imlib2 image viewer for X
display.....ImageMagick: display image
convert.....ImageMagick: convert image
identify.....ImageMagick: display file image info
import.....ImageMagick: save screen/window as image
compare.....ImageMagick: compare images
xfig.....Tool for drawing figures
transfig.....Converts fig → portable LaTeX figure
gimp.....GNU image manipulation program

Development

cscope.....Interactively examine a C program
gcc.....Compiles C and C++ code
gdb.....Debugger for C and C++
javac.....Compiles Java code
jdb.....Debugger for Java
awk.....Pattern scanning and processing language
perl.....Perl programming language
python.....Python programming language
ruby.....Ruby programming language
matlab.....Technical computing language
mathematica.....Mathematical computing language
R.....Data analysis language

Encryption

pgp.....Public key encryption program
gpg.....GnuPG: an encryption tool like PGP

Terminal Emulators

xterm.....Standard terminal emulator for X
rxvt.....Lightweight terminal emulator for X
mrxvt.....Multi-tab enabled version of rxvt

Miscellaneous

alias.....Create shorthand for a series commands
su.....Allows you to run a shell as another user
sudo.....Lets you execute a command as another user
nohup.....Lets a program run after you log out

This card may be freely distributed under the terms of the GNU general public licence — This document was compiled by Thiam H Lee on **<2006-12-06>** — v0.6 — The author assumes no responsibility for any errors on this card. The latest version can be found at <http://www.columbia.edu/~th12102/>. This reference card was adapted from Laurent Grégoire's ViM Quick Reference Card, found at <http://tnerual.eriogerg.free.fr/vim.html> .