

File Commands

ls - directory listing

ls -al - formatted listing with hidden files

cd *dir* - change directory to *dir*

cd - change to home

pwd - show current directory

mkdir *dir* - create a directory *dir*

rm *file* - delete *file*

rm -r *dir* - delete directory *dir*

rm -f *file* - force remove *file*

rm -rf *dir* - force remove directory *dir* *

cp *file1 file2* - copy *file1* to *file2*

cp -r *dir1 dir2* - copy *dir1* to *dir2*; create *dir2* if it doesn't exist

mv *file1 file2* - rename or move *file1* to *file2*
if *file2* is an existing directory, moves *file1* into directory *file2*

ln -s *file link* - create symbolic link *link* to *file*

touch *file* - create or update *file*

cat > *file* - places standard input into *file*

more *file* - output the contents of *file*

head *file* - output the first 10 lines of *file*

tail *file* - output the last 10 lines of *file*

tail -f *file* - output the contents of *file* as it grows, starting with the last 10 lines

Process Management

ps - display your currently active processes

top - display all running processes

kill *pid* - kill process id *pid*

killall *proc* - kill all processes named *proc* *

bg - lists stopped or background jobs; resume a stopped job in the background

fg - brings the most recent job to foreground

fg *n* - brings job *n* to the foreground

File Permissions

chmod *octal file* - change the permissions of *file* to *octal*, which can be found separately for user, group, and world by adding:

- 4 - read (r)
- 2 - write (w)
- 1 - execute (x)

Examples:

chmod 777 - read, write, execute for all

chmod 755 - rwx for owner, rx for group and world

For more options, see **man chmod**.

SSH

ssh *user@host* - connect to *host* as *user*

ssh -p *port user@host* - connect to *host* on port *port* as *user*

ssh-copy-id *user@host* - add your key to *host* for *user* to enable a keyed or passwordless login

Searching

grep *pattern files* - search for *pattern* in *files*

grep -r *pattern dir* - search recursively for *pattern* in *dir*

command* | grep *pattern - search for *pattern* in the output of *command*

locate *file* - find all instances of *file*

System Info

date - show the current date and time

cal - show this month's calendar

uptime - show current uptime

w - display who is online

whoami - who you are logged in as

finger *user* - display information about *user*

uname -a - show kernel information

cat /proc/cpuinfo - cpu information

cat /proc/meminfo - memory information

man *command* - show the manual for *command*

df - show disk usage

du - show directory space usage

free - show memory and swap usage

whereis *app* - show possible locations of *app*

which *app* - show which *app* will be run by default

Compression

tar cf *file.tar files* - create a tar named *file.tar* containing *files*

tar xf *file.tar* - extract the files from *file.tar*

tar czf *file.tar.gz files* - create a tar with Gzip compression

tar xzf *file.tar.gz* - extract a tar using Gzip

tar cjf *file.tar.bz2* - create a tar with Bzip2 compression

tar xjf *file.tar.bz2* - extract a tar using Bzip2

gzip *file* - compresses *file* and renames it to *file.gz*

gzip -d *file.gz* - decompresses *file.gz* back to *file*

Network

ping *host* - ping *host* and output results

whois *domain* - get whois information for *domain*

dig *domain* - get DNS information for *domain*

dig -x *host* - reverse lookup *host*

wget *file* - download *file*

wget -c *file* - continue a stopped download

Installation

Install from source:

./configure

make

make install

dpkg -i *pkg.deb* - install a package (Debian)

rpm -Uvh *pkg.rpm* - install a package (RPM)

Shortcuts

Ctrl+C - halts the current command

Ctrl+Z - stops the current command, resume with **fg** in the foreground or **bg** in the background

Ctrl+D - log out of current session, similar to **exit**

Ctrl+W - erases one word in the current line

Ctrl+U - erases the whole line

Ctrl+R - type to bring up a recent command

!! - repeats the last command

exit - log out of current session

* use with extreme caution.

