

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.