

File Commands

ls - directory listing
ls -al - formatted listing with hidden files
cd *dir* - change directory to *dir* (**..** to go one "up")
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* exists, moves *file1* into directory *file2*.
cat > *file* - type into *file* (exit with Ctrl-D)
less *file* - output the contents of *file* (exit with 'q')
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
ln -s *file link* - create symbolic link *link* to *file*

Process Management

app & - start *app* in the background
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

File Permissions

chmod *mode file* - change the permissions of *file* to *mode*, which consists of a combination of letters:

- who: u (user), g (group), o (others), a (all)
- how: + (add), - (remove), = (set)
- what: r (read), w (write), x (execute)

Examples:

chmod g+rx *file* - read and execute for group

chmod u=rwx *file* - rwx for owner

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

SSH

ssh *user@host* - connect to *host* as *user*
ssh-copy-id *user@host* - add your key to *host* for *user* to enable a keyed or passwordless login
scp *user@host:remote_file .* - copy remote file to local filesystem
scp *local_file user@host:remote_dir* - copy local file to remote host

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

man *command* - show the manual for *command*
passwd - change you password
quota - show your quota
df - show free space on disk
du - show directory space usage
w - display who is logged on this machine
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
date - show the current date and time
which *app* - show which *app* will be run by default

Compression

tar -czf *file.tar.gz files* - create a (compressed) archive of files with Gzip compression
tar -xf *file* - extract the files from an archive (compressed or uncompressed)
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
wget *file* - download *file*
wget -c *file* - continue a stopped download

Keys

<Tab> - command completion
<Up>/<Down> - previous/next command in history
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+A - go to the beginning of the line
Ctrl+E - go to the end of the line
Ctrl+E - erase to the end of the 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