

Linux Command-Line Reference

File Commands
ls – directory listing
ls -al – formatted listing with hidden files
cd <i>dir</i> – change directory to <i>dir</i>
cd – change to home
cd - (cd dash) – toggle back to last recent directory
pwd – show current directory
mkdir <i>dir</i> – create a directory <i>dir</i>
rm <i>file</i> – delete <i>file</i>
rm -r <i>dir</i> – delete directory <i>dir</i>
rm -f <i>file</i> – force remove <i>file</i>
rm -rf <i>dir</i> – force remove directory <i>dir</i> (caution!)
cp <i>file1 file2</i> – copy <i>file1</i> to <i>file2</i>
cp -r <i>dir1 dir2</i> – copy <i>dir1</i> to <i>dir2</i> ; create <i>dir2</i> if it doesn't exist
mv <i>file1 file2</i> – rename or move <i>file1</i> to <i>file2</i> if <i>file2</i> is an existing directory, moves <i>file1</i> into directory <i>file2</i>
ln -s <i>file link</i> – create symbolic link to <i>file</i>
touch <i>file</i> – create empty <i>file</i>
cat > <i>file</i> – writes standard output into <i>file</i>
cat >> <i>file</i> – appends standard output to <i>file</i>
more <i>file</i> – output the contents of <i>file</i>
head <i>file</i> – output the first 10 lines of <i>file</i>
tail <i>file</i> – output the last 10 lines of <i>file</i>
tail -f <i>file</i> – 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 <i>pid</i> – kill process id <i>pid</i>
history – see your previous commands
!999 – execute a previous command from history

File Permissions
chmod <i>octal file</i> – change the permissions of file to octal, which can be found separately for user, group, and world by adding: <ul style="list-style-type: none">• 4 – read (r)• 2 – write (w)• 1 – execute (x)
chmod 777 <i>file</i> – read, write, execute for all
chmod 755 <i>file</i> – rwx for owner, rx for group and all
For more options, see man chmod .

SSH
ssh <i>user@host</i> – connect to remote host as user
ssh -p <i>port user@host</i> – connect to remote host on port <i>port</i> as user

Searching / Filtering
grep <i>pattern files</i> – search for pattern in files
grep -r <i>pattern dir</i> – search recursively for pattern in <i>dir</i>
<i>command</i> grep <i>pattern</i> – search for pattern in the output of command
locate <i>file</i> – find all instances of file
wc -l <i>file</i> – count all lines in a file
uniq -c <i>file</i> – count unique lines in a file

System Info
date – show the current date and time
cal – show this month's calendar
uptime – show current uptime
time <i>command</i> – shows length of time to run command
w – display who is online
cat /proc/cpuinfo – cpu information
cat /proc/meminfo – memory information
man <i>command</i> – show the manual for command
df – show disk usage
du – show directory space usage
free – show memory and swap usage
whereis <i>app</i> – show possible locations of app
which <i>app</i> – show which app will be run by default

Compression
tar -czf <i>file.tar.gz files</i> – create a tar with Gzip compression
tar -xzf <i>file.tar.gz</i> – extract a tar using Gzip
zip <i>archive.zip file1 file2</i> – compress file into <i>file.zip</i>
unzip <i>file.zip</i> – decompress <i>file.zip</i> back to <i>file</i>

vi / vim
vim <i>file</i> – edit or create a file using vim
i (letter “i”) – Change into INSERT mode for editing
esc key – Change back into COMMAND mode for viewing
:w – write edits to file but do not close file
:q – quit vim
:qw – write out edits to file and quit vim

Shortcuts / Other
Ctrl+C – halts the current command
Ctrl+D – log out of current session, similar to exit
Ctrl+R – search recent commands
 – pipe command, joins commands together
!! – repeats the last command
exit – log out of current session