

UNIX / LINUX CHEAT SHEET

[Tweet](#)

73

[G+](#)
[in](#) [Share](#)
[Like](#)

FILE SYSTEM

ls — list items in current directory

ls -l — list items in current directory and show in long format to see permissions, size, and modification date

ls -a — list all items in current directory, including hidden files

ls -F — list all items in current directory and show directories with a slash and executables with a star

ls dir — list all items in directory dir

cd dir — change directory to dir

cd .. — go up one directory

cd / — go to the root directory

cd ~ — go to your home directory

cd - — go to the last directory you were just in

pwd — show present working directory

mkdir dir — make directory dir

rm file — remove file

rm -r dir — remove directory dir recursively

cp file1 file2 — copy file1 to file2

cp -r dir1 dir2 — copy directory dir1 to dir2 recursively

mv file1 file2 — move (rename) file1 to file2

ln -s file link — create symbolic link to file

touch file — create or update file

cat file — output the contents of file

less file — view file with page navigation

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

vim file — edit file

alias name 'command' — create an alias for a command

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

gzip file — compresses file and renames it to file.gz

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

SYSTEM

shutdown — shut down machine

reboot — restart machine

date — show the current date and time

whoami — who you are logged in as

finger user — display information about user

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

NETWORKING

wget file — download a file

curl file — download a file

scp user@host:file dir — secure copy a file from remote server to the dir directory on your machine

scp file user@host:dir — secure copy a file from your machine to the dir directory on a remote server

scp -r user@host:dir dir — secure copy the directory dir from remote server to the directory dir on your machine

ssh user@host — connect to host as user

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

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

ping host — ping host and output results

whois domain — get information for domain

dig domain — get DNS information for domain

dig -x host — reverse lookup host

lsof -i tcp:1337 — list all processes running on port 1337

SHORTCUTS

ctrl+a — move cursor to beginning of line

ctrl+f — move cursor to end of line

alt+f — move cursor forward 1 word

alt+b — move cursor backward 1 word

PROCESS MANAGEMENT

ps — display your currently active processes

top — display all running processes

kill pid — kill process id pid

kill -9 pid — force kill process id pid

PERMISSIONS

ls -l — list items in current directory and show permissions

chmod ugo file — change permissions of file to ugo
 - u is the user's permissions, g is the group's permissions, and o is everyone else's permissions. The values of u, g, and o can be any number between 0 and 7.

7 — full permissions

6 — read and write only

5 — read and execute only

4 — read only

3 — write and execute only

2 — write only

1 — execute only

0 — no permissions

chmod 600 file — you can read and write - good for files

chmod 700 file — you can read, write, and execute - good for scripts

chmod 644 file — you can read and write, and everyone else can only read - good for web pages

chmod 755 file — you can read, write, and execute, and everyone else can read and execute - good for programs that you want to share

SEARCHING

grep pattern files — search for pattern in files

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

grep -rn pattern dir — search recursively for pattern in dir and show the line number found

grep -r pattern dir --include='*.ext' — search recursively for pattern in dir and only search in files with .ext extension

command | grep pattern — search for pattern in the output of command

find file — find all instances of file in real system

locate file — find all instances of file using indexed database built from the updatedb command. Much faster than find

sed -i 's/day/night/g' file — find all occurrences of day in a file and replace them with night - s means substitute and g means global - sed also supports regular expressions