

## File commands

### ls [option] file

- a: show hidden
- A: show hidden except . and ..
- h: human readable size
- i: inode info
- l: long list format
- m: output as csv
- n: numeric uid and guid
- r: sort in reverse order
- S: sort by file size
- t: sort by modification time

### tree [options] dir

- d: only directories
- f: show full paths
- P pattern: only matching pattern
- I pattern: except matching pattern
- h: print sizes in human readable way
- C: use colors
- L x: max x level depth

### cp [options] source dest

- b: backup dest before overwrite
- r: recursive
- f: force
- l: link files instead of copy
- P: dont follow sym links
- i: interactive
- u: copy only if source newer than dest

### mv [options] source dest

- b: backup dest before overwrite
- f: force
- i: interactive
- u: move only if source newer than dest

### rm [options] file

- f: force
- i: interactive

rm - -foo if file name is -foo

### tail [options] file

- f: show end of file live
- 35: show last 35 lines
- q: be quiet

### ln [options] file link

- s: sym link (hard by default)
- f: overwrite link if exists
- b: backup old link before overwrite

### head [options] file

- 35: show first 35 lines
- q: be quiet

### tac file(s)

print files starting from last line

### cut [options] file

- d char: use char as delimiter
- f 1,3,5: print fields 1, 3 and 5

### chmod [options] mode file(s)

-R: recursive

#### symbolic mode

format: [ugoa][[+=[perms]],...  
example: u+x,o-wx,g-w

u: owner  
g: group  
o: others a: all  
+: add mode  
-: remove mode  
=: exact mode  
r: read  
w: write  
x: execute files and search for dirs  
X: search for dirs  
s: setuid or setgid  
t: sticky bit

#### numeric mode

format: [0-7]1,4  
example: 755

first digit: setuid(4), setgid(2)  
second digit: owner perms  
third digit: group perms  
fourth digit: others perms

read: 4  
write: 2  
execute: 1

### find path [options] [tests] [actions]

- mindepth x: ignore levels < x depth
- maxdepth y: ignore levels > y depth

#### tests:

- name "xyz\*": name like xyz\*
- iname "xyz\*": case insensitive
- type d: only directories
- type f: only files
- mtime 0: modified < 1 day
- mtime -x: modified < x days
- mtime +x: modified > x days
- mmin: like
- mtime but in minutes
- size +100M: size > 100MB
- size -100M: size < 100MB  
(M for MB, k for KB, G for GB)
- perm /o+w: writable by others
- ! -perm /o+r : not readable by others

#### actions:

- print: print matching
- delete: rm matching files
- exec cmd '{}' ; : cmd on every match
- exec cmd '{}' + : cmd once on all results
- exec rm -rf '' : remove matching items
- fprint /tmp/result: write matches to /tmp/result

### diff [options] files

- r: recursive
- w: ignore whitespaces
- B: ignore blank lines
- q: only show file names
- x"sync\*": exclude files with path like .sync\*

### grep [options] pattern files

- i: ignore case
- P: pattern is a perl regex
- m: stop after m matches
- n: also show matching line number
- R: recurse directories
- c: only show matching lines count
- exclude=glob : exclude these
- include=glob : only consider these

### cat [options] file(s)

- v: non ascii chars except tab and eol
- T: show tabs
- t: equivalent to -vT
- E: show eol end of line
- e: equivalent to -vE
- A: equivalent to -vET
- s: remove repeat empty lines

### uniq [options] input output

- c: prefix lines by occurrence
- d: only print duplicate lines
- u: only print unique lines

### sort [options] file

- n: numeric sort
- b: ignore blank lines
- f: ignore case
- r: reverse order

### tar [options] file

- f file: archive file
- c: create
- t: list
- x: extract
- C DIR: cd to DIR
- z: gzip
- j: bzip2

### du [options] file

- c: a grand total
- h: human readable
- L: dereference sym links
- P: no dereference of sym links
- s: total for each argument
- exclude=pattern
- max-depth=N: no deeper than N levels

### df [options] file

- h: human readable
- i: list inodes info
- P: no dereference of sym links

## Process Commands

### ps [options]

- e: all processes
- f: full listing
- H: show hierarchy
- p pid: this process pid
- C cmd: this command name cmd
- w: wide output
- ww: to show long command lines
- l: long listing, including wchan
- o x,y,z: show columns x y z
- o user,pid,cmd: show columns user, pid command
- N: negation
- u user: processes owned by user
- u user -N: processes not owned by user
- sort=x,y: x y are columns in ps output
- sort=user: sort by user
- sort=+time: sort by cpu time asc
- sort=-time: sort by cpu time desc
- sort=size: sort by memory size
- sort=vsize: sort by vm size

### top [options]

- d x: refresh every x seconds
- p pid1 -p pid2: only processes with pid1 pid2
- c : show command lines
- interactive commands
- space: udpdate display
- n: change number of displayed proces- ses
- up and down: browse processes
- k: kill a process
- o: change order
- T: sort by time
- A: sort by age
- P: sort by cpu
- M: sort by memory
- c: display/hide command line m: display/hide memory
- t: display/hide cpu
- f: manage list of displayed columns
- up and down: move between columns
- d: display/hide the selected column
- q: apply and quit the field mgmt screen

### pgrep [options] pattern

- l: show pid and process name
- a: show pid and full command line
- n: if more than one show newest
- o: if more than one show oldest
- u uid : show only processes of uid
- c: count results

## Network & Remote

### ssh [options] user@host ["cmd1;cmd2"]

- 2: force protocol 2
- o StrictHostKeyChecking=no: ignore remote host key change
- X: forward X11 display

### wget [options] url

- b: run in background
- o file: print wget output in file
- o /dev/null: suppress wget output
- q: be quiet
- d: debug
- O file: save response to file
- c: resume file download
- S: print server headers
- T N: timeout after N seconds
- user=user: basic auth user
- password=pwd: basic auth password
- save-cookies file: save cookies to file
- load-cookies file: use file as cookies
- post-data=string
- post-file=file
- no-check-certificate: ignore ssl certificate

### curl [options] url

- H header: like -H "Host: st.com"
- u <user:password>: basic http auth
- s: be silent
- S: show errors if silent mode
- L: follow new location in case 301
- data "field=value": x-www-form-urlencoded query
- data-binary data: post data as is without encoding
- data-binary @filename: post filename content as is
- X method: use PUT, GET, POST etc.
- request method: use PUT, GET, POST etc.

### mail [options] to-address

- s subject: email with subject
- c address1,address2: cc copy
- b address1,address2: bcc copy
- mail -s 'hello there' 'joe@st.com' <somefile

## Terminal

(C- = Ctrl, M- = Alt)  
C-c: halt current process  
C-z: pause current process  
bg %1: resume it in background  
fg %1: resume it in foreground  
jobs: list background processes  
C-d: logout  
C-r: search in history  
C-k: remove to end of current line  
C-y: paste removed text  
C-w: remove a word backward  
M-d: remove a word forward  
C-u: remove current line  
C-a: beginning of current line  
C-e: end of current line  
C-x C-e: edit current line in \$EDITOR