

The Mac Terminal Commands Cheat Sheet

COMMAND

Shortcuts

Tab
Ctrl + A
Ctrl + E
Ctrl + U
Ctrl + K
Ctrl + W
Ctrl + T
Esc + T
Ctrl + L
Ctrl + C
Ctrl + D
Option + →
Option + ←
Ctrl + F
Ctrl + B
Ctrl + Y
Ctrl + Z
Ctrl + _
Option + Shift + Cmd + C
Shift + Cmd + V
exit

Basics

/ (Forward Slash)
.(Single Period)
.. (Double Period)
~ (Tilde)
sudo [command]
nano [file]
open [file]
[command] -h
man [command]

Change Directory

cd
cd [folder]
cd ~
cd/
cd -
pwd
cd..
cd../..

List Directory Contents

ls
ls -C
ls -a
ls -l
ls -F
ls -S

ACTION

Auto-complete file and folder names
Go to the beginning of the line you're currently typing on
Go to the end of the line you're currently typing on
Clear the line before the cursor
Clear the line after the cursor
Delete the word before the cursor
Swap the last two characters before the cursor
Swap the last two words before the cursor
Clear the screen
Kill whatever you're running
Exit the current shell
Move cursor one word forward
Move cursor one word backward
Move cursor one character forward
Move cursor one character backward
Paste whatever was cut by the last command
Puts whatever you're running into a suspended background process
Undo the last command
Copy plain text
Paste the selection
End a shell session

Top level directory
Current directory
Parent directory
Home directory
Run command with the security privileges of the super user
Opens the Terminal editor
Opens a file
Get help about a command
Show the help manual of the command

Home directory
Change directory, e.g. cd Documents
Home directory
Root of the drive
Previous directory or folder you last browsed
Show your working directory
Move up to the parent directory
Move up two levels

Display the name of files and subdirectories in the directory
Force multi-column output of the listing
List all entries including those with .(period) and ..(double period)
Output the list of files in one entry per line format
Display a / (slash) immediately after each path that is a directory, * (asterisk) after executable programs or scripts, and @ after a symbolic link
Sort files or entries by size

ls -l	List in a long format. Includes file mode, owner and group name, date and time file was modified, pathname, and more
ls -l /	List of the file system from root with symbolic links
ls -lt	List the files sorted by time modified (most recent first)
ls -lh	Long listing with human readable file sizes in KB, MB, or GB
ls -lo	List the file names with size, owner, and flags
ls -la	List detailed directory contents, including hidden files
File Size and Disk Space	
du	List usage for each subdirectory and its contents
du -sh [folder]	Human readable output of all files in a directory
du -s	Display an entry for each specified file
du -sk* sort -nr	List files and folders, totaling the size including the subfolders. Replace sk* with sm* to list directories in MB
df -h	Calculate your system's free disk space
df -H	Calculate free disk space in powers of 1,000 (as opposed to 1,024)
File and Directory Management	
mkdir <dir>	Create new folder named <dir>
mkdir -p <dir>/<dir>	Create nested folders
mkdir <dir1> <dir2> <dir3>	Create several folders at once
mkdir "<dir>"	Create a folder with a space in the filename
rmdir <dir>	Delete a folder (only works on empty folders)
rm -R <dir>	Delete a folder and its contents
touch <file>	Create a new file without any extension
cp <file> <dir>	Copy a file to the folder
cp <file> <newfile>	Copy a file to the current folder
cp <file>~/<dir>/<newfile>	Copy a file to the folder and rename the copied file
cp -R <dir> "<new dir>"	Copy a folder to a new folder with spaces in the filename
cp -i <file><dir>	Prompts you before copying a file with a warning overwrite message
cp <file1> <file2> <file3>/Users/<dir>	Copy multiple files to a folder
ditto -V [folder path][new folder]	Copy the contents of a folder to new folder. In here "-V" print a line of status for every file copied
rm <file>	Delete a file (This deletes the file permanently; use with caution.)
rm -i <file>	Delete a file only when you give confirmation
rm -f <file>	Force removal without confirmation
rm <file1> <file2> <file3>	Delete multiple files without any confirmation
mv <file> <newfilename>	Move/rename
mv <file> <dir>	Move a file to the folder, possibly by overwriting an existing file
mv -i <file> <dir>	Optional -i flag to warn you before overwriting the file
mv *.png ~/<dir>	Move all PNG files from current folder to a different folder
Command History	
Ctrl + R	Search through previously used commands
history n	Shows the previous commands you've typed. Add a number to limit to the last n items
![value]	Execute the last command typed that starts with a value
!!	Execute the last command typed
Permissions	
ls -ld	Display the default permission for a home directory
ls -ld/<dir>	Display the read, write, and access permission of a particular folder
chmod 755 <file>	Change the permission of a file to 755

chmod -R 600 <dir>
chown <user>:<group> <file>

Processes

ps -ax

ps -aux
top
top -ocpu -s 5
top -o rsize
kill PID

ps -ax | grep <appname>

Network

ping <host>
whois <domain>
curl -O <url/to/file>
ssh <username>@<host>
scp
<file><user>@<host>:/remote/path

arp -a
ifconfig en0
traceroute [hostname]

Homebrew

brew doctor
brew help
brew install <formula>|<cask>
brew uninstall <formula>|<cask>
brew list --formula
brew list --cask
brew deps <formula>|<cask>
brew search text|regex/
brew upgrade <formula>|<cask>
brew outdated <formula>|<cask>
brew outdated --formula
brew outdated --cask
brew pin [installed_formula]
brew unpin [installed_formula]

brew cleanup

Environment Variable or Path

printenv
\$echo
echo \$PATH
echo \$PATH >path.txt

export PATH=\$PATH:absolute/path
to/program/

Search

Change the permission of a folder (and its contents) to 600
Change the ownership of a file to user and group. Add -R to include folder contents

Output currently running processes. Here, a shows processes from all users and x shows processes that are not connected with the Terminal
Shows all the processes with %cpu, %mem, page in, PID, and command
Display live information about currently running processes
Display processes sorted by CPU usage, updating every 5 seconds
Sort top by memory usage
Quit process with ID <PID>. You'll see PID as a column in the Activity Monitor
Find a process by name or PID

Ping host and display status
Output whois info for a domain
Download file via HTTP, HTTPS, or FTP
Establish SSH connection to <host> with user <username>
Copy <file> to a remote <host>

View a list of all devices on your local network. It will show you the IP and MAC address of all the devices
View your device IP and MAC address
Identify the path and the hops traversed by the packets from your device to the destination address

Check brew for potential problems
List of useful homebrew formula and cask commands
Install a formula or cask
Uninstall a formula or cask
List only installed formulas
List only installed cask
List all the dependencies of a formula or cask
Search formula or cask through regex
Upgrade the formula or cask
Search for outdated formula or cask
Search for outdated formula
Search for outdated cask
Pin a formula from getting upgraded
Unpin to upgrade a package
Remove stale lock files and outdated packages for all formula and casks.

Display a list of currently set environment variables. Also tells you which shell you're using
Tells the terminal to print something and show it to you
Check the value of the PATH variable which store a list of directories with executable files
Export the path directory to a text file
Execute a program via terminal only in your current session. If you use a program regularly, add the path to shell configuration file.

find <dir> -name "<file>"

grep "<text>" <file>

grep -rl "<text>" <dir>

Output

cat <file>

less <file>

head <file>

<cmd> > > <file>

<cmd> > <file>

<cmd1> | <cmd2>

Find all files named <file> inside <dir>. Use wildcards (*) to search for parts of filenames

Output all occurrences of <text> inside <file> (add -i for case insensitivity)

Search for all files containing <text> inside <dir>

Output the content of <file>

Output the contents of <file> using the less command that supports pagination and more

Output the first 10 lines of <file>

Appends the output of <cmd> to <file>

Direct the output of <cmd> into <file>

Direct the output of <cmd1> to <cmd2>