

Bash Cheat Sheet (/)

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This cheat sheet is intended to be a quick reminder for the main concepts involved in using the command line and assumes you already understand their usage. If you are new to the Linux command line we strongly suggest you work through the Linux tutorial (/linuxtutorial/) from the beginning.

Click the title of a section to be taken to the relevant tutorial page to learn more about those concepts.

[something] indicates an optional value. **<something>** indicates a compulsory value.

In both instances, the surrounding symbols [or < are not to be included when you substitute the value in.

Basic Navigation (./navigation.php) ^

pwd

Where am I in the system.

ls [path]

Perform a listing of the given path or your current directory.

Common options: -l, -h, -a

cd [path]

Change into the given path or into your home directory.

Path

A description of where a file or directory is on the filesystem.

Absolute Path

One beginning from the root of the file system (eg. /etc/sysconfig).

Relative Path

One relative to where you currently are in the system (eg. Documents/music).

~ (tilde)

Used in paths as a reference to your home directory (eg. ~/Documents).

.(dot)

Used in paths as a reference to your current directory (eg. ./bin).

.. (dot dot)

Used in paths as a reference to your current directories parent directory (eg. ../bin).

TAB completion

Start typing and press TAB. The system will auto complete the path. Press TAB twice and it will show you your alternatives.

Piping and Redirection (./piping.php) ^

>

Redirect STDOUT to a file.

>>

Append STDOUT to the end of a file.

2>

Redirect the STDERR to a file.

<

Pass the contents of a file to a program as STDIN.

|

Feed the STDOUT of the program on the left as STDIN to the program on the right.

More About Files (./aboutfiles.php)

file [path]

Find out what type of item a file or directory is.

Spaces in names

Put whole path in quotes (") or a backslash (\) in front of spaces.

Hidden files and directories

A name beginning with a . (dot) is considered hidden.

Vi / Vim (./vi.php)

View our Vim Cheat sheet (cheatsheetvi.php)

Permissions (./permissions.php)

r (read) w (write) x (execute)

Owner or User, Group and Others

ls -l [path]

View the permissions of a file or all items in a directory.

chmod <permissions> <path>

Change permissions. Permissions can be either shorthand (eg. 754) or longhand (eg. g+x).

Filters (./filters.php)

head

Show the first n lines.

tail

Show the last n lines.

sort

Sort lines in a given way.

wc

How many words, characters and lines.

grep

Search for a given pattern.

See more on our Grep Cheat sheet (cheatsheetgrep.php)

More filters can be found here (./filters.php).

Useful Commands

du -sh /*

Find the size of every directory in your current directory.

df -h

Display how much disk space is used and also free.

basename -s .jpg -a *.jpg | xargs -n1 -i cp {}_original.jpg

Make a copy of every jpg image file in the current directory and rename adding _original.

find /home -mtime -1

Find all files in the given directory (and subdirectories) which have been modified in the last 24 hours.

shutdown -h now

Shutdown the system. (Replace -h with -r for reboot.)

Manual Pages (./manual.php)

man <command>

View the man page for a command.

man -k <search term>

Search for man pages containing the search term.

Press q to exit man pages

File Manipulation (./filemanipulation.php)

mkdir <directory name>

Create a directory

rmdir <directory name>

Remove a directory (only if empty).

touch <file name>

Create a blank file.

cp <source> <destination>

Copy the source file to the destination.

mv <source> <destination>

Move the source file to the destination.

May also be used to rename files or directories.

rm <path>

Remove a file or directory.

Common options: -r -f

Wildcards (./wildcards.php)

May be used anywhere in any path.

*

Zero or more characters (eg. b*).

?

Single character (eg. file.???).

[]

Range (eg. b[aio]t).

Process Management (./processes.php)

CTRL + C

Cancel the currently running process.

kill <process id>

Cancel the given process.

Include the option -9 to kill a stubborn process.

ps

Obtain a listing of processes and their id's.

Including the option aux will show all processes.

CTRL + Z

Pause the currently running process and put it in the background.

jobs

See a list of current processes in the background.