

Bash Cheat Sheet



Priviliges General > man [command] Display the man pages for the [command] > sudo [command] Run [command] as superuser > [command] -help Display information about how to use the [command] > sudo -k Forget superuser password > [command] -h Switch shell user to superuser Same as --help > su Logout of the current session Change the password of the current user > exit > passwd

System Display the current date and time > date Display the month's calendar > cal Display the current system uptime

Display possible locations of [command] > whereis [command] > which [command] Display which application will be run by [command] Display the Ubuntu version > lsb_release -a

Display the kernel version > uname -r Display all kernel information > uname -a > **df** Display disk usage Display directory space usage > du > shutdown Shutdown the Ubuntu system

Hardware Information

> uptime

Display bootup messages > dmesg Display information about the CPU > cat /proc/cpuinfo Display information about the memory > cat /proc/meminfo Display memory and swap usage > free > Ishw Display hardware configuration info > Isblk Display block devices info Display tree-diagram of PCI devices > Ispci -tv > lsusb -tv Display tree-diagram of USB devices > dmidecode Display BIOS hardware info

> hdparm -i /dev/[disk] Display disk data information of [disk] Display disk read speed test of [disk] > hdparm -tT /dev/[disk] > badblocks -s /dev/[disk] Display unreadable blocks test of [disk]

Package management

Refresh package list > apt update > apt upgrade Upgrade all packages **Upgrade Ubuntu version** > apt dist-upgrade Remove all obsolete packages > apt autoremove

> apt install [package] Install [package] > apt remove [package] Remove [package]

Search for [package] in package list > apt search [package] Manually install [package] using a .deb file > dpkg -i [package].deb

Directory navigation

> |s -a|

> cd /

> cd

> cd ...

> cd ./[subdir]

Show current directory > pwd List the contents of the current directory

List detailed information about all the contents of the current direc-

tory

> cd [dir] Change the current working directory to [dir]

Change the current working directory to the root directory Change the current working directory to your home directory Change the directory to the sub directory subdir of your current di-

rectory

Change the current working directory to the parent directory

File management

> mkdir [dir] Create the directory [dir] > touch [file] Create [file] > cp [source] [target] Copy [source] to [target] > cp -r [source] [target]

Copy [source] to [target] and create directory for [target], if not present

> cat [file] Outputs the contents of [file] > cat >[file] Writes the standard input into [file] Outputs the first 10 lines of [file] > head [file] > tail [file] Outputs the last 10 lines of [file] > tail -f [file] Continues to output lines as [file] grows > rm [file] Deletes [file] > rm -r [dir] Deletes [dir] and contained elements

> rsync -a [directory] [backup] Sync the contents of [directory] with the backup directory

[backup]

Users and groups

Display logged in users and activity > W Display who is logged in > who Display who you are logged in as > whoami Show active user details > id Show last system logins > last > finger [user] Display information about [user] Modify user information > usermod > adduser [user] Add [user] as a new user > groupadd [group] Add [group] as a new user group

> userdel [user] Delete the user [user]

Bash variables

> usermod -aG [group] [user]

Assign [value] to [variable] (creates the varaible, if it doesn't exist) > [variable]="[value]" Display the value of [variable] > echo \$[variable]

Add user [user] to group [group]

Display list of all bash variables and functions > set

File permission

> chmod [permissions] [file] Changes the permissions of [file] to [permissions] Permissions

can be set for the user (owner of the file), the user group the file belongs to, other groups, or all. Possible permission are read, write, or execute. Use the following syntax to set permissions: (ugoa)=(w-

(r-)(x-). (- means the permission is not given.) > chown [owner] [file] Changes the owner of [file] to [owner] > chgrp [group] [file] Changes the user group of [file] to [group]

Searching

> grep [pattern] [file] Search for pattern [pattern] in [file] Search recursively for pattern [pattern] in [dir] > grep -r [pattern] [dir]

> [command] | grep [pattern] Search for pattern [pattern] in the output of [command] (| is a so

called pipe operator and is used to forward the output of one command to the next command)

> locate [file] Find all instances of [file]

> find [dir] -name [file] Find all instances of [file] in [dir] or sub directories

Search all named processes for [pattern] > pgrep [pattern]

System services

> start [service] Start the job for [service] > restart [service] Restart the job for [service]

> status [service] Check the status of the job for [service]

> stop [service] Stop the job for [service]

Process management

Display active process snapshot > ps Display processes as a tree > pstree Display process memory usage > pmap Display all running processes > top Like top, just fancier > htop > kill [pid] kills the process with the process id [pid] Kills all process with the name [process] > killall [process] Kills all process matching [pattern] > pkill [pattern]

Display list of files opened by processes > Isof > nohup [command] Execute [command] as a process in background

Network

> hostname Display system hostname > ifconfig Show network information Show wireless network information > iwconfig > sudo iwlist scan Scan for wireless networks

> ping [host] Send ping to [host] and display the results > whois [domain] Display whois information for [domain] > dig [domain] Display DNS information for [domain]

> dig -x [host] Reverse lookup [host] > wget [file] Download [file] > wget -c [file] Continue stopped download of [file]

> scp [file] [host] Copy [file] to the directory [host] on a different machine

> rsync -a [/location] [/backup/] Sync the contents of a location with the backup directory

Firewall

> ufw enable Turn on the firewall Turn off the firewall > ufw disable > ufw default allow Allow all connections by default > ufw default deny Deny all connections by default > ufw status Display current status and rules

> ufw allow [port] Allow traffic on [port] > ufw deny [port] Block [port] > ufw deny from [ip] Block traffic from [ip]

SSH login

> ssh [user]@[host] Connect to [host] as [user] using ssh

Connect to [host] via port 22 > ssh [host]

> ssh -p [port] [user]@[host] Connect to [host] as [user] using a non-default [port]

Shortcuts

ctrl + shift + v

ctrl + c Halt the current command ctrl + d Logout of the current session Erase the word before the cursor ctrl + w ctrl + u Cut part of the line before the cursor ctrl + k Cut part of the line after the cursor

ctrl + r Bring up a recent command Cycle throw the last executed commands of the session up arrow / down arrow ctrl + shift + c Copy marked section of text (marked using the mouse)

Paste copied text