

Bash Cheat Sheet



Systen	n services
about how to use the [command] > restart [s	service] Restart the job for [service] service] Check the status of the job for [service]
Proces	ss management
<pre>date and time calendar system uptime ed in e logged in as about [user] > ps > pstree > pmap > top > htop > kill [pid]</pre>	Display active process snapshot Display processes as a tree Display process memory usage Display all running processes Like top, just fancier kills the process with the process id [pid]
	es for the [command] > start [se about how to use the [command] > restart [se status [se

Hardware Information

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

Display the Ubuntu version

Display the kernel version

Display disk usage

Display all kernel information

Display directory space usage

Shutdown the Ubuntu system

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

Priviliges

> lsb_release -a

> uname -r

> uname -a

> shutdown

> **df**

> du

> sudo [command] Run [command] as superuser > sudo -k Forget superuser password Switch shell user to superuser > su Change the password of the current user > passwd

Package management

Refresh package list > apt update Upgrade all packages > apt upgrade > apt dist-upgrade Upgrade Ubuntu version Remove all obsolete packages > apt autoremove > apt install [package] Install [package] > apt remove [package] Remove [package]

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

Directory navigation

> |s -a|

> cd

> cd ./[subdir]

Show current directory > pwd List the contents of the current directory > **|**S

List detailed information about all the contents of the current directory

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

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 direc-

tory

Change the current working directory to the parent directory > cd ...

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] > head [file] Outputs the first 10 lines of [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]

Searching

> grep [pattern] [file] Search for pattern [pattern] in [file]

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

mand to the next command) Find all instances of [file]

> locate [file] > find [dir] -name [file]

Find all instances of [file] in [dir] or sub directories

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

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

Network

Display system hostname > hostname Show network information > ifconfig 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]

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

SSH login

> wget [file]

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

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

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

Firewall

Turn on the firewall > ufw enable Turn off the firewall > ufw disable

> ufw default allow Allow all connections by default > ufw default deny Deny all connections by default Display current status and rules > ufw status Allow traffic on [port] > ufw allow [port]

> ufw deny [port] Block [port] > ufw deny from [ip] Block traffic from [ip]

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]

Bash variables

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

> echo \$[variable] Display the value of [variable]

Display list of all bash variables and functions > set

Shortcuts

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) ctrl + shift + v

Paste copied text