The Linux Commands Cheat Sheet contains:

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# Basic & Advanced Linux Commands Cheat Sheet

## List and View Files Quickly

ls To list view files in the present directory

ls-R To list view files in sub-directories

ls-a List view hidden files in the folder

ls-al

View detailed file information such as size, location, permission in a list

## Directory Handling

cd or cd ~ Return to Home directory

cd .. To move up a level

cd For easy direction to another directory or folder

cd / This one is used to view the root directory

## File Modification

cat > filename For creating new a new file

cat filename View contents of a file

mv filename Rename the filename

sudo

To run programs with superuser, or root, or administrator

rm filename Delete file

## Hardware Information

dmesg Enable message on boot

cat /proc/ cpuinfo As the name suggests, the command is used to

view CPU information

free -h View memory information

lshw View hardware configuration information in a list

lsblk Lists blocked devices

spci

Available controller information’s alongside host bridge

lspci -tv

To show available PCI devices in a tree-like diagram

lsusb -tv

To view available USB devices in a tree-like diagram

dmidecode BIOS information on hardware

hdparm -i /dev/[disk] Show disk data

hdparm -tT /dev/[disk] Perform disk checkup

badblocks -s /dev/[disk] Review unreadable disk space

## Search Query

grep [pattern] [X] Find file pattern where ‘X’ is the file name

grep -r [pattern] [X] Find a specific location where ‘X’ is the directory

locate [X]

Find all files in the directory where ‘X’ is the file name

find [/folder/location] -name [X] Find a list of names starting with the letter ‘X’

find [/folder/location] -size [X]

Find specific files in folders with a size greater than ‘X’

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## File Compression

tar cf [X.tar] [X] Create an archive where ‘X’ is the filename

tar xf [X.tar] Extract or unzip a file where ‘X’ is the zip

tar czf [X.tar.gz] To convert zip to tar where ‘X’ is the file

gzip [X]

For compressing a to .gz extension where ‘X’ is the filename

## Process Handling

ps Shows active process information

pstree Show process in tree-view

pmap Memory usage information in a process

kill [process\_id]

To kill a specific process, similar to ending from Windows taskbar

bg Listing and re-running process

lsof Show files in the process

With this command, we can rerun the most

fg

recently killed process, similar to ‘undo’

pkill [X] Kill a process where ‘X’ is the name

killall [X] Kill all process named ‘X’

## Package Installation

yum search [keyword] Find packages easily by keyword

yum info [X] Show package info where ‘X’ is the package name

yum install [X. rpm] Install the package named ‘X’

dnf install [X. rpm] Installing a package with the help of DNF

rpm -i [X. rpm]

Installing a package from the local file (-I to include)

rpm -e [X. rpm] Remove rpm package (‘-e’ to exclude)

## File Permission

chmod 777 [X]

Giving file permission to all users where ‘X’ is the filename

chmod 766 [X]

Giving file permission to all groups of users where ‘X’ is the filename

1. Executing file permission
2. Adding new permission to write a file

r Permission to read the file

chown [user] [X] Transfer file ownership where ‘X’ is the filename

chown [user]: [group] [X]

Transfer group rule over a file where ‘X’ is the filename

## SSH Login

ssh user@host For connecting to host

sh host Secure connection with a host

ssh -p [X] user@host

Connect to a specific port where ‘X’ is port number

telnet host Connect to host via Telnet 

## Networking Commands

SSH hostname Login to remote SSH connection

Ping hostname=””

To check network statuses such as ping and response

dir Display files in the current directory remotely

cd “dirname” Changing directory remotely

get X Downloading a file, it can be a link too

put X Upload file to a remote computer

quit Logout

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## Module Management

username -a

To know about the Kernel version and architecture

lsmod Find out the running modules

modinfo X Get information about the ‘X’ module

modprobe –remove X

Remove specific module where ‘X’ is the module name

modprobe X Load ‘X’ module into the kernel

# Tips and Tricks

Configuring Linux with new hardware and kernel can become tricky as multiple devices need their configuration. We need to enable modules to load the kernel into a fixed memory size. The first step is to do modules and install them.

make modules To create new modules

make moudles\_install To install the module.

Though most professionals use Linux as their primary OS, many use a virtual environment to live boot Linux images. Both have their advantages and drawbacks. One of the most reported finds is the wrong memory size. Suppose your computer has 16 GB of RAM, but it will only detect 8 Gb. To solve this, we need to set memory parameters.

LILO boot: linux mem=16GB Parameterizing memory for boot 