### The Linux Commands Cheat Sheet contains:

- Basic & Advanced Linux Commands Cheat Sheet
- Tips and Tricks
- Quick References

### **Basic & Advanced Linux Commands Cheat Sheet**

### **List and View Files Quickly**

| ls    | To list view files in the present directory  |
|-------|--|
| Is-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, |
| 15-a1 | 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

Available controller information's alongside host spci

bridge

To show available PCI devices in a tree-like lspci -tv

diagram

To view available USB devices in a tree-like Isusb -tv

diagram

dmidecode BIOS information on hardware

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

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

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

Find all files in the directory where 'X' is the file locate [X]

name

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

Find specific files in folders with a size greater

than 'X'

| 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   |
| fg                | With this command, we can rerun the most 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 |
| V                         | Executing file permission   |
| W                         | 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

To check network statuses such as ping and Ping hostname=""

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

#### **Module Management**

To know about the Kernel version and username -a

architecture

Ismod Find out the running modules

modinfo X Get information about the 'X' module

Remove specific module where 'X' is the module

name

modprobe X Load 'X' module into the kernel

## **Tips and Tricks**

modprobe -remove X

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