

Linux – Day 1

Linux Operating System

An operating system (OS) is a software program that acts as an intermediary between computer hardware and the various applications that run on a computer. It manages the computer's hardware resources, including the central processing unit (CPU), memory, input/output (I/O) devices (such as keyboard, mouse, printer, and monitor), and storage devices (such as hard drives and solid-state drives).

Ex: Microsoft Windows, macOS, Linux, Unix

How to Launch an EC2 Instance?

Login to the AWS Account ----> Navigate to EC2 Service ----> Click on 'Instances' ----> Name: Linux Practice, AMI: Amazon Linux, Instance Type: t2.micro (Free), Create a keypair (.pem - MobaXTerm) (.ppk - Putty & PuttyGen), Network: Default, Storage: Default (8GB), Number of instances: 1 ----> Launch Instance

How to connect to the EC2 Instance?

Download and Install MobaXTerm Software

Download Link: <https://mobaxterm.mobatek.net/download-home-edition.html>

For every EC2 Instance, which is in the running state, you will get an IP Address (Public IP). By using this IP we will connect to the instance.

Along with IP, we should also use Keypair that we have created while launching instance.

Open MobaXTerm s/w ----> Session ----> Click on SSH ----> Remote Host: <Public IP of Instance> ----> Advanced SSH Settings ----> Check Use Private Key option ----> The file icon will get enabled ----> Click on File icon ----> Select the Keypair file that you have created ----> Open ----> OK

For every linux based instances, the login id is "ec2-user"

Note: For every ubuntu based instances, the login id is "ubuntu"

login as: ec2-user ----> You will see a BIRD Icon ----> You are now connected to the instance

Note: For all the instances that are available in the AWS Cloud, you will get 750 Hours of free usage per month.

Ex: 10 Instances ---- For each instance; $750/10 = 75$ Hours (Free)

Dont keep the instances in the running state when you are not using it.

States of Instances:

Stop - Billing will not come ---- The data inside the instance will be preserved

Terminate - Billing will not come --- The data inside the instance will be lost

LINUX COMMANDS

=> In linux, we will work with commands.

=> Linux is CLI (Command Line Interface) based

1. To clear the screen

\$ clear (or) control + c

2. To see the todays date and time

\$ date

3. To see the calendar

\$ cal (You will see the current month)

\$ cal -3 (You will see the previous, current and next months)

4. To know the information about how much CPU, Memory, etc... are utilized

\$ top

To come out of the details, presss CONTROL + c

5. To see how much free space is available

\$ free -h ---> Interms of MB

\$ free -k ---> Interms of KB

\$ free -b ---> Interms of Bytes

6. To know the disk usage

\$ du (or) du -h

7. To display the history related to a specific command

\$ history |grep <Command Name>

Ex: history |grep clear ---> it will display the number of times the 'clear' command was executed.

8. To clear the history of all the commands executed so far

\$ history -c

9. To see the CPU information

\$ cat /proc/cpuinfo (or) lscpu

10. To see the Memory information

\$ cat /proc/meminfo (or) lsmem

11. To see the ROM/Volume information

\$ df (or) df -i (or) lsblk (or) fdisk -l (or) df -m

12. To see the IP address of server/VM

\$ ifconfig (or) ip addr (or) hostname -i

13. To see the list of files

\$ ls (This command will not display the hidden files/folders)

\$ ls -la (This command will display all the files/folders including the hidden files/folders)

GITHUB Repository URL: <https://github.com/KastroVKiran/Linux-by-Kastro>