class :- 6

Linux :- Package managers- yum , apt :-

-> Install webserver in Linux vm :-

L> enable 80 port number in security group inbound rules.

-> enable SSH

-> enable HTTP 80

--> Webserver is software which is used to run websites
--> We can use 'httpd' as a webserver in amazon Linux vm

$ sudo yum install httpd -->install webserver

$ sudo service httpd start --> start the webserver

$ cd /var/www/html --> navigate to website content directory

$ sudo vi index.html --> I to get into insert mode --> <h1> content </h1> -> esc -> :wq! -->

--> httpd webserver runs on 80 port number.
To acess our webserver we need to enable 80 port number in security group inbound rules
After all we can acess our webserver using ec20 vm public ip .

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systemctl in Linux

L> manage system services

Some of the common tasks that systemctl can perform -->

--> Starting service
--> Stopping services
--> Reload services
--> Re start services
---> Enable/disable services

sudo service docker start
sudo systemctl enable jenkins

start a service : systemctl start service-name
stop a service : systemctl stop service-name

Restart a service : systemctl restart service-name

Reload config file for a service without stopping it : systemctl reload service-name

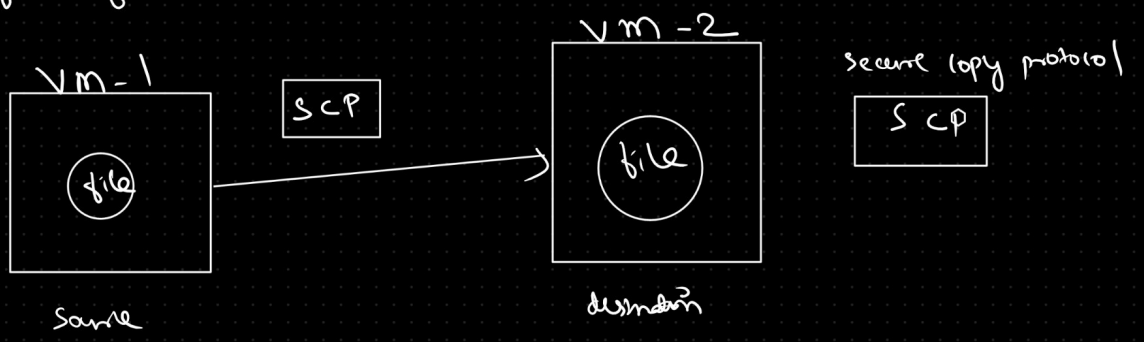
Enable a service to start automatically at boot time : systemctl enable service-name

Disable a service to start automatically at boot time: systemctl disable service-name

Current status of a service : systemctl status service-name

list all active service : systemctl list-units --type=service

=> copy files from one vm to another vm



1-> upload pem file to source vm

2-> give permission to read pem file -> $ chmod 400 key-value.pem

3-> SCP command :-

$ scp -I <pem-file> <source-file-path> username@dest-vm-public ip :/dest/path

example : sudo scp -i linux-devops-keypair.pem alien.txt ec2-user@13.127.111.178:/home/ec2-user/

Change hostname in vm

$ sudo hostname <new-name> -> set hostname

||

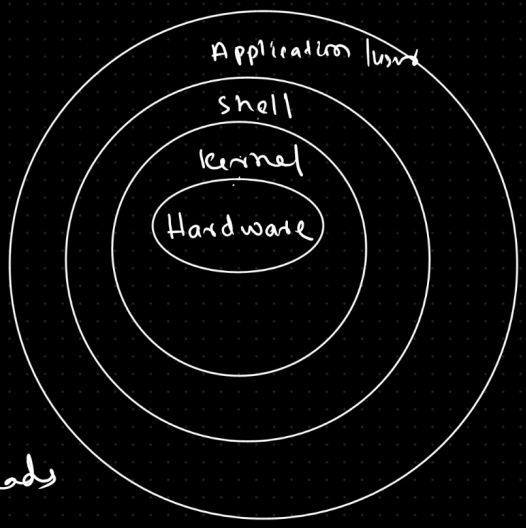
re-start session $ exit & press 'y' to connect back

- File Based operations -> File permissions -> sudoers file
- Text editors -> File ownership -> sshd_config
- Text filters -> Archives -> package manager
- Users management -> Networking -> static web hosting
  hosting (http

Linux Architecture

Linux is CLI based free and open source OS
-> Its secured
-> Its Multi User based OS
--> Highly Recommended for project related servers (docker, Jenkins , k8s, nexus, sonar, webservers ..)

1) hardware 2) kernel 3) shell



=> shell -> mediator b/w user & kernel
!!
process our commands

=> kernel -> program which reads shell commands & gives to hardware components

=> when we execute any Linux command, shell will read our command and it will translate our command into kernel understandable format
-- --> kernel s/w will convert our command into Linux machine hardware understandable format

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-> Scripting :-

-> whoami
pwd
date
ls -l
cal
} file

-> set of commands we keep in a file for execution
↳ Scripting is used to automate our daily routine work.

Instead of executing these commands one after the other manually , we can keep them inside a file and execute that file this process is referred as Scripting

-->The Process of executing the script file using shell is called as Shell Scripting --> Automate the usuall or regular task in a project

-> we create shell script file with .sh extension

=> $ vi first-script.sh -> i -> esc -> :wq!

!!
cal
date
pwd
ls -l

=>

=> $cat first-script.sh

$ sh first-script.sh

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