Important Instructions:

\* Total number of Questions will be around 23

\* You will be given by 2 VMs (node1 and node2)

\* In node1 system root password is already set (no need to reset) and will be mentioned in instruction page but in node2 system password need to be recovered as per the question.

\* In node1 system Network configuration is required but in node2 one networking is already done.

\* NTP needs to be configured in only node1 system (not in both)

\* YUM Repo needs to configure in both systems.

\* There is not any Q to configure LDAP Client (it is already configured). You just need to configure auto mounting For remoteuser's Home DIR in one system.

\* Firewall and SELinux both will be pre-enabled.

\* VIM editor will not work in exam so use VI editor

\* In this Server 3 Disks will be given.

\* /dev/vda : for ROOT filesystem ( don't do anything under this Disk )

\* /dev/vdb : You need to use for Swap and LVM Partition.

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Imp Notes

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While doing ssh to any servers(node1/node2) make sure you have to follow the below steps

vi /etc/ssh/sshd\_config

PermitRootLogin yes (make this changes in conf file)

#systemctl restart sshd

1.Assign static network settings,

IPADDRESS:172.25.250.10

NETMASK: 255.255.255.0

GATEWAY:172.25.250.254

DNS: 172.25.250.254

HOSTNAME: servera.lab.example.com

2.A web server running on non standard port 82 is having issues serving content. Debug and fix the issues.

=> The web server on your system can server all the existing HTML files from /var/www/html ( NOTE: Do not make any changes to these files )

=> Web service should automatically start at boot time.

3.Configure YUM repos with the given link (2 repos: 1st is BaseOS and 2nd is AppStream)

Link: - http://conchctent.example.com/rhel9.0/x86\_64/dvd/AppStream

Link: -userechm

4.Create the following users, groups and group memberships:

Create a group named sysadmin.

A user saara who belongs to sysadmin as a secondary group.

A user natasha who also belongs to sysadmin as a secondary group.

A user harry who does not have access to an interactive shell on the system, and who is not a member of sysadmin.

saara, natasha and harry should all have the password of avaster.

5.Create a collaborative directory /shared/sysadmin with the following characteristics:

Group ownership of /shared/sysadmin is sysadmin.

The directory should be readable, writable and accessible to members of sysadmin, but not to any other user.(It is understood that root has access to all files

and directories on the system).

Files created in /shared/sysadmin automatically have group ownership set to the sysadmin group.

6.The user saara must be configure a cron job that runs daily 5:30 PM local time executes logger "EX200 in progress"

or

Set the cron job for the user “saara” that should runs daily every 1 minute local time executes “Ex200 is progress ” with echo.

7.Copy the file /etc/fstab to /var/tmp

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Configure the permissions of /var/tmp/fstab so that:

The file /var/tmp/fstab is owned by the harry user.

The file /var/tmp/fstab belongs to the group harry.

The file /var/tmp/fstab should not be executable by anyone.

The user saara is able to read and write /var/tmp/fstab.

The user natasha can neither write nor read /var/tmp/fstab.

All other users (current & future) have the ability to read /var/tmp/fstab.

8.Create a user deal with user id 2015 and assign the password Redhat.

9.Configure your system so that it is an NTP client of classroom.example.com.

10.a. Search the files with extension .pl and copy the files to directory /root/pl.found.

b. Search student user files and copy the files to directory /root/student.found.

11.Search the keyword “sa” in /remo

Wvi/CHM.VI file and store the lines in .

12.a.Backup /etc directory to /root/etc.tar.gz and compress it by gzip

b.tar -cjvf /root/etc.tar.bz2 /etc

c. tar -cJvf /root/etc.tar.xz /etc

13.Configure autofs to automount the home directories of LDAP users. Note the following:

a.classroom.example.com NFS-exports /home/guests to your system

b.remoteuser1 home directory is, classroom.example.com:/home/guests/remoteuser1

c.remoteuser1’s home directory should be auto mounted locally beneath /home as /home/guests/remoteuser1.

d.home directories must be writable by their users.

14. When we will create any users in node1 the password of that particular user should expire in 20days.

15. write a script named adhoc.sh under /root which will search less than 2M files from /var and store it in /root/backup and also set the permission of set user identifier (SGID)

16.Give the sudo permission to group1.

17.When the existing user joe will create the file the permission should come as rw------- and when create the directory it should come as rwx------

18.Create a Container for alth user

Use this link http://domain.exam.com/rhel9/Containerfile build image named monitor

Do not change anything in Containerfie

Ans:

[root@node1]$ ssh alth@node1 (if alth password wont give in question try to put same password as root)

[alth@node1]$ wget http://domain.exam.com/rhel9/Containerfile

[alth@node1]$ loginctl enable-linger alth

[alth@node1]$ podman build -t monitor .\

[alth@node1]$ podman images

[Note: No need extra configuration in exam just run this 2 command only for this question ]

19. Create a rootless container :-

1. Create a Container name asciipdf

2. Use monitor image for asciipdf which you previously created

3. Create a systemd services name container-asciipdf for alth user only

4. Service will automatically started accross reboot do no any manual intervention.

5. Local host Directory /opt/files attach to Container directory /opt/incoming.

6. Local host Directory /opt/processed attach to container host directory /opt/outgoing

7. If the service work properly, you place any plain text file in /opt/file , then file automatically converts in pdf and also place into /opt/outprocess

Ans:

[root@node1]# loginctl enable-linger alth

[root@node1]# mkdir /opt/files

[root@node1]# mkdir /opt/processed

[root@node1]# chown alth:alth /opt/files

[root@node1]# chown alth:alth /opt/processed

\*\*\* we must connect to server through ssh to alth\*\*\*\*

[root@node1]# ssh alth@node1

[alth@node1]$ podman run -d --name asciipdf -v /opt/files:/opt/incoming:Z -v /opt/processed:/opt/outgoing:Z localhost/monitor (podman images will give the path of the image)

[alth@node1]$ mkdir –p ~/.config/systemd/user

[alth@node1]$ cd ~/.config/systemd/user

[alth@node1]$ podman generate systemd --name asciipdf –files –new

[alth@node1]$podman stop asciipdf

[alth@node1]$podman rm asciipdf

[alth@node1]$ systemctl --user daemon-reload

[alth@node1]$ systemctl --user enable container-asciipdf

[alth@node1]$ systemctl --user start container-asciipdf

[alth@node1]$ systemctl --user status container-asciipdf

[alth@node1]$ exit

[root@node1]# touch /opt/files/test (check and verify that file is converted or not)

Verification steps: - [root@node1.com]# reboot

[desktop@desktop]$ssh alth@node1

[alth@node1]$ systemctl --user status container-asciipdf

Serverb

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1. .In serverb.lab.example.com to assign a new password called "getroot".

lab start boot-resetting (in student user workstation machine need to execute this command while practicing only)

2.Configure YUM repos with the given link (2 repos: 1st is BaseOS and 2nd is AppStream)

Link: - http://content.example.com/rhel9.0/x86\_64/dvd/AppStream

Link: - http://content.example.com/rhel9.0/x86\_64/dvd/BaseOS

3.Create a Logical volume fedora with 30 extents from a volume group redhat of 8MB extent size. Mount it under /mnt/fedora with ext4 file system persistently.

Ans

4.Resize the logical Volume named myvol to 100MB. (NOTE: Size in between 90MB to 110MB is acceptable)

#lvdiplay |grep myvol

#lvresize -r -L 100M /dev/vg/myvol

#lvdiplay

5.Add SWAP Space with 512 MB.

Ans: #fdisk /dev/vdb

press n

enter-->enter-->type +512M enter

select t for giving type to swap id is=19

w

#partprobe

#mkswap /dev/vdb3

after completing swap partition update /etc/fstab

# vi /etc/fstab

/dev/vdb3 swap swap defaults 0 0

:wq

#swapon –a

#free -h [To check]

6.Configure tuned and change the tuned profile based on system performance.

Ans: # tuned-adm active

# tuned-adm recommend

# tuned-adm profile <give-recommended-profile-name-here>

# tuned-adm acti

ww