**RHCSA & RHCE**

**Password break:-**

Reboot and Interrupt the process , type e for edit kernel start

Append rd.break in line starting for Linux 16

And then press ctrl-X

Device come into emergency mode

# mount -o remount,rw /sysroot

# chroot /sysroot

#passwd

# touch /.autorelabel

#exit

#exit

**1.assign the static ip**

Ip : 192.168.0.X ( Where X is your station number or IP)

Netmask : 255.255.255.0

Gateway : 192.168.0.1

DNS : 192.168.0.254

- Set the Hostname stationX.example.com [ where X is your station number or IP ]

# nmcli connection show

nmcli connection modify eth0 ipv4.addresses “<IP> <gateway>”

#nmcli connection modify eth0 ipv4.addresses “192.168.0.x/24 192.168.0.1”

nmcli connection modify eth0 ipv4.dns <DNS IP >

#nmcli connection modify eth0 ipv4.dns 192.168.0.254

#nmcli connection modify eth0 ipv4.method manual

#nmcli connection modify eth0 connection.autoconnect yes

#nmcli connection up eth0

#hostnamectl set-hostname station.example.com

# ping instructor.example.com

Related config Files:

IP :- /etc/sysconfig/network-scripts/ifcfg-eth0

Hostname :- /etc/hostname

**Yum configuration:-**

#vim /etc/yum.repos.d/server.repo

[server]

name=server

baseurl=http://192.168.0.254/rhel70

enabled=1

gpgcheck=0

**2. A group named sysmgrs.**

- A user natasha who belongs to sysmgrs as a secondary group.

- A user harry who belongs to sysmgrs as a secondary group.

- A user sarah who does not have access to an interactive shell & who is not a member of sysmgrs group.

natasha, harry and sarah should all have the password of password.

#groupadd sysmgrs

#useradd -G sysmgrs natasha

#useradd -G sysmgrs harry

#useradd -s /sbin/nologin sarah

#passwd natasha

#passwd harry

#passwd sarah

3.

Group ownership of /shared/sysmgrs is sysmgrs.

- The directory should be readable, writable, and accessible to member of sysmgrs, 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/sysmgrs automatically have group ownership set to the sysmgrs group.

#mkdir -p /shared/sysmgrs

# cd /shared

#chgrp sysmgrs sysmgrs

#chmod 2770 sysmgrs

4.

Install the appropriate kernel update from ftp://instructor.example.com/pub/updates. The following criteria must be also be met:

# uname -r

# wget ftp://instructor.example.com/pub/updates/kernelversion

# yum localinstall kernelversion

# vim /boot/grub2/grub.cfg

Check new kernel is before older or after it

If new version is before old

# grub2-set-default 0

If new version is after

# grub2-set-default 1

#grub2-mkconfig >/boot/grub2/grub.cfg

#reboot

#uname -r [result should be new version]

5 The user natasha must configure a cron job that runs daily at 15:25 local time and executes

#crontab ?e ?u Natasha

25 15 \* \* \* /bin/echo hello

6.Configure your machine as LDAP client. LDAP server and LDAP directory tree information will be given in the exam.

- ldapuserX should be able to log into your system, where X is your station number, but will not have

a home directory until you have completed the autofs requirement.

- All ldapuser users have a password of password

--> Configure LDAP Search Base DN with: dc=example,dc=com

--> Configure LDAP Server with the URI: ldap://instructor.example.com

--> Download CA from Certificat URL: http://instructor.example.com/example-ca.crt

# yum install authconfig-gtk.x86\_64 sssd pam\_ldap -y

#authconfig-gtk

==> Prompt popup

Add given info like dc=example,dc=com

Server name :-- ldap://instructor.example.com

Certificate :-- http://instructor.example.com/example-ca.crt

Select in drop down :- ldap password

#service restart sssd

#service enable sssd

#su -ldapuserX

Note:- should login successfully but without home dir till autofs off

7.Configure autofs requirement:

- instructor.example.com (192.168.0.254) NFS-exports /rhome for ldapuser,

- ldapuserX's home directory is instructor.example.com:/rhome/ldapuserX, where X is your station number

- ldapuserX's home directory should be automounted locally beneath /rhome as /rhome/ldapuserX

- home directories must be writable by their users.

\* Note: Now check login through your ldapuserX from the terminal & only your station ldapuser will get the home directory

#yum install autofs -y

# vi /etc/auto.master

/rhome /etc/auto.misc

# vi /etc/auto.misc

ldapuserX -fstype=nfs.ver=3 instructor.example.com:/rhome/ldapuserX

# systemctl restart autofs

#systemctl enable autofs.service

8 Copy the file /etc/fstab to /var/tmp. Configure the permissions of /var/tmp/fstab so that:

the file /var/tmp/fstab is owned by the root user

- the file /var/tmp/fstab belong to the group root

- the file /var/tmp/fstab should not be execubable by anyone

- the user natasha is able to read and write /var/tmp/fstab

- the user harry can neither write nor read /var/tmp/fstab

- all other users (current or future) have the ability to read /var/tmp/fstab

#cp /etc/fstab /var/tmp/

# cd /var/tmp/

# ls -ltrh

# setfacl -m -u:natasha:rw fstab

# setfacl -m -u:harry:- fstab

9. Configure your system as a NTP client of instructor.example.com.

#Vim /etc/chrony.conf

Server instructor.example.com iburst

#systemctl restart chronyd.service

#systemctl enable chronyd.service

10 Resize the lvm to 250M /home

->Check /home info

#lvdisplay

# umount /dev/vol0/home

# fsck ?f /dev/vol0/home

#resize2fs /dev/vol0/home 250M

#lvreduce ?l 250M /dev/vol0/home

11 Retry done Create a swap partition of 756M MB and make it available permanent.

#fdisk-l

#fdisk /dev/vda

N for new

E for extended

T for change the type to 82

W for save

#partprobe /dev/vda

#mkswap /dev/vda5

#vim /etc/fstab

/dev/vda5 swap swap defaults 0 0

#swapon -s

#swapon -a

12 Create the LV of 50 Extents named with newLogVol by creating vg of PE size 16MB named with newVolGrp, LV should have vfat filesystem & mount it on /mnt/lvm directory.

-pvcreate

-VG newvolgrp-PE 16

-LV 50 EX-newlogvol-vfat FS

#fdisk-l

#fdisk /dev/vda

N for new

E for extended

T for change the type to 8e

W for save

#partprobe /dev/vda

#pvcreate /dev/vda6

#vgcreate -s 16 newVolGrp /dev/vda6

#lvcreate -n newLogVol -l 50 newVolGrp

#mkdir /mnt/LVM

#vi /etc/fstab

/dev/newVolGrp/newLogVol /mnt/lvm vfat defaults 0 0

#mkfs.vfat /dev/newVolGrp/newLogVol

#mount -a

#df -Th

13 Find a file created by a user harry and copy it into a /root/findfile directory.

#mkdir /root/findfile

# Find / -type f -user harry -exec cp -vap {} /root/findfile/ \;

14 Find a string "root" from a file /etc/passwd and copy that string in a /root/testfile file.

Only root string -> #grep -o root /etc/passwd > /root/testfile

For full line having root ->#grep root /etc/passwd > /root/testfile

**15 Create user manalo with user ID 5233**

Useradd -u 5233 manalo

**16 Create a compressed archive of /var/ & /etc/ in /opt as exam.tar.gz**

tar -cvz /opt/exam.tar.gz