

RHCT (Redhat Certified Technician) RH202

RedHat RH202

Version Demo

Total Demo Questions: 14

Total Premium Questions: 140

Buy Premium PDF

<https://passqueen.com>

support@passqueen.com

Topic Break Down

Topic	No. of Questions
Topic 1, Troubleshooting and System Maintenance	11
Topic 2, Installation and Configuration	127
Topic 3, Mix Questions	2
Total	140

QUESTION NO: 1 - (SIMULATION)

SIMULATION

One Logical Volume is created named as myvol under vo volume group and is mounted. The Initial Size of that Logical Volume is 124MB. Make successfully that the size of Logical Volume 245MB without losing any data. The size of logical volume

240MB to 255MB will be acceptable.

Answer and

Explanation:

:

1.First check the size of Logical Volume: `lvdisplay /dev/vo/myvol`

2.Increase the Size of Logical Volume: `lvextend -L+121M /dev/vo/myvol`

3.Make Available the size on online: `ext2online /dev/vo/myvol`

4.Verify the Size of Logical Volume: `lvdisplay /dev/vo/myvol`

5.Verify that the size comes in online or not: `df -h`

We can extend the size of logical Volume using the `lvextend` command. As well as to decrease the size of Logical Volume, use the `lvresize` command. In LVM v2 we can extend the size of Logical Volume without unmount as well as we can bring the actual size of Logical Volume on online using `ext2online` command.

ANSWER: See the explanation for the answer

Explanation:

Extend the logical volume by 121 MB (from 124 MB to approximately 245 MB), then grow the mounted filesystem. Do **not** reduce or recreate the filesystem.

```
# Confirm the LV and its mounted filesystem
lvdisplay /dev/vo/myvol
findmnt -no SOURCE,FSTYPE,TARGET /dev/vo/myvol

# Extend the LV to the requested size
lvextend -L +121M /dev/vo/myvol

# For an ext2/ext3 filesystem, grow it online
resize2fs /dev/vo/myvol

# Verify both the LV and filesystem sizes
lvdisplay /dev/vo/myvol
df -hT
```

On older RH202 systems where the supplied filesystem-growing utility is `ext2online`, the filesystem step may instead be:

```
ext2online /dev/vo/myvol
```

An equivalent direct target-size command is `lvextend -L 245M /dev/vo/myvol`. LVM allocates in physical extents, so the resulting LV can be slightly different from exactly 245 MB; the required acceptable range is 240–255 MB.

If `findmnt` reports an XFS filesystem, grow it using its mount point rather than `resize2fs`:

```
xfs_growfs /mount/point
```

QUESTION NO: 2 - (SIMULATION)

SIMULATION

Create the user named user1, user2, user3

Answer and

Explanation:

:

🔗 uk.co.certification.simulator.questionpool.PList@306f4c30

We create the user using `useradd` command and we change the password of user using `passwd` command. If you want to set the blank password use: `passwd -d username`.

ANSWER: See the explanation for the answer

Explanation:

Create the three local user accounts as `root` (or with `sudo`):

```
useradd user1
useradd user2
useradd user3
```

Equivalently:

```
for u in user1 user2 user3; do
    useradd "$u"
done
```

Verify that the accounts exist:

```
id user1
id user2
id user3
```

No password requirement is specified. If the simulation requires empty passwords, remove each password hash with:

```
passwd -d user1
passwd -d user2
passwd -d user3
```

QUESTION NO: 3 - (SIMULATION)

SIMULATION

Make Secondary belongs the jackie and curtin users on sysuser group. But david user should not belongs to sysuser group.

Answer and

Explanation:

:

1. `usermod -G sysuser jackie`
2. `usermod -G sysuser curtin`
3. Verify by reading `/etc/group` file

Using `usermod` command we can make user belongs to different group. There are two types of group one primary and another is secondary. Primary group can be only one but user can belongs to more than one group as secondary.

`usermod -g groupname username` To change the primary group of the user

`usermod -G groupname username` To make user belongs to secondary group.

ANSWER: See the explanation for the answer

Explanation:

Add `jackie` and `curtin` to `sysuser` as supplementary (secondary) group members, and remove `david` if he is currently listed in that group:

```
usermod -aG sysuser jackie
usermod -aG sysuser curtin
gpasswd -d david sysuser
```

Verify the resulting membership:

```
getent group sysuser
id jackie
id curtin
id david
```

The `-G` option sets supplementary groups. The `-a` option is important: it appends `sysuser` without removing any existing supplementary groups from `jackie` or `curtin`. `gpasswd -d` ensures that `david` is not a member of `sysuser`.

QUESTION NO: 4 - (SIMULATION)

SIMULATION

Create the group named `sysuser`.

Answer and

Explanation:

:

1. `groupadd sysuser`

`groupadd` command is used to create the group and all group information is stored in `/etc/group` file.

ANSWER: See the explanation for the answer

Explanation:

Create the required group as root (or with `sudo`):

```
groupadd sysuser
```

Verify that it was created:

```
getent group sysuser
```

This creates the local group `sysuser`; its entry is stored in `/etc/group`.

QUESTION NO: 5 - (SIMULATION)

SIMULATION

Install the Redhat Linux RHEL 4 through NFS. Where your Server is `server1.example.com` having IP `172.24.254.254` and shared `/var/ftp/pub`. The size of the partitions are listed below:

/1048

/home1028

/boot 512

/var 1028

/usr2048

Swap->1.5 of RAM Size

/archiveconfigure the RAID Level 0 of remaining all free space.

After completing the installation through NFS solve the following questions. There are two networks 172.24.0.0/16 and 172.25.0.0/16. As well as there are two domains example.com on 172.24.0.0/16 network and my133t.org on 172.25.0.0/16 network.

Your system is based on example.com domain.

Answer and

Explanation:

:

1. Insert the CD on CD-ROM and start the system.

2. In Boot: Prompt type linux askmethod

3. It will display the language, keyboard selection.

4. It will ask you for the installation method.

5. Select the NFS Image from the list

6. It will ask the IP Address, Net mask, Gateway and Name Server. Select Use

Dynamic IP Configuration: because DHCP Server will be configured in your exam lab.

7. It will ask for the NFS Server Name and Redhat Enterprise Linux Directory.

Specify the NFS Server: 172.24.254.254

Directory: /var/ftp/pub

8. After Connecting to the NFS Server Installation start in GUI. Go up to the partition screenby selecting the different Options.

9. Create the partition According to the Question because Size and what-what partitions should you create at installation time is specified in your question

10.Create the two RAID partitions having equal size of remaining all free space.

11.Click on RAID button

12.Type mount point /archive

13.Select RAID Level 0

14.Click on ok

15. Then select the MBR Options, time zone and go upto package selections.

It is another Most Important Time of installation. Due to the time limit, you should care about the installation packages. At Exam time you these packages are enough.

X-Window System

GNOME Desktop

(these two packages are generally not required)

Administration Tools.

System Tools

Windows File Server

FTP Servers

Mail Servers

Web Servers

Network Servers

Editors

Text Based Internet

Server Configuration Tools

Printing Supports

When installation will complete, your system will reboot. Jump for another Question.

ANSWER: See the explanation for the answer

Explanation:

Install RHEL 4 from the NFS installation tree at:

NFS server: 172.24.254.254

NFS directory: /var/ftp/pub

1. Boot the RHEL 4 installation CD/DVD and enter `linux askmethod` at the `boot:` prompt.
2. Select the appropriate language and keyboard, then select **NFS image** as the installation method.
3. For installer networking, select **Use dynamic IP configuration (DHCP)**, as specified. Enter 172.24.254.254 as the NFS server and /var/ftp/pub as the Red Hat Enterprise Linux directory.
4. Continue to the disk partitioning screen and use custom/manual partitioning.

Create these normal partitions (sizes in MB/MiB as displayed by Anaconda):

/boot — 512 MB

/ — 1048 MB

/home — 1028 MB

/var — 1028 MB

/usr — 2048 MB

swap — size equal to $1.5 \times \text{installed RAM}$

Use a Linux filesystem such as ext3 for the mounted filesystems and set the swap partition type to swap.

RAID requirement:

After creating all required normal partitions and swap, use **all remaining free disk space** to create **two equal-sized software RAID member partitions**.

Select **RAID / Create RAID device**, select both RAID member partitions, choose **RAID level 0 (stripe)**, and assign mount point /archive.

The resulting RAID 0 device (for example, /dev/md0) must consume both remaining-space RAID members and be formatted with a Linux filesystem.

Install the boot loader to the **MBR**, select the required time zone and packages, and complete the installation. If the installer requests a hostname/domain, use the `example.com` domain because this host belongs to the 172.24.0.0/16 / `example.com` network; do not configure it as a `my133t.org` host.

QUESTION NO: 6 - (SIMULATION)

SIMULATION

Make sure on /data that only the owner user can remove files/directories.

Answer and

Explanation:

:

By default user1 can remove user2's files due to directory permission to group member.

We can prevent of deleting files from others users using Sticky Bits.

⇒ `chmod o+t /data`

⇒ Verify /data: `ls -ld /data`

You will get: `drwxrwx—T`

ANSWER: See the explanation for the answer

Explanation:

Set the sticky bit on /data:

`chmod o+t /data`

Verify it with:

`ls -ld /data`

The sticky-bit indicator appears as `t` (or uppercase `T` when the execute bit for others is not set), for example:

`drwxrwx--T ... /data`

With the sticky bit enabled, users who can write to /data cannot remove or rename entries owned by another user. Removal is limited to the file/directory owner, the /data directory owner, or root.

QUESTION NO: 7 - (SIMULATION)

SIMULATION

Dig Server1.example.com, Resolve to successfully through DNS Where DNS server is 172.24.254.254

Answer and

Explanation:

:

`#vi /etc/resolv.conf`

`nameserver 172.24.254.254`

`# dig server1.example.com`

`#host server1.example.com`

DNS is the Domain Name System, which maintains a database that can help your computer translate domain names such as `www.redhat.com` to IP addresses such as `216.148.218.197`. As no individual DNS server is large enough to keep a database for the entire Internet, they can refer requests to other DNS servers.

DNS is based on the named daemon, which is built on the BIND (Berkeley Internet Name Domain) package developed through the Internet Software Consortium

Users want to access by name so DNS will interpret the name into IP address. You need to specify the Address of DNS server in each and every client machine. In Redhat

Enterprise Linux, you need to specify the DNS server into `/etc/resolv.conf` file.

After Specifying the DNS server address, you can verify using `host`, `dig` and `nslookup` commands.

ANSWER: See the explanation for the answer

Explanation:

Configure the system to use `172.24.254.254` as its DNS resolver, then verify that `server1.example.com` resolves.

```
printf 'nameserver 172.24.254.254\n' > /etc/resolv.conf
dig server1.example.com
# or:
host server1.example.com
```

The essential required setting in `/etc/resolv.conf` is:

```
nameserver 172.24.254.254
```

For a persistent NetworkManager-managed configuration, set the connection's IPv4 DNS server to `172.24.254.254` (for example, with `nmcli con mod <connection> ipv4.dns 172.24.254.254`) and reactivate the connection. Confirm the `lookup` output contains an address for `server1.example.com`.

QUESTION NO: 8 - (SIMULATION)

SIMULATION

Make on `/data` that only the user owner and group owner member can fully access.

Answer and

Explanation:

:

1. `chmod 770 /data`

2. Verify using : `ls -ld /data`

Preview should be like:

```
drwxrwx--- 2 root sysadmin 4096 Mar 16 18:08 /data
```

To change the permission on directory we use the `chmod` command. According to the question that only the owner user (root) and group member (sysadmin) can fully access the directory so: `chmod 770 /data`

ANSWER: See the explanation for the answer

Explanation:

Set the directory permissions so that the owner and group have full directory access (`rwX`) and all other users have no access:

```
chmod 770 /data
```

Verify the result:

```
ls -ld /data
```

The permission portion should be:

```
drwxrwx---
```

This means the user owner has `rwX`, the group owner has `rwX`, and others have no permissions. If the required ownership is specifically `root:sysadmin`, set it as well:

```
chown root:sysadmin /data
```

QUESTION NO: 9 - (SIMULATION)

SIMULATION

There are more than 400 Computers in your Office. You are appointed as a System Administrator. But you don't have Router. So, you are going to use your One Linux

Server as a Router. How will you enable IP packets forward?

Answer and

Explanation:

:

1. `/proc` is the virtual filesystem, we use `/proc` to modify the kernel parameters at running time.

```
# echo "1" >/proc/sys/net/ipv4/ip_forward
```

2. `/etc/sysctl.conf` when System Reboot on next time, `/etc/rc.d/rc.sysinit` script reads the file `/etc/sysctl.conf`. To enable the IP forwarding on next reboot also you need to set the parameter.

```
net.ipv4.ip_forward=1
```

Here 0 means disable, 1 means enable.

ANSWER: See the explanation for the answer

Explanation:

Enable IPv4 packet forwarding on the Linux server so it can route packets between networks.

Enable it immediately (until reboot):

```
echo 1 > /proc/sys/net/ipv4/ip_forward
```

Alternatively:

```
sysctl -w net.ipv4.ip_forward=1
```

Make the setting persistent across reboots by adding or uncommenting this line in `/etc/sysctl.conf`:

```
net.ipv4.ip_forward = 1
```

Then apply the persistent configuration without rebooting:

```
sysctl -p
```

A value of 1 enables forwarding; 0 disables it.

QUESTION NO: 10 - (SIMULATION)

SIMULATION

Set the Hostname station?.example.com where ? is your Host IP Address.

Answer and

Explanation:

:

⇒ hostname station?.example.com This will set the host name only for current session. To set hostname permanently.

⇒ vi /etc/sysconfig/network

HOSTNAME=station?.example.com

⇒ service network restart

ANSWER: See the explanation for the answer

Explanation:

Determine the system's assigned host IP address, then replace ? with the required station identifier derived from that address (as specified by the lab environment). For example, if the required identifier is 5, the hostname must be station5.example.com.

On the RHEL version implied by this RH202 question, set it persistently in /etc/sysconfig/network:

```
hostname station?.example.com
vi /etc/sysconfig/network
# Set:
HOSTNAME=station?.example.com
service network restart
```

Thus, the required configuration line is:

```
HOSTNAME=station<your-host-IP-identifier>.example.com
```

The `hostname` command changes the running hostname immediately; the `HOSTNAME=` entry makes the setting survive a reboot.

QUESTION NO: 11 - (SIMULATION)

SIMULATION

One Domain RHCE is configured in your lab, your domain server is server1.example.com. nisuser2001, nisuser2002, nisuser2003 user are created on your server 192.168.0.254:/rhome/stationx/nisuser2001. Make sure that when NIS user login in your system automatically mount the home directory. Home directory is separately shared on server /rhome/stationx/ where x is your Station number.

Answer and

Explanation:

:

1. use the `authconfig --nisserver= --nisdomain= --update`

Example: `authconfig --nisserver=192.168.0.254 --nisdomain=RHCE --update`

or `system-config-authentication`

2. Click on Enable NIS

3. Type the NIS Domain: RHCE
4. Type Server 192.168.0.254 then click on next and ok
5. You will get a ok message.
6. Create a Directory /rhome/stationx where x is your station number.

6. vi /etc/auto.master and write at the end of file

```
/rhome/stationx /etc/auto.home --timeout=60
```

7. vi /etc/auto.home and write

```
* -rw,soft,intr 192.168.0.254:/rhome/stationx/&
```

Note: please specify your station number in the place of x.

8. Service autofs restart

9. Login as the nisuser2001 or nisuser2002 on another terminal will be

Success.

According to question, RHCE domain is already configured. We have to make a client of RHCE domain and automatically mount the home directory on your system. To make a member of domain, we use the authconfig with option or system-config-authentication command. There are lots of authentication server i.e NIS, LDAP, SMB etc. NIS is a RPC related Services, no need to configure the DNS, we should specify the NIS server address.

Here Automount feature is available. When user tried to login, home directory will automatically mount. The automount service used the /etc/auto.master file. On

/etc/auto.master file we specified the mount point the configuration file for mount point.

ANSWER: See the explanation for the answer

Explanation:

Configure this host as an NIS client of the already configured RHCE NIS domain, then use autofs to mount each NIS user home directory on demand. Replace stationX with this machine's assigned station number.

```
authconfig --enablenis --nisdomain=RHCE --nisserver=192.168.0.254 --update
service ypbind restart
chkconfig ypbind on
```

```
mkdir -p /rhome/stationX
```

Add this indirect-map entry to /etc/auto.master:

```
/rhome/stationX /etc/auto.home --timeout=60
```

Create /etc/auto.home with the following wildcard map entry:

```
* -rw,soft,intr 192.168.0.254:/rhome/stationX/&
```

Start and enable automounting:

```
service autofs restart
chkconfig autofs on
```

The & in the automount map is replaced by the requested key (for example, nisuser2001). Thus, accessing /rhome/stationX/nisuser2001, including during login, mounts:

```
192.168.0.254:/rhome/stationX/nisuser2001
```

Verify NIS identity resolution and the mount, for example:

```
getent passwd nisuser2001
su - nisuser2001
mount | grep /rhome/stationX
```

`authconfig` updates the NSS/PAM configuration so NIS accounts can authenticate; the `autofs` map supplies their home directories only when they are used.

QUESTION NO: 12 - (SIMULATION)

SIMULATION

Install the Cron Schedule for david user to display “Hello” on daily 5:30.

Answer and

Explanation:

:

☞ Login as a root user

☞ cat >schedule.txt

```
30 05 * * * /bin/echo "Hello"
```

3. `crontab -u david schedule.txt`

4. `service crond restart`

The cron system is essentially a smart alarm clock. When the alarm sounds, Linux runs the commands of your choice automatically. You can set the alarm clock to run at all sorts of regular time intervals. Alternatively, the `at` system allows you to run the command of your choice once, at a specified time in the future.

Red Hat configured the cron daemon, `crond`. By default, it checks a series of directories for jobs to run, every minute of every hour of every day. The `crond` checks the `/var/spool/cron` directory for jobs by user. It also checks for scheduled jobs for the computer under

`/etc/crontab` and in the `/etc/cron.d` directory.

Here is the format of a line in `crontab`. Each of these columns is explained in more detail:

#minute, hour, day of month, month, day of week, command

* * * * * command

Entries in a `crontab` Command Line

Field

Value

Minute

0-59

Hour

Based on a 24-hour clock; for example, 23 = 11 p.m.

Day of month

1-31

Month

1-12, or jan, feb, mar, etc.

Day of week

0-7; where 0 and 7 are both Sunday; or sun, mon, tue, etc.

Command

The command you want to run

ANSWER: See the explanation for the answer

Explanation:

Install a per-user crontab entry for `david`. The schedule fields are minute then hour, so daily at 05:30 is `30 5 * * *`.

```
cat >/tmp/david.cron <<'EOF'
30 5 * * * /bin/echo "Hello"
EOF
crontab -u david /tmp/david.cron
crontab -u david -l
```

This creates `david`'s cron job, which runs `/bin/echo "Hello"` every day at 5:30 AM. Restarting `crond` is normally unnecessary after installing a crontab because the daemon automatically detects the updated user crontab. If the simulation specifically requires it, use:

```
service crond restart
```

QUESTION NO: 13 - (SIMULATION)

SIMULATION

Create the user named `jeff`, `marion`, `harold`

Answer and

Explanation:

:

1.useradd jeff

2.useradd marion

3. useradd harold

`useradd` command is used to create the user. All user's information stores in `/etc/passwd` and user's shadow password stores in `/etc/shadow`.

ANSWER: See the explanation for the answer

Explanation:

Create the three local user accounts as `root` (or by using `sudo`):

```
useradd jeff
useradd marion
useradd harold
```

Verify the accounts if required:

```
id jeff
id marion
id harold
```

The account entries are recorded in `/etc/passwd`, and password hashes (once passwords are set) are stored in `/etc/shadow`.

QUESTION NO: 14 - (SIMULATION)

SIMULATION

We are working on `/data` initially the size is 2GB. The `/dev/test0/lvtestvolume` is mount on `/data`. Now you required more space on `/data` but you already added all disks belong to physical volume. You saw that you have unallocated space around 5

GB on your harddisk. Increase the size of `lvtestvolume` by 5GB.

Answer and

Explanation:

∴

1. Create a partition having size 5 GB and change the systype id '8e'.
2. use `partprobe` command
3. `pvccreate /dev/hda9` Suppose your partition number is `hda9`.
4. `vgextend test0 /dev/hda9` `vgextend` command add the physical disk on volume group.
5. `lvextend -L+5120M /dev/test0/lvtestvolume`
6. verify using `lvdisplay /dev/test0/lvtestvolume`.

ANSWER: See the explanation for the answer

Explanation:

Create a new approximately 5 GiB partition from the unused disk space, make it an LVM physical volume, add it to volume group `test0`, and then extend `lvtestvolume` by 5 GiB.

```
# Use fdisk (or the available partitioning tool) on the disk containing free space
fdisk /dev/hda
# Create a new 5G primary/logical partition, for example /dev/hda9
# Set its type to 8e (Linux LVM), then write the partition table

partprobe /dev/hda
pvccreate /dev/hda9
vgextend test0 /dev/hda9
lvextend -L +5G /dev/test0/lvtestvolume
# Equivalently: lvextend -L +5120M /dev/test0/lvtestvolume
```

Because the logical volume is mounted on `/data`, also grow the filesystem so that the additional capacity is usable:

```
# For an ext2/ext3/ext4 filesystem:
resize2fs /dev/test0/lvtestvolume

# If /data is XFS instead, use:
# xfs_growfs /data
```

Verify the result:

```
lvdisplay /dev/test0/lvtestvolume
vgs
df -h /data
```

Note: `/dev/hda9` is only an example partition name from the question. Use the actual new partition created on the disk (for example, on newer systems it may be `/dev/sdaN` or `/dev/vdaN`).