**1.What is a runlevel? Type of Runlevels? What is runlevel 5 and what is default runlevel and where it is defined?**

Ans:- Runlevels are operational levels that describe the state of the system with respect to what services are available. There are 0-6,s or S runlevels available. Runlevel 5 refers to multiuser with GUI. Default runlevel is defined in /etc/inittab, which tells to init to what runlevel the system to be brought upon the boot/reboot.

**2.df hung? What might be the issue? How do you know which server is causing the issue(incase of nfs mount issue)**

Ans:- Due to NFS mounts, where the nfs server is not responding. Check mount command to know all the existing mounts, search for NFS mounted filesystems to check the problem.

**3.You come to know that the disk is corrupted after issuing multipath -ll command. What will you do?**

Ans:-This is not obvious; however, it might coincidence that the disk might have been disconnected from storage due to connectivity issues, zone issues or some other technical glitch at storage end. Work with storage team to fix the issue. Once the storage team fix the issue and if you observer the data is corrupted, you need to restore from backup (liaise with backup team for the same) or you might have had rsync configured based on you environment.

**4. Tool to install Package? How will you install the same?**

An:- I use rpm or yum command to install the package. When using rpm command, I use rpm –ivh /path/to/package, in case of yum, I use yum install packagename –y command.

**5. How do you scan a lun?**

Ans:- Echo “ - - -“ > /sys/class/fc\_host/hostX/scan

**6.Request from application team to build /app filesystem 20GB. Provide the complete procedure.**

Ans:-I assume that I have enough free space in appvg(used by application team), if no, I will request disk from storage team(via service request), and scan the pv(tell the command). Create the pv add the same to vg(tell the command), and create lv, then create file system. Below are steps to create 20GB filesystem with /app mount point

lsblk

Echo “ - - -“ > /sys/class/fc\_host/hostX/scan

Lsblk, observer you got the disk(compare with old output), else inform to storage team.

Pvcreate /dev/sdg,Vgextend appvg /dev/sdg, Lvcreate –L 20G –n applv01 appvg /dev/sdg

Mkfs.ext /dev/appvg/applv01, Mkdir /app. Introduce the line in /etc/fstab : /dev/mapper/appvg-applv01 /app ext4 defaults 0 0. Finally mount the fs using mount /app command and verify with df –h command. Close SR/Change and informed to application team.

**7.NTP configuration file?**

ans:- /etc/ntp.conf. Provide sever IP ibust details and save. Restart the daemon and check ntp -q to verify if the time is sync'ing.

**8.How will you list files that are modified 7 days ago?**

Ans:- find /path -mtime +7 -print

**9.kdump configuration file?**

ans:-kdump is a feature of the Linux kernel that creates crash dumps in the event of a kernel crash. When triggered, kdump exports a memory image (also known as vmcore) that can be analyzed for the purposes of debugging and determining the cause of a crash. To configure the amount of memory to be reserved for the kdump kernel, edit the /boot/grub/grub.conf file and add crashkernel=<size>M

**10.What are the servers you are supporting? Have you worked on cisco servers?**

Ans:- I am supporting prod, pre-prod(uat) and dev servers

**11.Procedure to patch the system?**

Ans:- check my material

**12.What is sticky bit? How to enable?**

Ans:- When sticky bit is enabled on directory, only the owner of the file only can delete the file or dir though you have world writeable access on parent (example /tmp). You enabled the same using chmod +t /dir command or chmod 1777 /dir.

**13.How will you see WWWN and what are the different ways?**

Ans:-check my material.

To know WWWN of HBA

systool -c fc\_host -A "port\_name"

You may need to provide wwwn of HBA to storage team to map LUNs

or

cat /sys/class/fc\_host/hostX/node\_name

**14.How to configure bonding? how to know the status of bond interface?**

Ans:- provide steps narrated in the material. to know the status cat /proc/net/bonding/bondX

**15.yum configuration files and usage?**

It is used perform Software Administration such as install, remove, undo installation, list installation, history etc., yum repo files are located by default at /etc/yum.repos.d directory.

**16.How do you know the latency time of a disk?**

ans:- You can use iostat -x and check for the await column. the await column shows avg request latency.

**17.How do you the particular process running at what port ?**

ans:- use -p flag along with nestat command. example: netstat -ntulp

**18.NFS Portnumber ? Configuration file? Usage?**

Ans:- NFS port Number: 2049, conf file: /etc/exports. It is used to share Filesystem or Directory from UNIX system another.

**19.Configuration file for interfaces?**

Ans:- /etc/sysconfig/network-scripts/ifcfg-'Ifname'

**20.Crontab file format, how to edit crontab and crontab file location?**

Ans:- always use crontab -e command as this procedure will notify crond about any changes in the contab file. the location is /var/spoon/cron/'username'. Its format is "min hr dateofthemonth month dayofthweek /path/tocommand"

**21.What is the difference between zombie and defunct process? Can you kill a zombie process? What will happen?**

Ans:-In linux, defunt or zombie - both are same. Processes marked <defunct> are dead processes (so-called "zombies") that remain because their parent has not destroyed them properly. These processes will be destroyed by init if the parent process exits. killing defunt or zombie will not have any effect.

**22.Application team got some issue with filesystem? What do you do?**

Ans:- Check first if it comes to your perimeter. If the issue is specific to application, you might not be owning it. However if you like to help you can probably suggest and don’t own the same as you don’t have application expertize. In this case, application team got issue with filesystem - I understand that they might not able to write the data - due to filesystem went to read only state for some reason, or Inodes are full or FS space completely utilized or application team doesn’t have permissions of specific directories etc., I will try fix issues based on its kinds listed above.

**23.Filesystem unmount is not happenning? Reason? How to achieve this? How to list process and how to kill ?**

Ans:- filesystem might be being used by any user or process(es). You will get error device is busy while you issue unmount command. Check and list the processes using fuser /fsname and if you have proper approval to umount, you might need to kills those running process using fuser -uk /fsname. If still doesnt umount, user lsof /fsname to see if there are any opened files, and you might need kill those processes and unmount it. As this is being destructive procedure, make sure you have proper approval do to so. Else you might need hold the responsibility for any data curruction as you are killing while certain processe are bing written or read from the disk.

**24.What are different type signals available for kill command in linux?**

**Ans:-**

**Signal Name Signal Description**

SIGHUP 1 Hang up detected on controlling terminal or death of controlling process

SIGINT 2 Issued if the user sends an interrupt signal (Ctrl + C)

SIGQUIT 3 Issued if the user sends a quit signal (Ctrl + D)

SIGFPE 8 Issued if an illegal mathematical operation is attempted

SIGKILL 9 If process gets signal it must quit and will not do any clean-up operations

SIGALRM 14 Alarm clock signal (used for timers)

SIGTERM 15 Software termination signal (sent by kill by default)

**25.Different process states?**

Ans:-

PROCESS STATE CODES

Here are the different values that the s, stat and state output specifiers (header "STAT" or "S") will display to describe the state of a process:

D uninterruptible sleep (usually IO)

R running or runnable (on run queue)

S interruptible sleep (waiting for an event to complete)

T stopped by job control signal

t stopped by debugger during the tracing

W paging (not valid since the 2.6.xx kernel)

X dead (should never be seen)

Z defunct ("zombie") process, terminated but not reaped by its parent

**26.Command to restart network in RHEL6 and RHEL7**

In RHEL6:

service network restart

In RHEL7:

systemctl restart network

**27.filesytem went to readonly mode? What will you do?**

Ans:- This issue arises if disks got disconnect from the srver (might be you are using storage disks, and due to some technical reasons in the storage, disk got disconnected). You need to reboot the server if those filesystems are from root disk(OS filesytems). If those are userdefined Volume groups, you need umount, deactivate and activate vgs and lv and then mount.

**28.booting procedure?**

Ans:- Poweron-->Post->BIOS->MBR->Grub->Kernel->Init->Runlevels

**29.Server installation from scratch?**

Ans:- I will be given build document in which details about my new server such as hostname, ip, other network details, which gold image that I need use either from kickstart, or ISO image will be given. For physical servers, I will be getting ILOM or iDRAC ip to connect and mount ISO or Kickstart to perform the installation. If it is a VM, i will have gold template from which i build the srever.

**30.Patching procedure from scratch?**

I use central repository, where patches are downloaded from Redhat portal and kept. I enable given repository and start my update using yum update command.(Pre checks, patch, post checks demonstrated and given in the material).

**31.Increase and decrease filesystem?**

Ans:- Ans: Below are the Steps :

Use the lvextend command (lvextend -L +100M /dev/<Name of the LVM Partition> , in this example we are extending the size by 100MB.

– resize2fs /dev/<Name of the LVM Partition>

– check the size of partition using ‘df -h’ command

-Umount the filesystem using umount command,

-user e2fsck /dev/vg/lvname and resiz2fs /dev/mapper/myvg-mylv 10G

-Now use the lvreduce command , e.g lvreduce -L 10G /dev/mapper/myvg-mylv

**32.Recently faced issues?**

Ans:- I might have informed you in the class to take certain scenarios as recently faced issues.

**33.how will reduce the root filesystem?**

Ans:-

1. Boot the systm in rescue mode (using DVD or kickstart or iso image)

2. Gain access to shell and this Mount the filesystems under /mnt/sysimage

assume that the existing root filesytem is 51200 MB and I want to reduce the same so that it become 3000MB

lgscan

lvs

lvchange -ay /dev/vg\_root/logvol00

e2fsck -f /dev/vg\_root/logvol00

resize2fs /dev/vg\_root/logvol00 3000M

lvreduce -L 3000M /dev/vg\_root/logvol00

4.Leave rescue shell using exit command and reboot the server and let it boot normally.

**34.Samba configuration?**

Ans:- /etc/samba/smb.conf

**35.Tell me the process to create a server?**

For VM, i use vcenter to create the server and perform installation from approved template. For physical server, either I mount ISO image(from the console) or do kickstart installation as per given build document. (Narrate those steps demonstrated in the class).