

## For 1<sup>st</sup> Node

### Question-1. Configure network and set the static hostname

IP ADDRESS = 192.168.1.238

NETMASK = 255.255.255.0

GATEWAY = 19.168.1.1

DNS = 192.168.1.230

Domain name = techsoulit.com

Host name = node1.techsoulit.com

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

baseurl = [http://www.techsoulit.com/rpms/RHEL-9-4-0-BaseOS-x86\\_64/BaseOS/](http://www.techsoulit.com/rpms/RHEL-9-4-0-BaseOS-x86_64/BaseOS/)

baseurl = [http://www.techsoulit.com/rpms/RHEL-9-4-0-BaseOS-x86\\_64/AppStream/](http://www.techsoulit.com/rpms/RHEL-9-4-0-BaseOS-x86_64/AppStream/)

### Question-3. Debug SELinux

- 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 (Do not make any changes to these files)
- Web service should automatically start at boot time.

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

- A group named sysadm.
- A user "harry" who belongs to sysadm as a secondary group.
- A user "natasha" who belongs to sysadm as a secondary group.
- A user "sarah" who does not have access to an interactive shell & who is not a member of sysadm
- All above-mentioned users should have the password of "Rhcsaexam"

### Question-5. Create a collaborative Directory

- Create the Directory "/home/common" with the following characteristics.
- Group ownership of "/home/common" should go to "sysadm" group.
- The directory should have full permission for all members of "sysadm" group but not to the other users except "root".
- Files created in future under "/home/common" should get the same group ownership.

### Question-6. Configure Cron job (1 question in exam)

- a. Configure a cron job that runs every 1 minutes and executes logger "EX200 in progress" as the user "natasha"

- b. The user "harry" must configure a cron job that runs daily at 14:23 local time & executes /bin/echo "hi alex"
- c. Deny cronjob for user "sarah" so that other user for this system is not affected for this cronjob

### **Question-7. Configure AutoFS**

All remote users home directory is exported via NFS, which is available on ldap.techsoulit.com or 192.168.1.235 and your NFS-exports directory is /home/guests/ for remote5.

- Remote home directory is ldap.techsoulit.com:/home/guests/
- Remote home directory should be automount autofs service.
- Home directories must be writable by their users.
- when you are able to log in as remote5 user it's found home directory as /home/guests/remote5.
- Ensure that remote5 user can read, write on his home directory but remote10 only can read privileges.

### **Question-8. Configure your system so that it is an NTP client of ns1.techsoulit.com**

**Question-9. Create a tar archive of "/etc/" with "bzip2/gzip" and should be placed in /root/ directory as "myarchive.tar"**

**Question-10. Find the files of the owner "natasha" and copy the file to the given path of "/root/find.user" directory/file**

**Question-11. Find all strings "ich" from the "/usr/share/dict/words" file and copy those strings in a /root/lines file**

**Question-12. Create a new user with UID 3515 and user name as "gilly" and password "radiowits"**

**Question-13. Configure ACL Permission:**

Copy the file "/etc/passwd" to "/var/tmp". Configure the permissions of "/var/tmp/passwd" so that:

- The file "/var/tmp/passwd" is owned by the root user.
- The file "/var/tmp/passwd" belong to the group root.
- The file "/var/tmp/passwd" should not be executable by anyone.
- The user harry is able to read and write "var/tmp/passwd". [ACL]
- The user sarah can neither write nor read "/var/tmp/passwd".

[Note that: all other users (current or future) have the ability to read "/var/tmp/passwd".]

**Question-14. Configure your system so that; All the new user's password will be valid of maximum 20 days. But all the previous user will be default days**

**Question-15. Create a container image from the provided link**

- create a container image from "http://techsoulit.com/container/Containerfile" name it as 'process\_files'.

- Login to 'registry.lab.example.com' through "admin" and "redhat321"

NOTE: Find the registry from Instruction page. || container should be created by one regular user 'gilly' will get in ques.

**Question-16.** Create rootless container and do volume mapping which they asked you in the question and run container as a service from normal user account, the service must be enabled so it could start automatically after reboot.

- Create a container named as 'ascii2pdf' using the previously created container image from previous question 'process\_files'

- Map the '/opt/files' to container '/opt/incoming'

- Map the '/opt/processed' to container '/opt/outgoing'

- Create systemd service as container-ascii2pdf.service

- Make service active after all server reboots.

**Question-3.1(extra).** Install the httpd services and ensure that is start automatically at reboot and run port 82 using the "/web" as the Document root

**Question-4.1(extra).** Assign Sudo Privilege

- "sysadm" group has access to add user in the server

- "harry" user has access to set the password for users without asking sudo password

**Question-17(extra).** Configure the rhcsa application so that when run as "pandora" it shows below message "Labla lbal lahs ksbhs"

**Question-18(extra).** Customize user environment:

- Create a command called starton on your server.

- It should able to execute the following command (ps -eo pid,tid,class,rtprio,ni,pri,psr,pcpu,stat, comm).

**Question-19(extra).** Script file

- create a script file with the name 'script.sh' inside the '/bin' and locate all files from '/usr/local' directory which has more than 30k and less than 50k copy under '/root/d1'.

- set the sgid permission for this directory.

**Question-20(extra).** Set permission for user "gilly". User will get the permission below for file & directory when he creates new files or directory

-rw-----

drwx-----

## **For 2<sup>nd</sup> Node**

**Question-1.** Reset root user password and make it 'BD@rhcsa2025'

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

baseurl = [http://www.techsoulit.com/rpms/RHEL-9-5-0-BaseOS-x86\\_64/BaseOS/](http://www.techsoulit.com/rpms/RHEL-9-5-0-BaseOS-x86_64/BaseOS/)

baseurl = [http://www.techsoulit.com/rpms/RHEL-9-5-0-BaseOS-x86\\_64/AppStream/](http://www.techsoulit.com/rpms/RHEL-9-5-0-BaseOS-x86_64/AppStream/)

**Question-3.** Resize a logical Volume

- Resize the logical volume "vo" so that after reboot size should be in between 290MB to 330MB.

**Question-4.** Create a swap partition of 512MB and mount it permanently

**Question-5.** Create a logical volume of name "database" from a volume group name "datastore" physical extents of 16M and logical volume should have size of 50extents. Formate with ext4 filesystem and permanently mounted to /mnt/database

**Question-6.** Configure System Tuning

- Choose the recommended 'tuned' profile for your system and set it as the default.