

Practice A

Requirements:

Install a RHEL 9 virtual machine that meets the following requirements:

- 2 GB of RAM
- 20 GB of disk space using default partitioning
- One additional 20-GB disk that does not have any partitions installed
- Server with GUI installation pattern

Questions:

1. Create user **student** with password **password**, and user **root** with password **password**.
2. Configure your system to automatically mount the ISO of the installation disk on the directory **/repo**. Configure your system to remove this loop-mounted ISO as the only repository that is used for installation.
3. Assume that you don't know the root password, reset the root password so you can be able to sign in. Set the root password to **mypassword**.
4. Set default values for new users. Set the default password validity to 90 days, and set the first UID that is used for new users to 2000.
5. Create users **jade** and **max** and make them members of the **group finances** as a secondary group membership. Also, create users **kathy** and **leo** and make them members of the group **accounting** as a secondary group. Ensure that user **max** has UID 1234 and cannot start an interactive shell.
6. Create shared group directories **/groups/finances** and **/groups/accounting**, and make sure the groups meet the following requirements:
 - Members of the group finances have full access to their directory.
 - Members of the group accounting have full access to their directory.
 - New files that are created in the group directory are group owned by the group owner of the parent directory.
 - Others have no access to the group directories.

7. Create a 2-GiB volume group with the name **storevg**, using 8-MiB physical extents. In this volume group, create a 500-MiB logical volume with the name **data**, and mount it persistently on the directory **/data**.
8. Find all files that are owned by user **jade** and copy them to the directory **/rootedjadefiles**.
9. Schedule a task that runs the command **touch /etc/motd** every day from Monday through Friday at 2 a.m.
10. Add a new 10-GiB virtual disk to your virtual machine. On this disk, add a Stratis volume and mount it persistently.
11. Create user bob and set this user's shell so that this user can only change the password and cannot do anything else.
12. Install the httpd service and ensure that it is started automatically at reboot and run on port 82 using the /web as the DocumentRoot.
13. As a user **smith** create a container that runs an HTTP server. Ensure that it mounts the host directory /httproot on the directory /var/www/html. And the http port of the container is bind to the host port 8080
14. Configure this container such that it is automatically started on system boot as a user smith service.
15. Create a directory with the name /users and ensure it contains the subdirectories ldapuser1 to ldapuser10. Export this directory by using an NFS server.
16. Create users ldapuser1 to ldapuser10 and set their home directories to /home/users/ldapuser1 to /home/users/ldapuser10. Make sure that while these users access their home directory, autofs is used to mount the NFS shares folder for each user from the same server.