



RHCSA Practice Exam 3

This test exam needs the following setup:

- An IPA server that is offering central services such as LDAP and NFS. The setup of such a server is described in Appendix D, “Setting Up Identity Management,” of this book. Alternatively, you can use the test VMs provided on rhatcert.com.
- A cleanly installed VM. Step 1 of this test exam describes how to set up such a VM based on a KVM setup. Notice that the IP addresses that are used in the VMs are based on the internal IP addresses in a KVM setup. If you are using another virtualization platform, make sure to change the IP addresses accordingly.
- Unless specifically mentioned, you should perform all tasks described here on the VM.
 1. Install an RHEL 7 VM. Use a 12-GB LVM volume or disk backend file on the host as the storage backend for the virtual machine. Use the bridged network interface on the host for networking in the virtual machine. (This should normally be done automatically.) Make sure that the VM meets the following requirements. You perform all the tasks listed here on the server unless stated otherwise:
 - 20 GB total disk space.
 - IP address is obtained by using DHCP.
 - Set hostname to `myserver1.example.com`.
 - A 500-MB boot partition.
 - A logical volume for the `/` file system with a size of 6 GB.
 - A logical volume for swap with a size of 512 MB.
 - Install the Server with GUI installation pattern.
 2. Create two users: `laura` and `leo`. Set the minimal time they have to keep their password before it can be changed to 14 days. Also set their accounts to expire automatically on February 14, 2022.

3. Create two groups: sales and account. Without changing the primary group assignment, make leo a member of the group sales and laura a member of the group account.
4. Copy all files from the disk or ISO image that you have used to install the VM to the directory /var/ftp/repo on the VM. Configure this directory as a repository and set your VM to use this repository.
5. Install the vsftpd FTP server and share the repository that you just created through this FTP server in such a way that other computers can also use it as a repository. Ensure that this server is automatically started after a reboot.
6. Verify that you can mount the NFS share that is offered through the IPA server. Set up automount so that this share is automatically mounted when you access the /share/something directory on your VM.
7. Reboot your server. From the GRUB boot prompt, reset the root password. Do this in a way that assumes that you do not have the root password anymore.
8. Configure a firewall such that the FTP server and the SSH server on your virtual machine are accessible.
9. Use the appropriate mechanism to write the message “it’s 4 PM” to /var/log/messages every day at 4 p.m., but not on the weekend.
10. Create an additional swap volume with a size of 100 MiB and ensure that it is mounted automatically.
11. Configure fixed network address assignment. Your virtual machine should use the IP address 192.168.122.220 with the subnet mask 255.255.255.0. The default router should be set to 192.168.122.1 and the DNS server should be set to 192.168.122.200.
12. Create a Kickstart file that if used is going to install the nmap package.