Labs

During the Red Hat exams, the tasks will be presented electronically. Therefore, this book presents most of the labs electronically as well. For more information, see the "Lab Questions" section toward the end of Chapter 16. Most of the labs for this chapter are straightforward and require very few commands or changes to one or two configuration files.

Lab 1

You'll need two Linux computers for this lab: one as an NFS server, and a second as an NFS client. Call these computers server1.example.com and tester1.example.com. Configure a directory named /shared. Add a single file to that directory. Start by configuring rules to share that directory with the no_root_squash directive. For any firewall that's configured, make sure to limit access to the example.com network. If you followed the instructions in Chapter 1, that would be the 192.168.122.0/24 network.

Go to the remote system and make sure you're able to view shared NFS directories from the server. Mount that system on a local /testing directory. Can you copy files to that directory?

Unmount the share and then remove the **no_root_squash** directive. What happens when you mount the NFS share for a second time from the client?

Lab 2

This lab can use the same two systems used in Lab 1. On the server, share the /home directories and provide write permissions to the client computer. On the client, set up the /home directory from the NFS server to be mounted the next time that client computer is booted. Since the client computer probably already has a /home directory, set it up on the /remote directory.

Lab 3

In this lab, you'll experiment with different SELinux settings. For example, if you're asked to prevent writes to any shared NFS directories, what do you do?

Lab 4

This labs expands Lab 1 to configure the /shared NFS directory with optional Kerberos authentication, communication integrity, and encryption. First, configure a KDC and set up the server1 and tester1 systems, as described in Exercise 12-5 and 16-2.

Go to the remote client tester1.example.com and make sure you can mount the NFS share using any of the **sec=krb5**, **sec=krb5i**, and **sec=krb5p** security options.

Then, test each of the following scenarios. What happens when you try to mount the NFS share?

1. Stop the **nfs-secure-server** service on server1.example.com. Try to mount the NFS share.

2. Start the **nfs-secure-server** service on server1.example.com. Stop the **nfs-secure** service on tester1.example.com. Try to mount the NFS share.

3. Start the **nfs-secure** service on tester1.example.com. Move the /etc/krb5.keytab file to a different location on tester1.example.com. Try to mount the NFS share.

4. Restore the file /etc/krb5.keytab on tester1.example.com. Move the /etc/krb5.conf file to a different location on tester1.example.com. Try to mount the NFS share.

5. Restore the file /etc/krb5.conf on tester1.example.com. Remove the nfs service in firewalld. Try to mount the NFS share.

6. Add the nfs service in firewalld. Stop the KDC services. Try to mount the NFS share.