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Answers to Even-numbered Exercises

- 2. Which command would you give to mount on the local system the /home directory hierarchy that resides on the file server named **plum**? Assume the mounted directory hierarchy will appear as /**plum.home** on the local system. How would you mount the same directory hierarchy if it resided on the fileserver at 192.168.1.1? How would you unmount /home?
 - \$ sudo mount plum:/home /plum.home
 - \$ sudo mount 192.168.1.1:/home /plum.home
 - \$ sudo umount /home
- 4. Which command line lists the currently mounted NFS directory hierarchies?

\$ mount | grep nfs4

or

\$ df -t nfs4

6. From a server, how would you allow readonly access to **/opt** for any system in **example.com**?

Place the following line in /etc/exports:

/opt *.example.com(ro,no_subtree_check)

8. Describe the difference between the **root_squash** and **all_squash** options in /etc/exports.

The **root_squash** option maps **root** to UID 65534; **all_squash** maps all users to UID 65534.

10. Some diskless workstations use NFS as swap space. Why is this approach useful? What is the downside?

Because it has no disk space, a diskless workstation has no swap space. The only choice is to use NFS; if it did not use NFS for swap space, the work-station would be limited by the amount of its physical memory (RAM).

Swapping in general is slow because disks are much slower than RAM. NFS is even slower than a local disk; any process that uses an NFS swap space will spend a long time waiting for pages to be swapped in.

12. What does the mount **nosuid** option do? Why would you want to use this option?

The **nosuid** option forces setuid executables in the mounted directory hierarchy to run with regular permissions on the local system.

Giving a user the ability to run a setuid program can give that user the ability to run a program with **root** privileges. Normally you do not want an ordinary user running a program as a privileged user.