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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 nfs
   ```

   or

   ```
   $ df -t nfs
   ```

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 workstation 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.