

This project is about NFS (Network File System).

Examination items:

- 1) Examine the `/etc/exports` file on **jaguar**. What directories does it export? What machines does it export to? What options are used? For the “what machines”, give an English description of the machines, i.e. figure out what the networks and netmasks mean. **WARNING:** you need to know the options to get the action items to work.
- 2) The machine you administer mounts two directories from **cheetah**. **Report:** the `fstab` entries on your machine that cause these mounts.
- 3) **Cheetah** is running the automounter. Look at **cheetah**. **Report:** what NFS directories does **cheetah** actually have mounted (`df` or `mount`). (Note as our discussion of the automounter pointed out, the answer will depend on which of these directories has been accessed recently.) Now do an “`ls ~volper`” and report any change in the directories **cheetah** has mounted. (Again, there will be no change if someone did this just before you did.) Examine the automount configuration (`/etc/auto.master`), it uses the indirect format. This means it will refer to some additional files which you will need to examine as well. 3a) **Report:** what options does **cheetah** use when it tries to mount the directory containing `~volper` and what is the name of the file that contained those options. 3b) **Report:** what options does **cheetah** use when it tries to mount the directory from your machine and what is the name of the file that contained those options. **WARNING:** options not listed default. You should examine the `mount` manual entry and know what the defaults are; this is critical to getting the following questions to work.

Action items:

- 4) Configure your `fstab` so that it attaches the directory `/sdb/slack14.2-64/slackware64` from **jaguar** on your local directory tree as `/mnt` whenever it boots. **Jaguar** is already configured to make this directory available to your machine, you do not need to modify **jaguar**. Your `/mnt` directory should already exist.

**Report:** the file you changed on your local machine and the line you added to it.

- 5) Configure your machine so that it makes the directory `/etc` available to **cheetah**. **Cheetah** will access this directory as `/net/lab/labxx` where `labxx` is the name the machine you are assigned to administer. **Cheetah** is already configured to mount your `etc` directory, you do not need to make any modifications to **cheetah**. Because your `exports` was empty when you last booted; you will also need to start `rpc.nfsd` and `rpc.mountd`. (I recommend using the `/etc/rc.d/rc.nfsd` script to do this.)

Testing: Log into **cheetah** and run `ls /net/lab/labxx`. Because **cheetah** is running the automounter this `ls` will cause your directory to be mounted. Now run `df`, you should see the `/etc` from your machine mounted.

**Report:** the files you changed on your local machine and give the lines you added to them. Also report the part of the disk free report from **cheetah** that applies to the `/etc` from your machine.

- 6) Configure the automounter on your machine so that it will mount the `/load` directory from **jaguar** on `/opt` (that directory should already exist). Specifically `ls /opt/load` should display the directory from **jaguar**. Use an indirect map. Automount is by default disabled so you will need to enable it by marking the start script executable (`chmod a+x /etc/rc.d/rc.autofs`). You will need to use that script to start and reload the automounter. (Reload when you make changes to the files.)

**Report:** The line you added to `auto.master` and the entire indirect file you created.