Lab 39.1: Static Configuration of a Network Interface

Note: you may have to use a different network interface name than `eth0`. Of course you can do this exercise from a graphical interface but we will present a command line solution.

1. Show your current IP address, default route and **DNS** settings for `eth0`. Keep a copy of them for resetting later.
2. Bring down `eth0` and reconfigure to use a static address instead of **DCHP**, using the information you just recorded.
3. Bring the interface back up, and configure the nameserver resolver with the information that you noted before. Verify your hostname and then **ping** it.
4. Make sure your configuration works after a reboot.

You will probably want to restore your configuration when you are done.

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Solution 39.1

1. ```
   $ ifconfig eth0
   $ route -n
   $ cp /etc/resolv.conf resolv.conf.keep
   ```

2. ```
   $ sudo ifconfig eth0 down
   ```

   Make sure the following is in /etc/sysconfig/network-scripts/ifcfg-eth0 on **Red Hat**-based systems:

   ```
   DEVICE=eth0
   BOOTPROTO=static
   ONBOOT=yes
   IPADDR=noted from step 1
   NETMASK=noted from step 1
   GATEWAY=noted from step 1
   ```

   On **SUSE**-based systems edit the file in /etc/sysconfig/network in the same way, and on **Debian**-based systems edit /etc/networking/interfaces to include:

   ```
   iface eth0 inet static
        address noted from step 1
        netmask noted from step 1
        gateway noted from step 1
   ```

3. ```
   $ sudo ifconfig eth0 up
   ```

   ```
   $ sudo cp resolv.conf.keep /etc/resolv.conf
   $ cat /etc/sysconfig/network
   $ cat /etc/hosts
   $ ping yourhostname
   ```

4. ```
   $ sudo reboot
   $ ping hostname
   ```


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