Exercise 35.1: Static Configuration of a Network Interface

> **i** **Please Note**
>
> You may have to use a different network interface name than `eth0`. You can most easily do this exercise with **nmtui** or your system's graphical interface. We will present a command line solution, but beware details may not exactly fit your distribution flavor or fashion.

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.

✅ Solution 35.1

1. ```
   $ ip addr show eth0
   $ ip route
   $ cp /etc/resolv.conf resolv.conf.keep
   ```

   or

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

2. ```
   $ sudo ip link set eth0 down
   ```

   or

   ```
   $ sudo ifconfig eth0 down
   ```

> **On RedHat / CentOS**
>
> Make sure the following is in `/etc/sysconfig/network-scripts/ifcfg-eth0` on **Red Hat**-based systems:
>
> **in** `/etc/sysconfig/network-scripts/ifcfg-eth0`
>
> ```
> DEVICE=eth0
> BOOTPROTO=static
> ONBOOT=yes
> IPADDR=noted from step 1
> NETMASK=noted from step 1
> GATEWAY=noted from step 1
> ```

On openSUSE , SLES, OpenSUSE, and Debian-based systems

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:

in `/etc/sysconfig/network` **or** `/etc/networking/interfaces`

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

3. `$ sudo ip link set eth0 up`

   or

   `$ 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`