Exercise 3.2: Create a boot-time configuration of your network interface

Using the values recorded in the previous step, create the appropriate network configuration files. The following files have test data, be sure to use your actual values.

Make a backup copy in /var/tmp of any file before editing.

Reboot and verify the network connections function.

Solution 3.2

- On an **Ubuntu** system, edit the file `/etc/network/interfaces` and add or modify the configuration like below, using your discovered values:

```
# interfaces(5) file used by ifup(8) and ifdown(8)
auto lo
iface lo inet loopback

auto enp0s3
iface enp0s3 inet static
        address 10.0.2.15
        netmask 255.255.255.0
        gateway 10.0.2.2

#place dns information after interface stanzas
dns-nameservers 8.8.8.8
```

- On a **CentOS** system, edit the file `/etc/sysconfig/network-scripts/ifcfg-<adaptername>` file and ensure it has the following contents:

```
DEVICE=<adapter-name>
TYPE=ethernet
BOOTPROTO=none
IPADDR=10.0.2.15
PREFIX=24
GATEWAY=10.0.2.2
DNS1=8.8.8.8
NAME="LFSstatic"
ONBOOT=yes
```

- On a **SUSE** system You have to turn off **NetworkManager** first

  1. As the 'root' user run the command `yast lan`
  2. You will see a warning telling you that network manager is managing the network settings, click `OK`
  3. Under `Global Options -> Network Setup Method`, select `Wicked Service`
  4. Click `OK`
  5. Add the following settings in the file `/etc/sysconfig/network/ifcfg-eth0`

```
NAME="LFSstatic"
DEVICE=eth0
BOOTPROTO="static"

IPADDR=10.0.2.15/24

STARTMODE="auto"
USERCONTROL="no"
```

6. Add the following to the file `/etc/sysconfig/network/config`

   ```
   NETCONFIG_DNS_STATIC_SERVERS=8.8.8.8
   ```

7. Add the following to the file `/etc/sysconfig/network/ifroute-eth0`

   ```
   #Destination        Gateway         Netmask    Device
   default             10.0.2.2  0.0.0.0     eth0
   ```

- Once you've made the configuration changes restart the networking services using the distribution's method