4.5 Lab: Configure IP Addresses on Linux

Explanation 🎧

Complete this lab as follows:

1. View the current state of the network card in the IT-Laptop computer.
   a. From the Favorites bar, select **Terminal**.
   b. At the prompt, type **ip addr show** and press **Enter** to view the current state of the network adapter.
   c. Type **cd /etc/sysconfig/network-scripts** and press **Enter**.
   d. Type **ls** and press **Enter** to view the files in this folder. (Take note of ifcfg-enp2s0, which is the configuration file for the network adapter.)

2. Configure the IP version 4 TCP/IP settings for the enp2s0 network connection.
   a. Type **nano ifcfg-enp2s0** and press **Enter** to edit the first adapter.
   b. Using the keyboard and arrow keys, configure the IP settings as follows:
      - IPADDR: **192.168.0.254**
      - NETMASK: **255.255.255.0**
      - BROADCAST: **192.168.0.255**
      - GATEWAY: **192.168.0.5**
      - Remove the line that reads BOOTPROTO=dhcp.
   c. Type **Ctrl** + **x** to exit the editor.
   d. Type **y** to save the modified buffer to the disk.
   e. Press **Enter** to save the file using the default name.

3. Configure DNS.
   a. At the prompt, type **nano /etc/resolv.conf** and press **Enter** to configure the DNS server addresses.
   b. Type **nameserver 163.128.78.93** and press **Enter** to start a new line.
   c. Type **nameserver 163.128.80.93** on the new line.
   d. Type **Ctrl** + **x** to exit the editor.
   e. Type **y** to save the modified buffer to the disk.
   f. Press **Enter** to save the file using the default name.
   g. Type **ip link set enp2s0 down** and press **Enter** to bring the interface down.
   h. Type **ip link set enp2s0 up** and press **Enter** to bring the interface back up with the new configuration.

4. Use ping to test the corrections to the enp2s0 interface card.
   a. At the prompt, type **ping -c4 192.168.0.5** and press **Enter** to confirm the connection to the network and default gateway.
   b. Type **ping -c4 163.128.80.93** and press **Enter** to confirm the connection to the DNS server and the outside network.
   c. Type **ping -c4 www.corpnet.xyz** and press **Enter** to confirm DNS resolution.