**5-2 Activity: Packet Tracer**

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CYB-210

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1. Change **network addressing** (subnet masks, IP addressing, and default gateway) for the new network configuration.
   1. A screenshot of a computer

      Description automatically generatedProvide a screenshot with at least one IP **Configuration** dialog window evidencing the correct configuration of the static routing with appropriate subnet masks, IP address, and default gateway.
   2. Provide an **explanation** of the steps taken to properly configure and test functionality in the simulated network.

I clicked on PC\_1Admin I then clicked on desktop, and IP Configuration. I then changed the IP address and default gateway to match the new addresses. I used the same steps to change the other IP addresses in the new configuration spreadsheet.

1. Change **RIP**to accommodate two new network configurations. Submit a screenshot of the RIP Configuration dialog window and a brief explanation of the steps you took.
   1. A screenshot of a computer

      Description automatically generatedProvide a screenshot of the RIP **Configuration** dialog window.
   2. Provide an **explanation** of the steps taken to properly configure and test functionality in the simulated network.

To configure rip I used the commands no router rip and configure rip by using the router rip command. I removed the old networks by using the no network command and then I entered the new IP addresses for the networks.

1. Configure **NAT** on the router. Submit a screenshot of the NAT translations table and a brief explanation of the steps you took.
   1. A screenshot of a computer

      Description automatically generatedProvide a screenshot of the NAT **Configuration** dialog window evidencing the correct configuration of NAT on the router.

A computer screen shot of a computer program

Description automatically generated

* 1. Provide an **explanation** of the steps taken to properly configure and test functionality in the simulated network.

To configure NAT, I started by configuring the interfaces, with f0/0 being inside and f1/0 being outside. When I finished that, I configured the IP addresses both inside and outside. I then Identified the inside source static.

1. Configure **DHCP services.**
   1. Provide two screenshots evidencing the correct **configuration** of the DHCP server, including a DHCP Configuration dialog window and at least one host device displaying the IP configuration window with an appropriate IP address obtained via DHCP.

A screenshot of a computer

Description automatically generated

A screenshot of a computer

Description automatically generated

* 1. Provide an **explanation** of the steps taken to properly configure and test functionality in the simulated network.

To start, I selected the server on the student's network. Then, I clicked on the services tab and then on the DHCP tab. I created the student pool and inserted the name, default gateway, starting IP address, and maximum number of users. I then clicked save and updated the students’ PCs by going to them and selecting DCHP for address. I had some issues with it working, so I went to the CLI and used the command “ipconfig /renew,” and everything worked after that.

1. Configure **DNS** for the server name and IP address.
   1. A screenshot of a computer

      Description automatically generatedProvide a screenshot of the DNS **Configuration** dialog window evidencing the correct configuration of RIP.
   2. Provide an **explanation** of the steps taken to properly configure and test functionality in the simulated network.

I first clicked on the Server\_Main and selected the services tab and finally the DNS tab. I removed the old one, and then I filled out the information like the name, type, and address, and then I turned it on and saved it.

1. Label **all devices and networks** with the IP addresses.
   1. A diagram of a computer network

      Description automatically generatedProvide a screenshot of the entire functional **network topology** with all devices and networks labeled according to the specifications.

I first clicked on Place Note and clicked where I wanted to add the addresses. I then typed all the addresses for each PC and printer, as the switches didn’t need any changes. I then moved them to better locations so they could be read more easily.