Scenario:

Your best friend's sister worked at a fast food restaurant last summer in your small, lake-resort town. When local traffic conditions made it impossible to quickly deliver food to customers on the lake, she offered to use her hobby drone to attempt a delivery. After the successful delivery, many more followed. Whether a customer ordered kebab at home at 2 AM or ice cream sandwiches on a boat in the lake, the drone made the delivery on time. Eventually, an investor funded her to start her own small business, which she named Always Food Available (AFA). She now has contracts with three fast food restaurants and a grocery store that begin in December. She has seven employees to include your best friend. Your best friend asked you to run AFA's small computer network part-time. You knew AFA was going to grow and its network and intellectual property would need more than just you to protect it, so you asked and received permission to hire the rest of your team part-time too. You have less than a month to prepare. It is time to begin applying basic network security!

Your task is to configure the AFA HQ network to connect to the AFA Warehouse network and ensure that both networks can access the Internet. You have been given the follow the instructions to help you configure the network devices.

A few things to note

Round 1 for Packet Tracer is a discovery exercise. You will find that all interface restrictions have been lifted for this round. This is to allow you to fully explore Packet Tracer. In future rounds the interface will be lock down to only allow changes in the Packet Tracer interface that are needed to complete the exercise. To get maximum points for the Packet Tracer exercise you will need to simply successfully submit your valid Packet Tracer file to the Round 1 NetAcad course.

If you don't see a router prompt hit <enter> a few times

Intranet:

· This network is a series of routers that have been configured with the EIGRP routing protocol.

Internet:

· Production web server is hosted on the Internet: www.afa.com (65.100.10.2)
· DNS server that all hosts will use is 65.100.10.2

Instructions

NOTE: Do not type the quotation marks when you are prompted to type a command.

1. Configure the AFA HQ Router as follows

· Open the CLI on the AFA HQ Router.
· If you see a "Continue with configuration dialog? [yes/no], type "no" <enter>
· At the "Router>" prompt, type "**enable**" <enter>

o This will put you into enable mode (Enable Mode is a privilege level that allows a user to make configuration changes to the router)

· At the "Router#" prompt, type "configuration terminal" <enter>

o This will put you into configuration mode - Configuration Terminal – this may be shortened to “conf t” (or “config t”)

· At the "Router(config)#" prompt, type "enable password C1sc0R0cks" <enter>

o This sets the password. You will need to remember this password.

· At the "Router(config)#" prompt, type “hostname AFA_HQ_Router” <enter>

o This will rename the router hostname

· At the "AFA_HQ_Router (config)#" prompt, type "router eigrp 1" <enter>

o This will put you into the routing protocol configuration mode for EIGRP.

· At the "AFA_HQ_Router (config-router)#" prompt type "network 64.103.100.0 0.0.0.255" <enter> and "network 100.103.100.0 0.0.0.255" <enter>.

o This will add these two networks to this routers advertisements to share with other neighbor routers.

· At the "AFA_HQ_Router (config-router)#" prompt, type “exit” <enter>

o This will exit config-router mode

· At the "AFA_HQ_Router (config)#" prompt, type "interface fa0/0" <enter>

o This will put you into the interface config mode.

· At the "AFA_HQ_Router (config-if)#" prompt, type "ip address 64.103.100.101 255.255.255.0" <enter>

o This will set the IP address on the router interface

· At the "AFA_HQ_Router (config-if)#" prompt, type "no shut" <enter> and then <enter> again

o This will enable the interface. You should see a message stating that the interface changed state to up.

· At the "AFA_HQ_Router (config-router)#" prompt, type “exit” <enter>

o This will exit config-if mode

· At the "AFA_HQ_Router (config)#" prompt, type "interface fa0/1" <enter>

o This will put you into the interface configmode. We will now assign the selected interface a valid IP address and Subnet Mask

· At the "AFA_HQ_Router (config-if)#" prompt, type "ip address 100.103.100.1 255.255.255.0" <enter>

o This will set the IP address on the router interface

· At the "AFA_HQ_Router (config-if)#" prompt, type "no shut"

o This will enable the interface. You should see a message stating that the interface changed state to up.

· At the "AFA_HQ_Router (config-if)#" prompt, type "end"
· At the "AFA_HQ_Router #" prompt, type "write mem"

o This will write the configuration to memory

NOTE: If the commands were entered correctly, the link between the two routers should be green.

NOTE: The AFA HQ Switch does not require configuration at this time.

· Take a minute to check your configuration. To see if the configuration is correct, use "show" commands like

o show interface (sho int)
o show run
o show ip interface brief (sho ip int br)

2. Add a PC to the AFA HQ switch and rename it to "AFA HQ PC2" and connect to any port on the AFA HQ Switch. All of these settings can be set on the object properties by double clicking on the PC icon and then go to Desktop à IP Config.

· Set the IP address to be 100.103.100.3
· Set the subnet mask to 255.255.255.0
· Set the default gateway to 100.103.100.1
· Set the DNS to 65.100.10.2

3. Configure the AFA Warehouse Router as follows

· Open the CLI on the AFA Warehouse Router.
· If you see a "Continue with configuration dialog? [yes/no], type "no" <enter>
· At the "Router>" prompt, type "enable" <enter>

o This will put you into enable mode (Enable Mode is a privilege level that allows a user to make configuration changes to the router)

· At the "Router#" prompt, type "config t" <enter>

o This will put you into configuration mode - Configuration Terminal – this may be shortened to “conf t” (or “config t”)

· At the "Router(config)#" prompt, type "enable password C1sc0R0cks" <enter>

o This sets the password. You will need to remember this password.

· At the "Router(config)#" prompt, type “hostname AFA_Warehouse_Router” <enter>

o This will rename the router hostname

· At the "AFA_Warehouse_Router (config)#" prompt, type "router eigrp 1" <enter>

o This will put you into the routing protocol configuration mode for EIGRP.

· At the "AFA_Warehouse_Router(config-router)#" prompt type "network 64.102.100.0 0.0.0.255" <enter> and "network 101.101.100.0 0.0.0.255" <enter>.

o This will add these two networks to this routers advertisements to share with other neighbor routers.

· At the "AFA_Warehouse_Router(config-router)#" prompt, type “exit” <enter>

o This will exit config-router mode

· At the "AFA_Warehouse_Router(config)#" prompt, type "interface fa0/1" <enter>

o This will put you into the interface config mode.

· At the "AFA_Warehouse_Router(config-if)#" prompt, type "ip address 64.102.100.101 255.255.255.0" <enter>

o This will set the IP address on the router interface

· At the "AFA_Warehouse_Router(config-if)#" prompt, type "no shutdown" <enter> and then <enter> again

o This will enable the interface. You should see a message stating that the interface changed state to up. This can be abbreviated to “no shut”

· At the "AFA_Warehouse_Router(config-router)#" prompt, type “exit” <enter>

o This will exit config-if mode

· At the "AFA_Warehouse_Router(config)#" prompt, type "interface fa0/0" <enter>

o This will put you into the interface configmode. We will now assign the selected interface a valid IP address and Subnet Mask

· At the "AFA_Warehouse_Router(config-if)#" prompt, type "ip address 101.101.100.1 255.255.255.0" <enter>

o This will set the IP address on the router interface

· At the "AFA_Warehouse_Router(config-if)#" prompt, type "no shut"

o This will enable the interface. You should see a message stating that the interface changed state to up.
· At the "AFA_Warehouse_Router(config-if)#" prompt, type "end"
· At the "AFA_Warehouse_Router#" prompt, type "write mem"

o This will write the configuration to memory

NOTE: If the commands were entered correctly, the link between the two routers should be green.
NOTE: The AFA Warehouse Switch does not require configuration at this time.

· Take a minute to check your configuration. To see if the configuration is correct, use “show” commands like

o show interface (sho int)
o show run
o show ip interface brief (sho ip int br)
o show ip route (sho ip ro)

4. Add a Server to the AFA Warehouse network connected to the switch on any port. All of these settings can be set on the object properties by double clicking on the object icon.

· It should be named "AFA Warehouse Server"
· Set the IP address to be 101.101.100.3
· Set the subnet mask to 255.255.255.0
· Set the default gateway to 101.101.100.1
· Set the DNS to 65.100.10.2.
· Enable the FTP server on the server. This has to be enabled by going to the Service tab on the server and then click on the FTP button on the left side, bottom. Make sure it is “on”

5. Test connectivity:

· Browse from AFA HQ PC1 and AFA Warehouse Server to the production website: www.afa.com

· To do this you will need to double click on the object and click on the "Desktop" tab at the top of that window. Then click on "Web Browsers" and enter the URL above to see the page.
· From AFA HQ PC1, launch the CLI and FTP to the AFA Warehouse Server
· To do this you will need to double click on the object and click on the "Desktop" tab at the top of that window. Then, click on "Command Prompt" and at the PC> prompt type “ftp 101.101.100.3” and login with these credentials:

§ Username: cisco
§ password: cisco

· Once you have successfully logged in, close the window.

NOTE: Use ping to test connectivity when things are not working.

Submit Packet Tracer Activity
Once you have completed the activity, make sure to upload it in the Practice Round Competition Course by following the directions on the Packet Tracer page in the course or by using the walkthrough that came with the StartEx email. You will not receive points unless you submit the activity.