Part 2: Gather Information with Show Commands

# Step 1: Gather information from show interface command output.

Issue each of the following commands and then answer the related questions:

* show ip interface brief
* show interfaces
* show ip interface

1. Which commands display the status of the port?
   1. Show ip interface brief
2. Which command shows only the IP address (no subnet mask or prefix)?
   1. Show ip interface brief
3. Which command displays the description configured on the interface?
   1. Show interfaces
4. Which command displays the IP broadcast address?
   1. Show ip interface
5. Which command displays the MAC address of the interface?
   1. Show interfaces

# Step 2: Gather information from show ip route command output.

Issue each of the following commands and then answer the related questions:

* show ip route
* show ip route connected

1. How many networks are known by the router based on the output of the show ip route command?
   1. 2
2. What does the L at the beginning of the lines within the routing table represent?
   1. local
3. What does the /32 prefix listed in the route table indicate?
   1. Local ip address used for loopback.

# Step 3: Gather information after an interface state is changed.

1. On RTA, shut down the Gigabit Ethernet 0/0 interface and issue the show ip route command. How many networks are displayed in the routing table now?
   1. 2
2. Attempt to ping PC1. Was the ping successful?
   1. No
3. Issue the show ip interface brief command. What is the status of the Gigabit Ethernet 0/0 interface?
   1. administratively down down
4. Reactivate the Gigabit Ethernet 0/0 interface. Issue the show ip route command. Did the routing table repopulate? What can be inferred about the interface status of routes that appear in the routing table?
   1. The routes for Gigabet0/0 did re populate. The table interacts with the router’s settings