

6.15 Lab: Troubleshoot IP Configuration 1

Candidate: COMPTIA COMPTIA ()

Time Spent: 00:16

Score: 0%

Task Summary

Required Actions and Questions

✗ Q1: From Office2, which, if any, pings failed?

Your answer:

Correct answer: [The ISP - 198.28.2.254](#)

✗ Q2: What is the address of the default gateway assigned to Office2?

Your answer:

Correct answer: [192.168.0.4](#)

✗ Q3: From ITAdmin, which, if any, pings failed?

Your answer:

Correct answer: [The ISP - 198.28.2.254](#)

✗ Q4: What is the IP address of the default gateway assigned to ITAdmin?

Your answer:

Correct answer: [192.168.0.4](#)

✗ Q5: What do you see here that might explain why this computer can access the internet, but Office2 and ITAdmin can't?

Your answer:

Correct answer: [The default gateway for CorpServer is different.](#)

✗ Reconfigure the DHCP server with 192.168.0.5 as the default gateway

✗ Verify that the ITAdmin workstation can communicate with the internet

✗ Verify that the Office2 workstation can communicate with the internet

Explanation

While completing this lab, use the following information:

Device	IP Address
CorpServer	192.168.0.10

ITAdmin	192.168.0.31
Office2	192.168.0.34
ISP	198.28.2.254

Complete this lab as follows:

- From the Office2 computer, use the **ping** and **ipconfig** commands to test connectivity and gather information.
 - Right-click Office2 and select **Launch Windows**.
 - Right-click **Start** and select **Terminal (Admin)**.
 - From the Terminal prompt, type **ping IP_address** and press **Enter**.
 - Repeat step 1c to ping the remaining *computers*.
 - From the top right, select **Questions**.
 - Answer Question 1.
 - Minimize the Lab Questions dialog.
 - From the Terminal prompt, type **ipconfig /all** and press **Enter**.
Notice that DHCP Enabled is set to Yes, meaning the IP information is obtained from a DHCP server.
 - From the top right, select **Questions**.
 - Answer Question 2.
 - Minimize the Lab Questions dialog.
 - From the top left, select **Network Modeler** to return to the network diagram.
- From the ITAdmin computer, use the **ping** and **ipconfig** commands to test connectivity and gather information.
 - Right-click ITAdmin and select **Launch Windows**.
 - Right-click **Start** and select **Terminal (Admin)**.
 - From the Terminal prompt, type **ping IP_address** and press **Enter**.
 - Repeat step 2c to ping the remaining *computers*.
 - From the top right, select **Questions**.
 - Answer Question 3.
 - Minimize the Lab Questions dialog.
 - From the PowerShell prompt, type **ipconfig /all** and press **Enter**.
Notice that DHCP Enabled is set to Yes, meaning the IP information is obtained from a DHCP server.
 - From the top right, select **Questions**.
 - Answer Question 4.
 - Minimize the Lab Questions dialog.
 - From the top left, select **Network Modeler** to return to the network diagram.
- From the CorpServer computer, use the **ping** and **ipconfig** commands to test connectivity and gather information.
 - Right-click CorpServer and select **Launch Windows**.
 - Right-click **Start** and select **Windows PowerShell (Admin)**.
 - From the PowerShell prompt, type **ping Office2** and press **Enter**.
 - Type **ping 198.28.2.254** and press **Enter**.
Notice that this computer can get to the internet.
 - Type **ipconfig** and press **Enter**.
 - From the top right, select **Questions**.
 - Answer Question 5.
Since Office2 and ITAdmin obtain their IP addresses from a DHCP server and their default gateway is different from CorpServer (which can access the internet), the problem is most likely related to the IP configuration for the network.
 - Minimize the Lab Questions dialog.
 - Close PowerShell.
 - From the top left, select **Network Modeler** to return to the network diagram.
- From the CorpDHCP server, use the DHCP console to reconfigure the settings for the DHCP scope.

- a. Right-click CorpDHCP and select **Launch Windows**.
 - b. From the Server Manager menu bar, select **Tools > DHCP** to start the DHCP console.
 - c. Expand and select **CorpDHCP > IPv4 > Scope [192.168.0.1] Subnet1 > Scope Options**.
 - d. Right-click **Scope Options** and then select **Configure Options**.
 - e. Highlight the **003Router** option.
 - f. In the bottom pane, select **192.168.0.4** and then select **Remove**.
 - g. In the IP address field (the default gateway address), change the address listed to **192.168.0.5** and select **Add**.
 - h. Select **OK** to apply the change.
 - i. From the top left, select **Network Modeler** to return to the network diagram.
5. Verify that the ITAdmin and Office2 computers can access the internet.
- a. Right-click ITAdmin and select **Launch Windows**.
 - b. From the Terminal prompt, type **ipconfig /renew**.
This will request the new IP address information from the DHCP server and reconfigure the settings for the Ethernet connection.
 - c. Enter **ipconfig /all** to check the Ethernet configuration.
Notice that the default gateway is now correctly configured as 192.168.0.5.
 - d. At the PowerShell prompt, type **ping 198.28.2.254** (the ISP) and then press **Enter**.
 - e. From the top left, select **Network Modeler** to return to the network diagram.
 - f. Right-click Office2 and select **Launch Windows**.
 - g. Repeat steps 6b-6d to fix the problem for the second workstation.