Packet Tracer – Troubleshooting Challenge - Using Documentation to Solve Issues

Topology



Addressing Table

Objectives

Part 1: Gather Documentation

Part 2: Test Connectivity

Part 3: Gather Data and Implement Solutions

Part 4: Test Connectivity

Scenario

This is Part II of a two-part activity. Part I is **Packet Tracer - Troubleshooting Challenge - Documenting the Network**, which you should have completed earlier in the chapter. In Part II, you will use your troubleshooting skills and documentation from Part I to solve connectivity issues between PCs.

Part 1: Gather Documentation

Step 1: Retrieve network documentation.

To successfully complete this activity, you will need your documentation for the **Packet Tracer** - **Troubleshooting Challenge - Documenting the Network** activity you completed previously in this chapter. Locate that documentation now.

Step 2: Documentation requirements.

The documentation you completed in the previous activity should have an accurate topology and addressing table. If necessary, update your documentation to reflect an accurate representation of a correct answer from the **Packet Tracer - Troubleshooting Challenge - Documenting the Network** activity. You may need to consult with your instructor.

Part 2: Test Connectivity

Step 1: Determine location of connectivity failure.

At the end of this activity, there should be full connectivity between PC to PC and PC to the www.cisco.pka server. However, right now you must determine where connectivity fails by pinging from:

- PCs to www.cisco.pka server
- PC to PC
- PC to default gateway

Step 2: What pings were successful?

Document both the successful and failed pings.

Part 3: Gather Data and Implement Solutions

Step 1: Choose a PC to begin gathering data.

Choose any PC and begin gathering data by testing connectivity to the default gateway. You can also use **traceroute** to see where connectivity fails.

Step 2: Telnet to the default gateway and continue gathering data.

- a. If the PC you chose does not have connectivity to its default gateway, choose another PC to approach the problem from a different direction.
- b. After you have established connectivity through a default gateway, the login password is **cisco** and the privileged EXEC mode password is **class**.

Step 3: Use troubleshooting tools to verify the configuration.

At the default gateway router, use troubleshooting tools to verify the configuration with your own documentation. Remember to check switches in addition to the routers. Be sure to verify the following:

- Addressing information
- Interface activation
- Encapsulation
- Routing
- VLAN configuration
- Duplex or speed mismatches

Step 4: Document network symptoms and possible solutions.

As you discover symptoms of the PC connectivity issue, add them to your documentation.

Step 5: Make changes based on your solutions from the previous step.

Part 4: Test Connectivity

Step 1: Test PC connectivity.

- a. All PCs should now be able to ping each other and the **www.cisco.pka** server. If you changed any IP configurations, create new pings because the prior pings use the old IP address.
- b. If there are still connectivity issues between PCs or PC to server, return to Part 3 and continue troubleshooting.

Step 2: Check results.

Your Packet Tracer score should be 70/70. If not, return to Part 2 and continue to troubleshoot and implement your suggested solutions. You will not be able to click **Check Results** and see which required components are not yet completed.

Suggested Scoring Rubric

Activity Section	Question Location	Possible Points	Earned Points
Part 2: Test Connectivity	Step 2-a	15	
	Part 2 Total	15	
Part 3: Gather Data and Implement Solutions	Step 4-a	15	
Part 3 Total		15	
Packet Tracer Score		70	
Total Score		100	