



Lab 2.3.5 Gathering Symptoms

Objective

Complete this lab to practice what you learned in this lesson. You will be given a simple problem situation reported by the user, and must decide what questions to ask the user and what tools to use to completely document the symptoms of the problem.

In this exercise, the class will use the troubleshooting checklist and Cisco IOS commands to work through a troubleshooting scenario. You will complete the following step:

- Define the problem by questioning users and using Cisco IOS tools

After completing this exercise, you will be able to:

- Decide what questions to ask and which troubleshooting tools to use to completely document the symptoms of a network problem

Scenario

The end-users report they can no longer reach any devices in the network. All say this issue came up suddenly, in the last five minutes or so. According to them, the network was working fine previously.

Required Resources

These are the resources and equipment required to complete this exercise:

- Network diagram from the previous exercises

Lab Configuration setup.

- Connect to workgroup access router Kingston

Command List

Table 5: Helpful Commands

Command	Description
<code>ping {host ip-address}</code>	Sends an echo request packet to an address, then waits for a reply. The host ip-address variable is the IP alias or IP address of the target system.
<code>show ip interface brief</code>	Displays a summary of the status of all interfaces on a device
<code>show ip route</code>	Displays the current state of the IP routing table
<code>show running-config interface</code>	Displays the contents of the currently running configuration file
<code>telnet {host ip-address}</code>	Connects to an IP address or host name using the Telnet application
<code>tracert [destination]</code>	Identifies the path a packet takes through the network. The destination variable is the hostname or IP address of the target system.

Step 1

What additional questions would you ask the user?

Step 2

What commands should the user try from their PC?

What information do they discover?

Step 3

Where should you look first to isolate the problem?

What commands might you use to look for issues?

Try the commands. What information do you discover?

Step 4

Where should you look next to isolate the problem?

What commands might you use to look for issues?

Try the commands. What information do you discover?

Step 5

Repeat Step 4 as needed to isolate the problem.

Step 6

Activate the link to the access switch with the **no shutdown** interface configuration command on the access router.