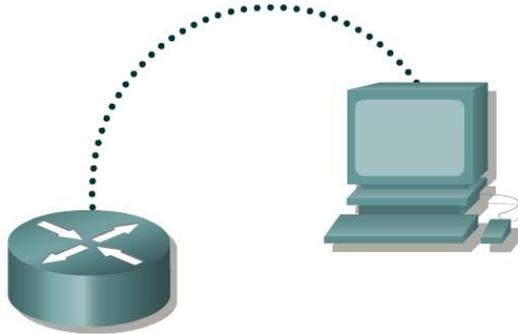


Lab 2.2.9 Command Line Fundamentals



Straight-through cable	—————
Serial cable	————— / \ \ / —————
Console (Rollover)
Crossover cable	- - - - -

Objective

- Log into a router and go to the user and privileged modes.
- Use several basic router commands to determine how the router is configured.
- Use the router HELP facility.
- Use command history and editing features.
- Logout of the router.

Background/Preparation

HyperTerminal is a simple Windows-based terminal emulation program that can be used to connect to the routers console port. A PC with HyperTerminal provides a keyboard and monitor for the router. Connecting to the console port with a rollover cable and using HyperTerminal is the most basic way to access a router for checking or changing its configuration.

Set up a network similar to the one in the diagram. Any router that meets the interface requirements may be used. Possible routers include 800, 1600, 1700, 2500, 2600 routers, or a combination. The configuration output used in this lab is produced from a 1721 series router. Other routers may produce slightly different output.

The following resources will be required:

- Workstation with a serial interface and HyperTerminal
- Cisco Router
- Rollover, or console, cable for connecting the workstation to the router

The following steps are intended to be executed on each router unless specifically instructed otherwise.

Step 1 Start HyperTerminal

- a. Start a HyperTerminal session as performed in the Establishing a HyperTerminal session lab.

Step 2 Log into the router

- a. Log into the router. If prompted to enter the initial setup mode, answer **no**. If prompted for a password, enter **cisco**.
- b. If the prompt shows "Router" this is the default. Something other than that may appear if this router has been named. What prompt did the router display? _____
- c. What does the prompt symbol following a router name mean? _____

Step 3 Use the HELP feature

- a. Enter the **help** command by typing the **?** at the user EXEC router prompt.

Router>?

List eight available commands from the router response.

Step 4 Enter privileged EXEC mode

- a. Enter enable mode by using the **enable** command. If a password is asked for, enter **class** when prompted.

Router>**enable** [Enter]

- b. Was **enable** one of the commands available from Step 2? _____
- c. What changed in the router prompt display and what does it mean?

Step 5 Use the help feature

- a. Enter the help mode by typing a question mark (**?**) at the router privileged EXEC prompt.

Router#?

- b. List ten (10) available commands from the router response.

Step 6 List the show commands

- a. List all show commands by entering **show ?** at the router privileged EXEC prompt.
Router#**show ?**
- b. Is **running-config** one of the available commands from this mode?

Step 7 Examine the running configuration

- a. Display the running router configuration by using the command **show running-config** at the privileged EXEC router prompt.
Router#**show running-config**
- b. List six key pieces of information shown with this command:

Step 8 Examine the configuration in more detail

- a. Continue looking at the configuration.
- b. When the word "more" appears, press the space bar. By pressing the space bar the router will display the next page of information.
- c. What happened when the space bar was pressed ?

Step 9 Use the command history feature

- a. Use the command **history** to see and reuse the previously entered commands. Press the up arrow or **Ctrl-p** to see the last entered command. Press it again to go to the command before that. Press the down arrow or **Ctrl-n** to go back through the list. This function lets the command history be viewed.
- b. What appeared at the router prompt when the up arrow was pressed?

Step 10 Logoff and turn the router off

- a. Close HyperTerminal.
- b. Shut down the router.