Packet Tracer - Navigating the IOS

Topology

Objectives

Establish a terminal session to a switch via the console port to explore the help functions and different EXEC modes.

Background

In this activity, you will practice skills necessary for navigating the Cisco IOS, including different user access modes, various configuration modes, and some common commands used on a regular basis.

Step 1: Connect PC1 to S1 using a console cable.

a. Click the **Connections** icon in the lower left corner of the Packet Tracer window.

b. Click the Console cable.

c. Click **PC1**; select the option for the RS-232 connection.

d. Drag the other end of the console connection to the S1 switch and click the switch to bring up the connection list.

e. Select the Console port to complete the connection.

Step 2: Establish a terminal session with S1.

a. Click **PC1** and then select the **Desktop** tab.

b. Click the **Terminal** application icon; verify that the Port Configuration default settings are correct.

What is the setting for bits per second? _____

c. Click **OK**.

d. The screen that appears may have several messages displayed. Press **ENTER** to continue.

What is the prompt displayed on the screen? _____

Step 3: Explore the IOS Help.

a. The IOS can provide help for commands depending on the command mode being accessed. The prompt currently being displayed is called **User EXEC** and the device is waiting for a command. The most basic form of help is to type a question mark (?) at the prompt to display a list of commands.

```
S1> ?
```

Which command begins with the letter ‘C’? _____

b. At the prompt, type **t**, followed by a question mark (**?**).

```
S1> t?
```

Which commands are displayed? _____

c. At the prompt, type **te**, followed by a question mark (**?**).

```
S1> te?
```

Which commands are displayed? _____

This type of help is known as **Context-Sensitive** Help, providing more information as the commands are expanded.

Step 4: Enter privileged EXEC mode.

a. At the prompt, type the question mark (**?**).

```
S1> ?
```

What information is displayed that describes the **enable** command? _____

b. Type **en** and press the **Tab** key.

```
S1> en<Tab>
```

What displays after pressing the **Tab** key?

This is called command completion or tab completion. When part of a command is typed, the **Tab** key can be used to complete the partial command. If the characters typed are enough to make the command unique, as in the case with the **enable** command, the remaining portion is displayed.

What would happen if you were to type **te<Tab>** at the prompt?

c. Enter the **enable** command and press **ENTER**. How does the prompt change?

d. When prompted, type the question mark (**?**).

```
S1# ?
```

Previously in user EXEC mode there was one command that started with the letter ‘C’. Now how many commands are displayed that begin with the letter ‘C’? (**Hint**: you could type c? to list just the commands beginning with ‘C’.)

_____

Step 5: Enter Global Configuration mode.

a. When in privileged EXEC mode, one of the commands starting with the letter ‘C’ is **configure**. Type either the full command or enough of the command to make it unique along with the <**Tab**> key to issue the command and press **<ENTER>**.

```
S1# configure
```

What is the message that is displayed?

_____

b. Press the **<ENTER>** key to accept the default parameter enclosed in brackets **[terminal]**.

How does the prompt change?

_____

c. This is called global configuration mode. This mode will be explored further in upcoming activities and labs. For now, exit back to privileged EXEC mode by typing **end**, **exit** or **Ctrl-Z**.

```
S1(config)# exit
S1#
```

Suggested Scoring Rubric

Activity Section	Question Location	Possible Points	Earned Points
Part 1: Basic Connections, Accessing the CLI and Exploring Help	Step 2a	5	
	Step 2c	5	
	Step 3a	5	
	Step 3b	5	
	Step 3c	5	
Part 1 Total		**25**	
Part 2: Exploring EXEC Modes	Step 1a	5	
	Step 1b	5	
	Step 1c	5	
	Step 1d	5	
	Step 2a	5	
	Step 2b	5	
Part 2 Total		**30**	
Packet Tracer Score		**20**	
Total Score		**75**	