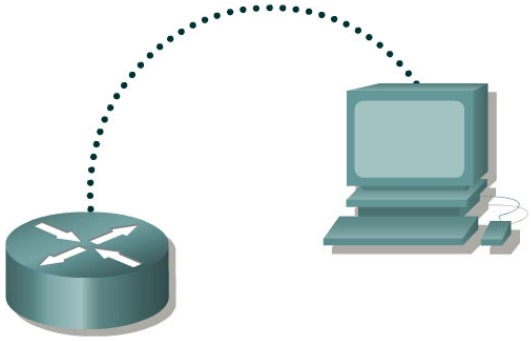
# Lab 3.2.3 Configuring Interface Descriptions



| Router Designation | Router Name | Fast Ethernet 0 Address | Serial 0 Address | Subnet mask for both interfaces | Enable Secret password | Enable/VTY/ Console passwords |
|---|---|---|---|---|---|---|
| Router 1 | GAD | 192.168.14.1 | 192.168.15.1 | 255.255.255.0 | class | cisco |

| | |
|---|---|
| Straight-through cable | |
| Serial cable | |
| Console (Rollover) | |
| Crossover cable | |

## Objective

- Choose a description for an interface and use interface configuration mode to enter that description.
- Set up a network similar to the one in the previous diagram.

## Background/Preparation

Any router that meets the interface requirements may be used. Possible routers include 800, 1600, 1700, 2500, 2600 routers, or a combination. Refer to the chart at the end of the lab to correctly identify the interface identifiers to be used based on the equipment in the lab. The configuration output used in this lab is produced from 1721 series routers. Any other router used may produce slightly different output. The following steps are intended to be executed on each router unless specifically instructed otherwise.

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

**Note:** Go to the erase and reload instructions at the end of this lab. Perform those steps on all routers in this lab assignment before continuing.

## Step 1 Configure the hostname and passwords on the router

a. On the router, enter the global configuration mode. Configure the hostname as shown in the chart. Then configure the console, virtual terminal and enable passwords. If there are any difficulties, refer to the Configuring router passwords lab.

b. What is the router command to view the current running configuration?

_____

c. What command mode must be used to enter the command listed in the last question?

_____

d. Enter the command from the previous question to verify the configuration that was just entered. If the configuration is not correct, fix the errors. Verify it again until correct.

### Step 2 Enter Global Configuration mode

a. Enter **`configure terminal`** at the router prompt. Notice the change in the router prompt.

What did the router prompt change to?

_____

### Step 3 Enter Interface Configuration mode

a. Enter **`interface serial 0`** at the global configuration prompt. Refer to interface chart.

What does the router prompt look like in interface configuration mode?

_____

### Step 4 Display help for the description command

a. Enter **`description ?`** at the router prompt.

What is the maximum number of characters in an interface description?

_____

### Step 5 Choose a description for the interface

a. An interface description includes the purpose and location of the interface, other devices or locations connected to the interface, and circuit identifiers. Descriptions help the support personnel better understand the scope of problems related to an interface. Descriptions also allow for a faster resolution of problems.

b. Given the following circuit information, choose a description for the serial 0 interface for GAD. Use the following form to document the choice.

| Link | Carrier | Circuit ID | Speed |
|---|---|---|---|
| GAD to BHM - | BellSouth | 10DHDG551170 | 1.544Mbits/sec |

### Step 6 Enter a description for interface serial 0

a. From the interface configuration mode for serial 0, enter the description text. The text is the description from the previous step. Then enter **Ctrl-z** or type **end** to return to the privileged EXEC mode.

**Note:** this would be the same as typing **exit** to leave the interface configuration mode and **exit** again to leave Global Configuration mode. This is a keyboard shortcut.

### Step 7 Examine the active configuration file

a. From the privileged EXEC mode, enter the command that will show the running configuration. The privileged EXEC mode is also called enable mode. The router will display information on how it is currently configured.

b. What command was entered? _____

c. What is the description for interface serial 0?

_____

## Step 8 Confirm interface description is correct

a. From the enable mode, enter the **`show interfaces serial 0`** command. The router displays information about the interface. Examine this output to confirm that the description entered is the correct description.

Upon completion of the previous steps, logoff by typing **exit**. Turn the router off.

## Erasing and reloading the router

Enter into the privileged EXEC mode by typing **enable**.

If prompted for a password, enter **class**. If “class” does not work, ask the instructor for assistance.

```
Router>enable
```

At the privileged EXEC mode, enter the command **erase startup-config**.

```
Router#erase startup-config
```

The responding line prompt will be:

```
Erasing the nvram filesystem will remove all files! Continue?
[confirm]
```

Press **Enter** to confirm.

The response should be:

```
Erase of nvram: complete
```

Now at the privileged EXEC mode, enter the command **reload**.

```
Router#reload
```

The responding line prompt will be:

```
System configuration has been modified. Save? [yes/no]:
```

Type **n** and then press **Enter**.

The responding line prompt will be:

```
Proceed with reload? [confirm]
```

Press **Enter** to confirm.

In the first line of the response will be:

```
Reload requested by console.
```

After the router has reloaded the line prompt will be:

```
Would you like to enter the initial configuration dialog? [yes/no]:
```

Type **n** and then press **Enter**.

The responding line prompt will be:

```
Press RETURN to get started!
```

Press **Enter**.

The router is ready for the assigned lab to be performed.

| **Router Interface Summary** | | | | | |
|---|---|---|---|---|---|
| Router Model | Ethernet Interface #1 | Ethernet Interface #2 | Serial Interface #1 | Serial Interface #2 | Interface #5 |
| 800 (806) | Ethernet 0 (E0) | Ethernet 1 (E1) | | | |
| 1600 | Ethernet 0 (E0) | Ethernet 1 (E1) | Serial 0 (S0) | Serial 1 (S1) | |
| 1700 | FastEthernet 0 (FA0) | FastEthernet 1 (FA1) | Serial 0 (S0) | Serial 1 (S1) | |
| 2500 | Ethernet 0 (E0) | Ethernet 1 (E1) | Serial 0 (S0) | Serial 1 (S1) | |
| 2600 | FastEthernet 0/0 (FA0/0) | FastEthernet 0/1 (FA0/1) | Serial 0/0 (S0/0) | Serial 0/1 (S0/1) | |
| In order to find out exactly how the router is configured, look at the interfaces. This will identify the type of router as well as how many interfaces the router has. There is no way to effectively list all of the combinations of configurations for each router class. What is provided are the identifiers for the possible combinations of interfaces in the device. This interface chart does not include any other type of interface even though a specific router may contain one. An example of this might be an ISDN BRI interface. The string in parenthesis is the legal abbreviation that can be used in IOS command to represent the interface. | | | | | |
| | | | | | |