Lab 3.1.3 Configuring Router Passwords

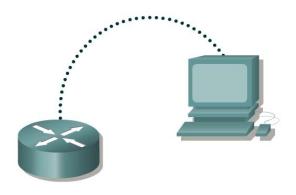|	
Straight-through cable	———————
Serial cable	—————Z———
Console (Rollover)	··························
Crossover cable	— — — — — — — —

Objective

- Configure a password for console login to user EXEC mode.

- Configure a password for virtual terminal (Telnet) sessions.

- Configure a secret password for privileged EXEC mode.

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 Login to the router in user EXEC mode

a. Connect to the router and login.

b. What prompt did the router display?

_____

c. What does this prompt mean?

_____

Step 2 Login to the router in privileged EXEC mode

a. Enter **enable** at the user EXEC mode prompt.

```
Router>enable
```

b. What prompt did the router display?

_____

c. What does this prompt mean?

_____

Step 3 Enter global configuration mode

a. Enter **configure terminal** at the privilege EXEC mode prompt.

```
Router#configure terminal
```

b. What prompt did the router display? _____

c. What does this prompt mean?

_____

Step 4 Enter a hostname of GAD for this router

a. Enter **hostname GAD** at the prompt.

```
Router(config)#hostname GAD
```

b. What prompt did the router display?

_____

c. What does this prompt mean?

_____

Step 5 Configure and exit

Configure the console password on the router and exit from line console:

```
GAD(config)#line console 0
GAD(config-line)#password cisco
GAD(config-line)#login
GAD(config-line)#exit
GAD(config)#
```

Step 6 Configure and exit

Configure the password on the virtual terminal lines and exit line mode:

```
GAD(config)#line vty 0 4
GAD(config-line)#password cisco
GAD(config-line)#login
GAD(config-line)#exit
GAD(config)#
```

Step 7 Configure the enable password

Configure the `enable password` on the router and exit from global configuration mode:

```
GAD(config)#enable password cisco
GAD(config)#exit
```

Step 8 Return to the user EXEC mode

Return to the user EXEC mode by entering the `disable` command:

```
GAD#disable
```

Step 9 Enter the privileged EXEC mode again

This time a prompt for a password will show. Enter **cisco** but the characters will not be seen on the line.

```
GAD>enable
Password:cisco
```

Step 10 Return to the configuration mode

Return to the configuration mode by entering `configure terminal`:

```
GAD#configure terminal
```

Step 11 Configure the enable secret password

Configure the enable secret password and exit from global configuration mode:

```
GAD(config)#enable secret class
GAD(config)#exit
```

Note: Remember the enable secret password is encrypted from the configuration view. Also do not type `enable secret password class`, or the secret password will be password, not class.

Step 12 Return to the user EXEC mode

Return to the user EXEC mode by entering the command disable:

```
GAD#disable
GAD>
```

Step 13 Enter the privileged EXEC mode again

A prompt for a password will show. Enter **cisco**. The characters will not be seen on the line. If it fails, continue until the bad secrets message is displayed:

```
GAD>enable
Password:cisco
```

```
Password:cisco
Password:cisco
% Bad secrets
```

Step 14 Enter the privileged EXEC mode again

A prompt for a password will show. Enter **class**. The characters will not be displayed on the line:

```
GAD>enable
Password:class
GAD#
```

Note: The enable secret password takes precedence over the enable password. So once an enable secret password is entered the enable password no longer is accepted.

Step 15 Show the routers running configuration

GAD#show running-config

a. Is there an encrypted password? _____

b. Are there any other passwords? _____

c. Are any of the other passwords encrypted? _____

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.					