Ankara University

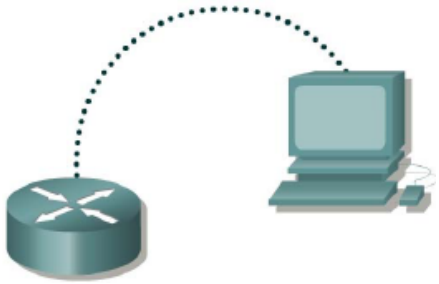
Department of Computer Engineering

COM332 2017

LAB 1 Part 2

SECTION 1

Configuring Router Passwords



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

Note: Go to the erase and reload instructions at the end of this lab. Perform those steps before continuing with this lab

Step 1: Login to the router in user EXEC mode

Step 2: Login to the router in privileged EXEC mode

```
Router>enable
```

Step 3: Enter global configuration mode

```
Router#configure terminal
```

Step 4: Enter a hostname of GAD for this router

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

Step 5: Configure and exit

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

Step 6: Configure and exit

GAD(config)#line vty 0 4

GAD(config-line)#password cisco

GAD(config-line)#login

GAD(config-line)#exit

GAD(config)#

Step 7: Configure and enable password

GAD(config)#enable password cisco

GAD(config)#exit

Step 8: Return to the user EXEC mode

GAD#disable

Step 9: Enter the privileged EXEC mode again

GAD>enable

Password:cisco

Step 10: Return to the configuration mode

GAD#configure terminal

Step 11: Configure the enable secret password

GAD(config)#enable secret class

GAD(config)#exit

Step 12: Return to the user EXEC mode

GAD#disable

GAD>

Step 13: Enter the privileged EXEC mode again

GAD>enable

Password:cisco

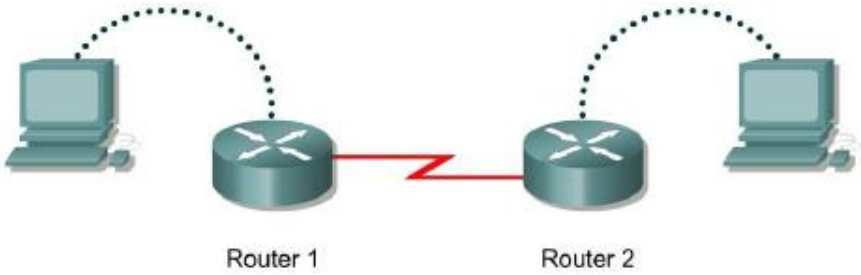
GAD#

Step 14: Show the routers running configuration

GAD#show running-config

SECTION 2

Configuring a Serial Interface



Router Designation	Router Name	Interface type	Serial 0 Address	Subnet mask	Enable secret password	Enable/VTY/ Console passwords
Router 1	GAD	DCE	192.168.15.1	255.255.255.0	class	cisco
Router 2	BHM	DTE	192.168.15.2	255.255.255.0	class	cisco

Objective:

- Configure a serial interface on each of two routers so they can communicate

Note: Go to the erase and reload instructions at the end of this lab. Perform those steps before continuing with this lab

Step 1: Basic router configuration

Step 2: Configure the name and passwords for Router 1

Step 3: Configure serial interface serial 0

GAD(config)#**interface serial 0/3/0**

GAD(config-if)#**ip address 192.168.15.1 255.255.255.0**

GAD(config-if)#**clock rate 56000**

GAD(config-if)#**no shutdown**

GAD(config-if)#**exit**

GAD(config)#**exit**

Step 4: SKIP THIS STEP ON THE LAB!

Save the running configuration

GAD#copy running-config startup-config

Step 5: Display information about serial interface 0 on GAD

GAD#**show interface serial 0**

Step 6: Configure the name and passwords for Router 2

Step 7: Configure serial interface serial 0

BHM(config)#**interface serial 0/3/0**

BHM(config-if)#**ip address 192.168.15.2 255.255.255.0**

BHM(config-if)#**no shutdown**

BHM(config-if)#**exit**

BHM(config)#**exit**

Step 8: SKIP THIS STEP ON THE LAB!

Save the running configuration

BHM#**copy running-config startup-config**

Step 9: Display information about serial interface 0 on BHM

BHM#**show interface serial 0**

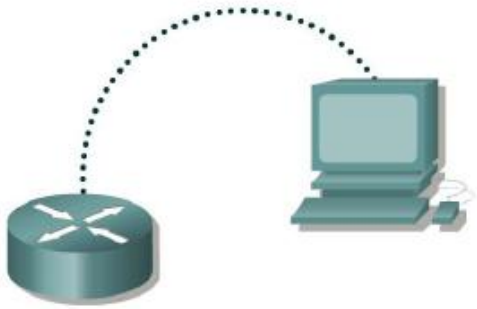
Step 10: Verify that the serial connection is functioning

BHM#**ping 192.168.15.1**

GAD#**ping 192.168.15.2**

SECTION 3

Making Configuration Changes



Router Name	Router Type	Serial 0 Address	Subnet mask	Enable Secret password	Enable/VTY/Console passwords
GAD		192.168.14.1	255.255.255.0	class	cisco

Objectives:

- Configure some basic router settings
- Bring interfaces up and down
- Make changes to the router configuration

Note: Go to the erase and reload instructions at the end of this lab. Perform those steps before continuing with this lab

Step 1: Basic router configuration

Step 2: Configure hostname and passwords

Step 3: Configure interface Serial 0

GAD(config)#**interface serial 0/3/0**

GAD(config-if)#**ip address 192.168.14.1 255.255.255.0**

GAD(config-if)#**no shutdown**

GAD(config-if)#**description Connection to the host**

GAD(config-if)#**exit**

GAD(config)#**exit**

Step 4: Save the configuration

GAD#**copy running-config startup-config**

Step 5: Verify the configuration

GAD#**show running-config**

Step 6: Modify the configuration

GAD(config-if)#**description Connection to the host**

GAD(config-if)#**no description Connection to the host**

Step 7: Bring down serial interface 0

GAD(config)#**interface serial 0**

GAD(config-if)#**shutdown**

GAD(config-if)#**exit**

GAD(config)#**exit**

GAD#

Step 8: Bring up Serial interface 0

GAD(config)#**interface serial 0/3/0**

GAD(config-if)#**no shutdown**

GAD(config-if)#**exit**

GAD(config)#**exit**

Step 9: Verify the configuration

GAD#**show running-config**

SECTION 4

Configuring an Ethernet Interface

Router Designation	Router Name	Router Type	FA0/0 Address	Subnet mask	Enable Secret password	Enable/VTY/ Console passwords
Router 1	GAD		192.168.14.1	255.255.255.0	class	cisco

Objectives:

- Configure an Ethernet interface on the router with an IP address and a subnet mask

Note: Go to the erase and reload instructions at the end of this lab. Perform those steps before continuing with this lab

Step 1: Configure the hostname and passwords on the GAD router

Step 2: Configure the FastEthernet 0 interface

GAD(config)#**interface fastEthernet 0/0**

GAD(config-if)#**ip address 192.168.14.1 255.255.255.0**

GAD(config-if)#**no shutdown**

GAD(config-if)#**exit**

GAD(config)#**exit**

Step 3: Save the configuration

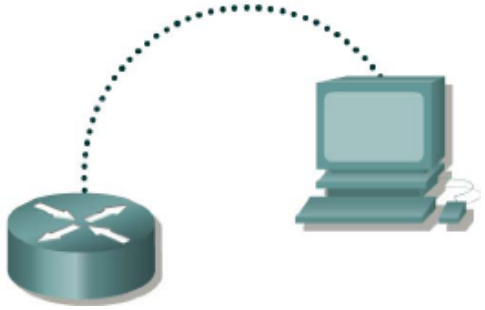
GAD#**copy running-config startup-config**

Step 4: Display the FastEthernet 0 configuration information

GAD#**show interface fastEthernet 0/0**

SECTION 5

Configuring Message-of-the-Day (MOTD)



Router Name	FA0/0 Address	S0/0 Address	Subnet mask	Enable Secret password	Enable/VTY/Console passwords
GAD	172.16.0.1	172.17.0.1	255.255.0.0	class	cisco

Objectives:

- Demonstrate the commands to enter a message-of-the-day(MOTD) on the router. This procedure allows all users to view the message upon entering the router
- Set up a network similar to the one in the previous diagram

Note: Go to the erase and reload instructions at the end of this lab. Perform those steps before continuing with this lab

Step 1: Configure basic router information

Step 2: Enter Global Configuration mode

GAD#**configure terminal**

Step 3: Display help for the **banner motd** command

GAD(config)#**banner motd ?**

Step 4: Choose the text for the MOTD

Step 5: Enter the desired banner message

GAD(config)#**banner motd # message #**

Step 6: Test the MOTD display

Enter the console session. Reenter the router to display the message of the day. This is done by pressing the **Enter** key. This will display the message entered into the configuration.

Step 7: Verify the MOTD by looking at the router configuration

GAD#**show running-config**

ERASING AND RELOADING THE ROUTER

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

Router>**enable**

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

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 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 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.