Ankara University

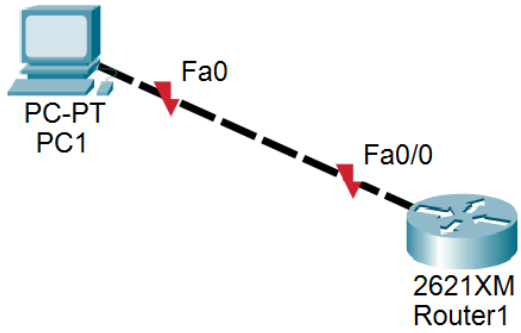
Department of Computer Engineering

BLM3032

LAB 3

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

Step 1: Design the configuration show above.

Step 2: Enter the CLI of Router.

Step 3: Login to the router in user EXEC mode

Step 4: Login to the router in privileged EXEC mode

Router>enable

Step 5: Enter global configuration mode

Router#configure terminal

Step 6: Enter a hostname of “R1” for this router

Router(config)#hostname R1

Step 7: Enable console password

R1(config)#line console 0

R1(config-line)#password **auciscolab**

R1(config-line)#login

R1(config)#exit

Step 8: Return to the user EXEC mode.

R1#exit

Step 9: Enter the privileged EXEC mode again and observe the password.

*Password:**auciscolab***

R1>enable

R1#show running-config

(Observe! Password can be seen.)

Step 10: Return to the configuration mode.

R1#configure terminal

Step 11: Delete the password.

R1(config)#line console 0

R1(config-line)# no password

R1(config-line)# exit

R1(config)# exit

R1#disable

R1>enable *(Observe! Password is not required to login.)*

Step 12: Configure the enable secret password

R1(config)#enable secret **ausecretpass**

R1(config)#exit

Step 12: Return to the user EXEC mode.

R1#exit

Step 13: Enter the privileged EXEC mode again.

R1>enable

Password:**ausecretpass**

R1#

Step 14: Show the routers running configuration.

R1#show running-config

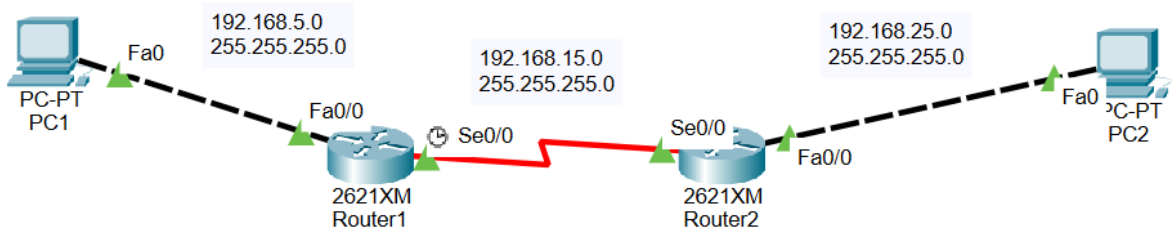
Step 15: Delete the secret password.

R1#configure terminal

R1(config)#no enable secret

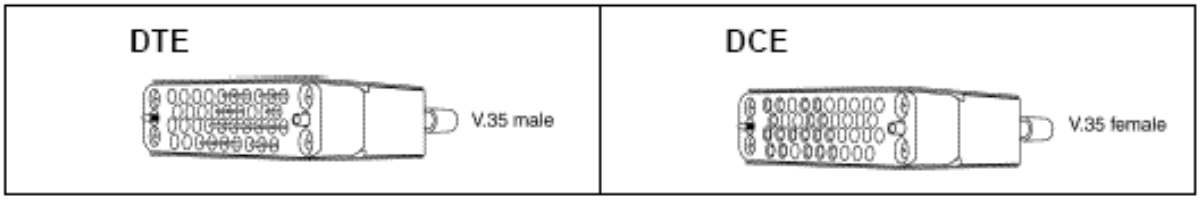
SECTION 2

Configuring the Serial and the FastEthernet Interface and Message-of-the-Day (MOTD) of a Router



Router Designation	Router Name	Interface Type	Serial 0/0 Address	Subnet Mask
Router1	**R1**	**DCE**	**192.168.15.1**	**255.255.255.0**
Router2	**R2**	**DTE**	**192.168.15.2**	**255.255.255.0**

Device	IP Address	Subnet Mask	Default Getaway
Router1	**(Fa0/0) – 192.168.5.1**	**255.255.255.0**	**N/A**
Router2	**(Fa0/0) – 192.168.25.1**	**255.255.255.0**	**N/A**
PC1	**192.168.5.10**	**255.255.255.0**	**192.168.5.1**
PC2	**192.168.25.10**	**255.255.255.0**	**192.168.25.1**



Objective:

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

Step 1: Design above architecture with CPT. (You need to mount WIC-2T serial module to connect two routers.)

Step 2: Configure the name of the Router 1 as "R1" and find out whether your connection is DCE or DTE?

R1# **show controller serial 0/0**

Step 3: Configure serial interface serial 0/0

R1(config)#**interface serial 0/0**

R1(config-if)#**ip address 192.168.15.1 255.255.255.0**

R1(config-if)#**clock rate 56000**

R1(config-if)#**no shutdown**

R1(config-if)#**exit**

Step 4: Configure fastEthernet interface 0/0 of R1

R1(config)#**interface fastEthernet 0/0**

R1(config-if)#**ip address 192.168.5.1 255.255.255.0**

R1(config-if)#**no shutdown**

R1(config-if)#**exit**

R1(config)#**exit**

Step 5: Display information about interfaces on R1

R1# **show ip interface brief**

Step 6: Configure the name of Router 2 as "R2"

Step 7: Configure serial interface serial 0/0 for Router 2 (There is no need for *clockrate* since the serial connection of Router 2 is a DTE interface.)

R2(config)#**interface serial 0/0**

R2(config-if)#**ip address 192.168.15.2 255.255.255.0**

R2(config-if)#**no shutdown**

R2(config-if)#**exit**

Step 8: Configure fastEthernet interface 0/0 of R2

R2(config)#**interface fastEthernet 0/0**

R2(config-if)#**ip address 192.168.25.1 255.255.255.0**

R2(config-if)#**no shutdown**

R2(config-if)#**exit**

R2(config)#**exit**

Step 9: Display information about interfaces on R2

R2# **show ip interface brief**

Step 10: Verify that the serial connection is functioning

R1#**ping 192.168.15.2**

R2#**ping 192.168.15.1**

Step 11: Verify that all connections are functioning (It will not work, probably. We will see how to make it work in the next week.)

PC1>ping 192.168.25.10

PC2>ping 192.168.5.10

Step 12: Enter Global Configuration mode

R1#**configure terminal**

Step 13: Display help for the **banner motd** command

R1(config)#**banner motd ?**

Step 14: Choose the text for the MOTD

Step 15: Enter the desired banner message

R1(config)#**banner motd ! message !**

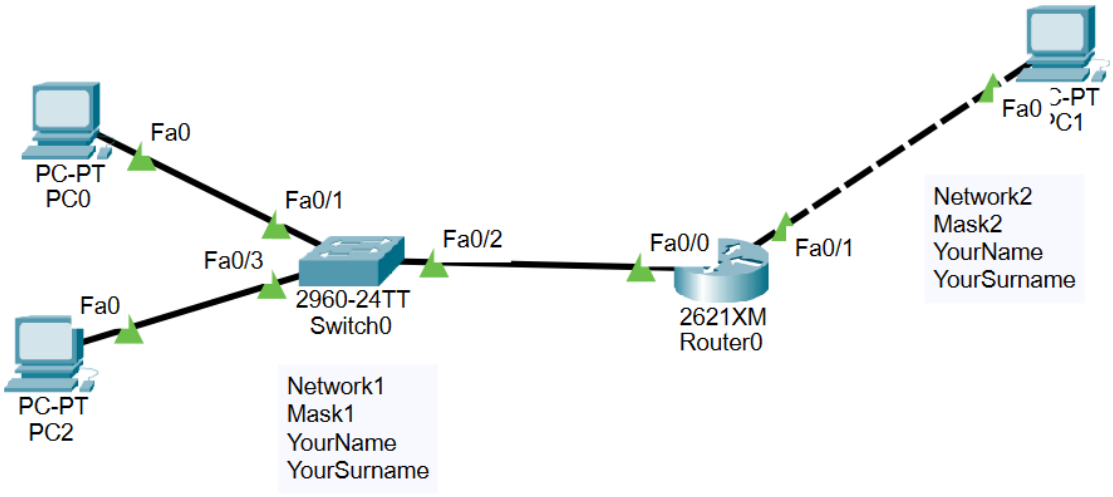
Step 16: Test the MOTD display

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 17: Verify the MOTD by looking at the router configuration

R1#**show running-config**

Homework:



- **Establish above schema.**
- **Identify 2 different networks and masks.**
- **Do not forget the fill notes to prove that this is your own work.**
- **Take a screenshot.**
- **Make sure use CLI to configure routers FastEthernet ports and copy your CLI codes to the homework sheet.**
- **Load your homework as a ONE pdf file.**
- **You have one week.**