Lab 5: Objective:

Part A: Assigning IP Address to the Different Intermediary Devices
Part B: Establishing the TELNET Session between the Intermediary & End Device

Lab 5

IP Assigning and TELNET

Part A: Assigning IP Address to the Different Intermediary Devices

Figure 1

Task –1, Drag a Router & a switch
Drag a Router & a switch with respect to the Topology diagram (figure 1)

Task –2, Router 1CLI
Click on the Router 1 and select CLI Tab

Task –3, Configure the Fast Ethernet Interface
Configure the Fast Ethernet Interface from the router so that it would show Green signal & acknowledge each other
--- System Configuration Dialog ---

Continue with configuration dialog? [yes/no]: **N**

Press RETURN to get started! (Press Enter Key)

Router>enable   (Press enter key)
Router#
Router# configure terminal (press Enter)
Enter configuration commands, one per line. End with CNTL/Z.
Router (config)#
Router(config)#interface FastEthernet 0/0
Router(config-if)#ip address 11.0.0.1 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#End

Task –4, PING

Router#ping 11.0.0.1
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 11.0.0.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 10/14/30 ms

2950-24
Switch2

1841
Router1

Part B: Establishing the TELNET Session between the Intermediary & End Device

TELNET:

Telnet is a protocol that allows you to connect to remote computers (called hosts) over a TCP/IP network (such as the internet). Using telnet client software on your computer, you can make a connection to a telnet server (that is, the remote host). Once your telnet client establishes a connection to the remote host, your client becomes a virtual terminal, allowing you to communicate with the remote host from your computer. In most cases, you'll need to log into the remote host, which requires that you have an account on that system. Occasionally, you can log in as guest or public without having an account.
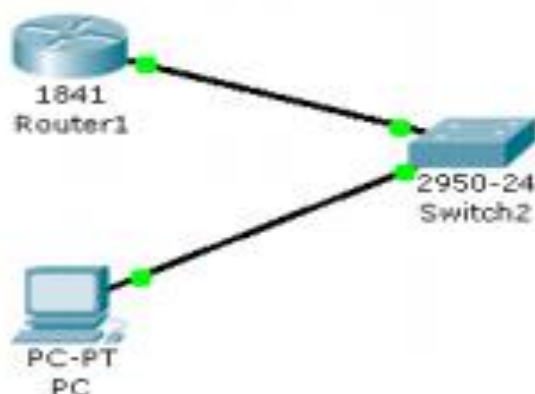

Figure 2

Note: when establishing a TELNET session Between Intermediary device and End Devices from Command prompt three Passwords are required.

1) Enable password
2) Line console password
3) Line VTY password

Task –1, Design

Design the Topology with respect to the diagram (figure 2)

Task –2, Assign the password

Assign the password to the router so that PC can establish the TELNET session from command prompt.

Router>enable
Router#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Enable Password
Router(config)#enable password cisco

Line Console Password
Router(config)#line console 0
Router(config-line)#password cisco
Router(config-line)#login

Line VTY password
Router(config-line)#exit
Router(config)#line vty 0 4
Router(config-line)#password cisco
Router(config-line)#end

Task –3, Router IP
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface fastEthernet 0/0
Router(config-if)#ip address 11.0.0.1 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#end
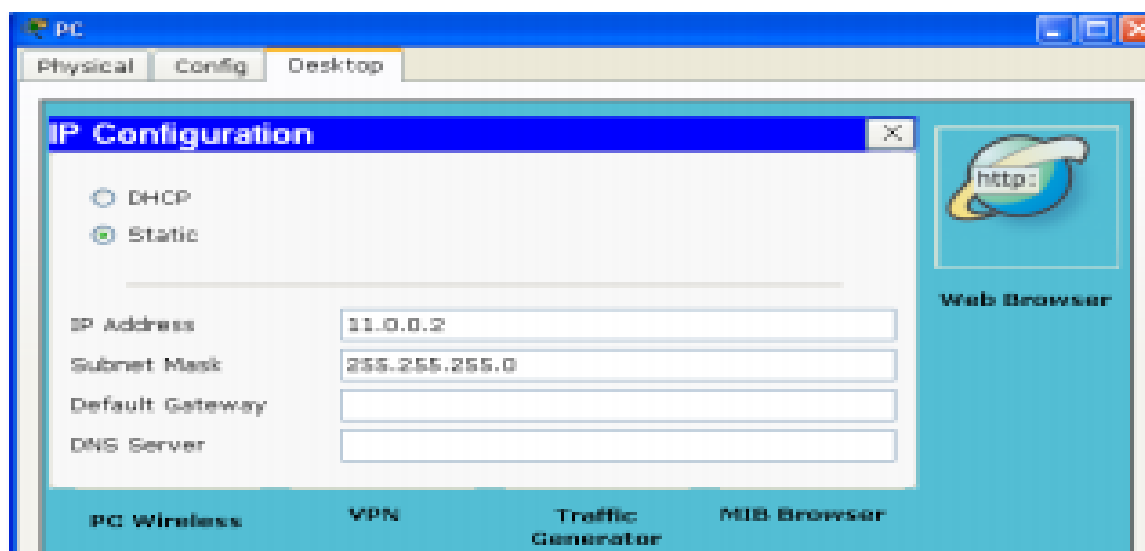
Task –4, IP to PC
Assign the IP Address to the PC

Figure 3

Task –5, Verify TELNET

Finally Open the Command Prompt from the PC.

PC>telnet 11.0.0.1
Trying 11.0.0.1 ...Open

User Access Verification

Password: cisco   (password will not be shown in the Command prompt)
Router>
This would be your final result and in the end it should be 100%

Lab 5 Exercise:

Design a ring network which consists of 4 routers. Use serial cable between routers. Attach a single PC with each router. You have to establish TELNET session by setting all three passwords which should be on your name.