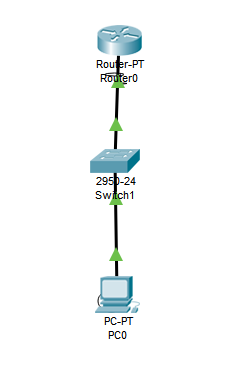
**LAB#08**

**CONFIGURE REMOTE ACCESS**

**Objective:** To prepare Router for remote access by the Telnet and SSH method

**Configure Router for Basic Telnet session**

**Telnet** permits a user to connect to an account on a remote machine. A client program running on the user’s machine communicates using the Telnet protocol with a server program running on the remote machine.



**Exercise#01**

***Virtual type terminal (VTY)*** lines are used for Telnet and Secure Shell (SSH) access. The VTY lines are disabled by default. You need to specify a password for the VTY lines to enable them.

* **Type these commands for configuration**

The *line Vty 0-15* command selects the whole 0-15 VTY line range.

Router(config)#**line vty 0 15**

Router(config-line)#**password cisco**

Router(config-line)#**login**

Router(config-line)#**enable secret $suet**

* **Apply commands these command by following above**

Router(config)#**interface fa 0/0**

Router(config-if)#**ip address 10.0.0.1 255.0.0.0**

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

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

* **Telnet Cisco device, go to command prompt of computer and type**

C:\>telnet 10.0.0.1

Connecting To 10.0.0.1

User Access Verification

Password:

Router>

**Exercise#02**

**Configure Router for secure remote session**

**SSH** acronyms for“Secure Shell”. It provides a secure mechanism to connect to another machine over a network. This allows you to control a remote computer over the internet without exposing the connection to other people.

* **Create a local user name**

Router(config)#**username ssuet password ccn**

* **Assign a domain name**

Router(config)#**ip domain-name ssuet.com**

* **Assign a host name**

Router(config)#**hostname ccn**

* **Following Command takes few a min to generate key**

**SSH** uses encryption keys to encrypt the data exchanged in an SSH session.

ccn(config)#**crypto key generate rsa**

How many bits in the modulus [512]: **768**

ccn(config)#**enable password cisco**

* **Configure vty ports for using SSH**

Router(config-line)#**line vty 0 15**

Router(config-line)#**login local**

Router(config-line)#**transport input ssh**

* **Apply these commands**

Router(config)# **interface FastEthernet 0/0**

Router(config-if)# **ip address 10.0.0.1 255.0.0.0**

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

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

* **Creating SSH session with Cisco device, , go to command prompt and type**

C:\>**SSH -L ssuet 10.0.0.1**

Open

* **Enter the password configured in step 1**

Password:

Router>

* **Verification of SSH**

Router# **show crypto key mypubkey rsa**

Router#**show line**

Tty Typ Tx/Rx A Modem Roty AccO AccI Uses Noise Overruns Int

0 CTY - - - - - 0 0 0/0 -

129 AUX 9600/9600 - - - - - 0 0 0/0 -

**\*** 130 VTY - - - - - 67 0 0/0 -

131 VTY - - - - - 0 0 0/0 -

132 VTY - - - - - 0 0 0/0 -

133 VTY - - - - - 0 0 0/0 -

134 VTY - - - - - 0 0 0/0 -

135 VTY - - - - 0 0 0/0 -

136 VTY - - - - - 0 0 0/0 -

137 VTY - - - - - 0 0 0/0 -

138 VTY - - - - - 0 0 0/0 -

139 VTY - - - - - 0 0 0/0 -

140 VTY - - - - - 0 0 0/0 -

141 VTY - - - - - 0 0 0/0 -

142 VTY - - - - - 0 0 0/0 -

143 VTY - - - - - 0 0 0/0 -

144 VTY - - - - - 0 0 0/0 -

145 VTY - - - - - 0 0 0/0 -

* **‘\*’ shows the active telnet Session**

Router# **show users**

Line User Host(s) Idle Location

0 con 0 idle 00:00:00

\* 67 vty 0 ssuet idle 00:00:45

* **To close telent conection**

Router#**clear line vty 0**

**EXERCISE QUESTIONS:**

**1.** Write difference between Telnet and SSH

**2.** Name the encryption techniques use for key encryption

**3.** What are the ports numbers for Telnet and SSH?

**4.** Why do we use***‘login’*** command after setting password on VTY lines?