

## Experiment No. 6

Aim: To perform remote login using Telnet server.

Requirement: Windows/Linux OS in P.C., CISCO Packet Tracer.

Theory:

Telnet:

Telnet is a network protocol used to virtually access a computer and to provide a two-way, collaborative and text-based communication channel between two machines. It follows a user command Transmission Control Protocol/Internet Protocol (TCP/IP) networking protocol for creating remote sessions. On the web, Hypertext Transfer Protocol (HTTP) and File Transfer Protocol (FTP) simply enable users to request specific files from remote computers, while, through Telnet, users can log on as a regular user with the privileges they are granted to the specific applications and data on that computer.

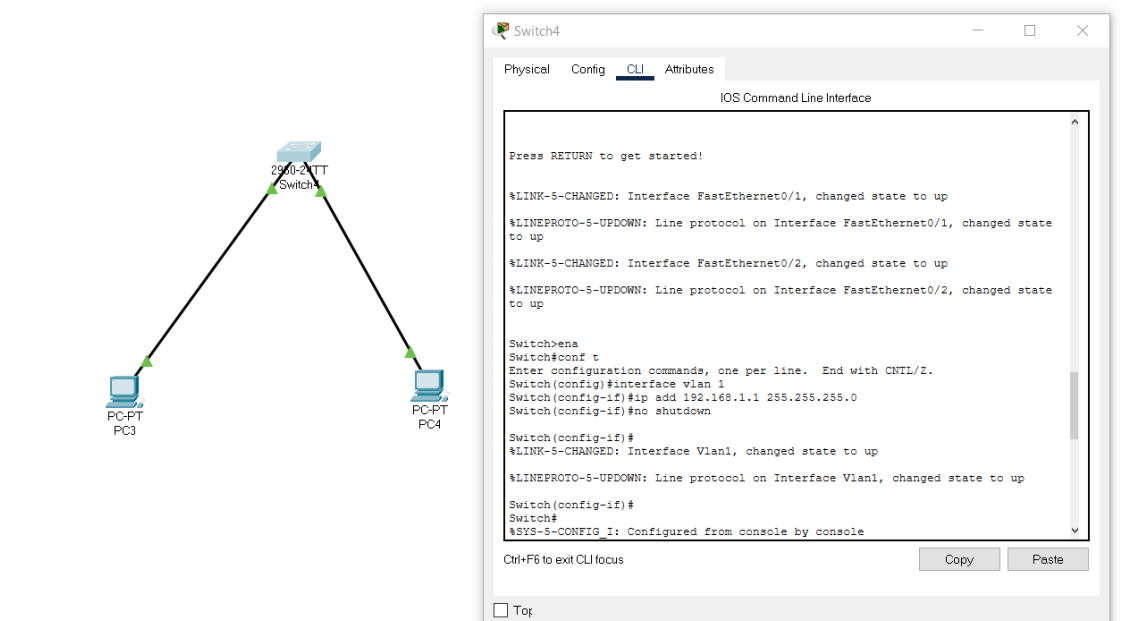
Telnet Working:

Telnet is a type of client-server protocol that can be used to open a command line on a remote computer, typically a server. Users can utilize this tool to ping a port and find out whether it is open. Telnet works with what is called a virtual terminal connection emulator, or an abstract instance of a connection to a computer, using standard protocols to act like a physical terminal connected to a machine.

Users connect remotely to a machine using Telnet, sometimes referred to as Telnetting into the system. They are prompted to enter their username and password combination to access the remote computer, which enables the running of command lines as if logged in to the computer in person. Despite the physical location of users, their IP address will match the computer logged in to rather than the one physically used to connect.

Telnet using CISCO Packet Tracer:

### 1) Configuring Switch:



## 2) Pinging switch from PC3 and PC4:

[Root]

Diagram showing a 2950-24TT Switch connected to PC-PT PC3 and PC-PT PC4. The switch is labeled '2950-24TT Switch4'.

PC3 Command Prompt Output:

```

Packet Tracer PC Command Line 1.0
C:\>ping 192.168.1.1

Pinging 192.168.1.1 with 32 bytes of data:

Request timed out.
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255

Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
C:\>

```

PC4 Command Prompt Output:

```

Packet Tracer PC Command Line 1.0
C:\>ping 192.168.1.1

Pinging 192.168.1.1 with 32 bytes of data:

Request timed out.
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255

Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
C:\>

```

Cooper Straight-Through

## 3) Configuring switch(Telnet Server) for remote login using Telnet:

Diagram showing a 2950-24TT Switch connected to PC-PT PC3 and PC-PT PC4. The switch is labeled '2950-24TT Switch4'.

Switch4 CLI Output:

```

IOS Command Line Interface

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up
%LINK-5-CHANGED: Interface FastEthernet0/2, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to up

Switch>ena
Switch#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#interface vlan 1
Switch(config-if)#ip add 192.168.1.1 255.255.255.0
Switch(config-if)#no shutdown

Switch(config-if)#
%LINK-5-CHANGED: Interface Vlan1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan1, changed state to up

Switch(config-if)#
Switch#
%SYS-5-CONFIG_I: Configured from console by console

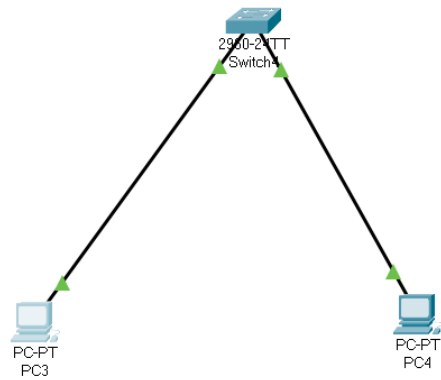
Switch#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#line vty 0 4
Switch(config-line)#login local
Switch(config-line)#user adnan password adnan
Switch(config)#enable password adnan
Switch(config)#

```

Ctrl+F6 to exit CLI focus

Copy Paste

#### 4) Remote login from PC3 to Telnet Server using telnet command:



```
Physical  Config  Desktop  Programming  Attributes
Command Prompt

Packet Tracer PC Command Line 1.0
C:\>ping 192.168.1.1

Pinging 192.168.1.1 with 32 bytes of data:

Request timed out.
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255

Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>telnet 192.168.1.1
Trying 192.168.1.1 ...Open

User Access Verification

Username: adnan
Password:
Switch>ena
Password:
Switch#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Switch(config)#
```

Conclusion: We have successfully remote login from P.C. to Telnet Server by performing proper configuration in CISCO Packet Tracer.