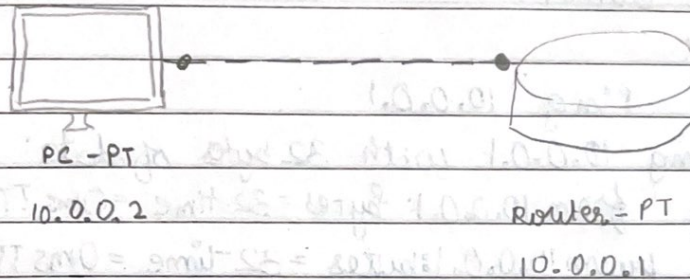


TELNET

Aims - To understand the operation of TELNET by accessing the router in server room from a PC in IT office.

Topology:



Procedure:

- Create a topology as shown, a PC-PT & a router
- Configure the IP address & gateway for PC0
- Configure the router by executing the following commands:

Step 1: enable.

Step 2: config T

Step 3: host name p1

Step 4: enable secret p1

Step 5: interface fa 0/0

Step 6: ip address 10.0.0.1 255.0.0.0

Step 7: No shut

Step 8: line vty 0 5

Step 9: login

Step 10: password po

Step 11: exit, exit

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Step 12: C08

Ping message to router

Password for user Access Verification is p0

password for enable is p1

Accessing router CLI from PC

Show ip route

PING OUTPUT:

PC > Ping 10.0.0.1

Pinging 10.0.0.1 with 32 bytes of data:

Reply from 10.0.0.1: bytes = 32 time = 0ms TTL = 255

Reply from 10.0.0.1: bytes = 32 time = 0ms TTL = 255

Reply from 10.0.0.1: bytes = 32 time = 0ms TTL = 255

Reply from 10.0.0.1: bytes = 32 time = 0ms TTL = 255

Ping statistics for 10.0.0.1

Packets sent = 4 Received = 4 loss = 0 (0% loss)

Approximate round trip times in milliseconds:

minimum = 0ms, Maximum = 0ms, Average = 0ms

PC > Telnet 10.0.0.1

Typing 10.0.0.1 ... open

User access verification

Password: P0

P1 > enable

Password: P1

R1 # show ip route

C 10.0.0.0/8 is directly connected, FastEthernet0/24

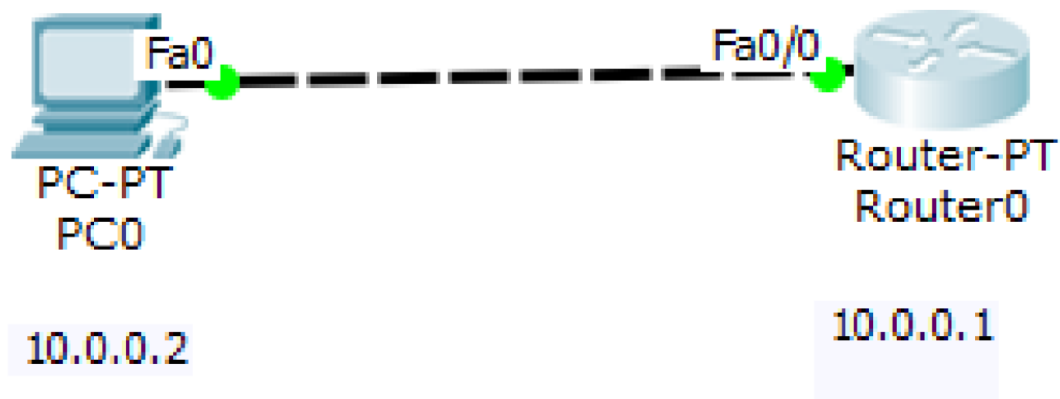
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Observation:

- TELNET stands for Teletype Network. It is a type of protocol that enables one computer to connect to the local computer.
- It is used as a standard TCP/IP protocol for virtual terminal service provided by ISO.
- TELNET operates on a client/server principle.

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IOS Command Line Interface

```
Router>en
Router#cong t
      ^
% Invalid input detected at '^' marker.

Router#config t
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#hostname r1
r1(config)#enable secret pl
r1(config)#interface fa0/0
r1(config-if)#ip address 10.0.0.1 255.0.0.0
r1(config-if)#no shut

r1(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to
up

r1(config-if)#line vty 0 5
r1(config-line)#login
% Login disabled on line 132, until 'password' is set
% Login disabled on line 133, until 'password' is set
% Login disabled on line 134, until 'password' is set
% Login disabled on line 135, until 'password' is set
% Login disabled on line 136, until 'password' is set
% Login disabled on line 137, until 'password' is set
r1(config-line)#password p0
r1(config-line)#
r1(config-line)#exit
r1(config)#exit
r1#
```

Command Prompt

```
Packet Tracer PC Command Line 1.0
```

```
PC>ping 10.0.0.1
```

```
Pinging 10.0.0.1 with 32 bytes of data:
```

```
Reply from 10.0.0.1: bytes=32 time=1ms TTL=255
```

```
Reply from 10.0.0.1: bytes=32 time=0ms TTL=255
```

```
Reply from 10.0.0.1: bytes=32 time=0ms TTL=255
```

```
Reply from 10.0.0.1: bytes=32 time=3ms TTL=255
```

```
Ping statistics for 10.0.0.1:
```

```
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
```

```
Approximate round trip times in milli-seconds:
```

```
    Minimum = 0ms, Maximum = 3ms, Average = 1ms
```

Command Prompt



Ping statistics for 10.0.0.1:

Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),

Approximate round trip times in milli-seconds:

Minimum = 0ms, Maximum = 3ms, Average = 1ms

PC>telnet 10.0.0.1

Trying 10.0.0.1 ...Open

User Access Verification

Password:

Password:

rl>en

Password:

rl#show ip route

Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP

D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area

N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2

E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP

i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter

area

* - candidate default, U - per-user static route, o - ODR

P - periodic downloaded static route

Gateway of last resort is not set

C 10.0.0.0/8 is directly connected, FastEthernet0/0

rl#