

18/12/2024

Experiment 10- To understand the operation of TELNET by accessing the router in server room from a PC in IT office.

Observation Book:

Experiment No: 10 30

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

Topology -

```
graph TD
    Router((Router  
10.0.0.2)) --- Fa0_0[Fa0/0]
    Fa0_0 --- Fa0[Fa0]
    Fa0 --- PC[PC  
10.0.0.1]
```

procedure:

1. open cisco packet tracer
2. Setup the chain as shown in figure
3. Assign IP address to PCs
4. Setup router in CLI, open CLI  
enter -> enable -> config terminal ->  
hostname R1 -> enable secret & passwords  
-> interface fa0/0 ->  
IP address 10.0.0.2 255.0.0.0 ->  
no shutdown -> link 0 3 ->  
login -> password -> & passwords ->  
exit -> wr (7b server changes in  
router) [done].
5. go to cmd in PC and ping 10.0.0.2
6. After 1st ping new type telnet 10.0.0.2

Result -

[ping]

pinging 10.0.0.2 32 bytes of data.

Reply from 10.0.0.2: bytes=32,  
time=0ms, TTL=255.

ping statistics

[TELNET]

pinging 10.0.0.2 -- open

ascii access configuration

enter passwords

R1> enable

password: <password>

R1# show ip route

Gateway of last route is not set

C: 10.0.0.8 is directly connected to 0/0

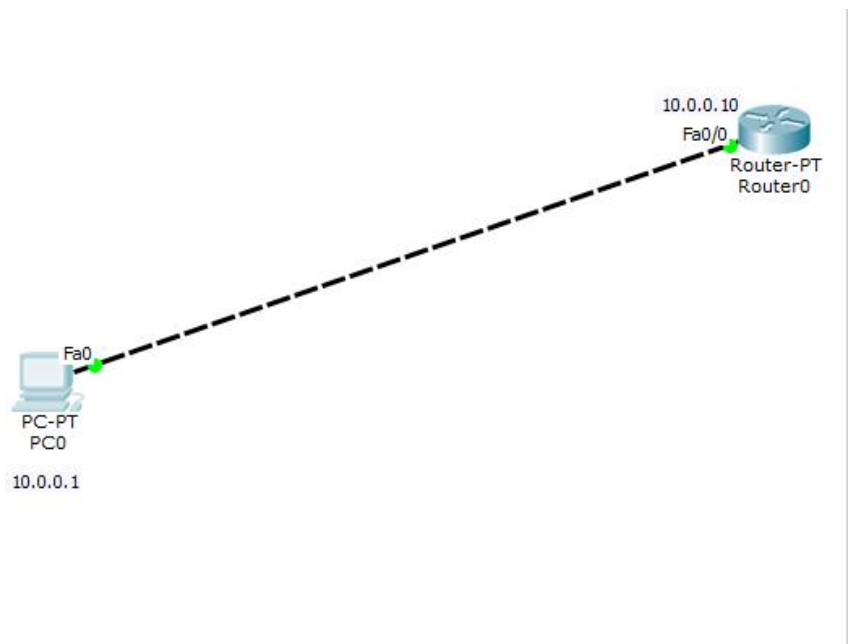
R1#

observation:

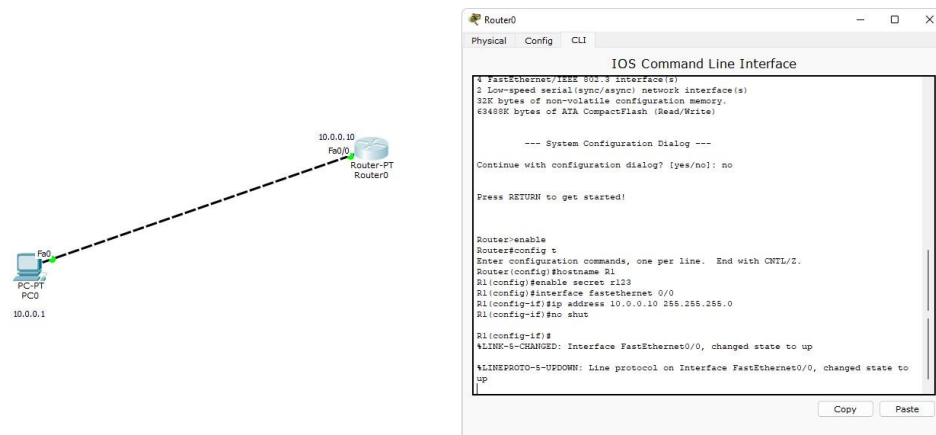
Telnet is a text based protocol that enables remote communication over TCP/IP network. It allows the execution of commands on a remote device, it is used for initial setup or management. In the experiment above we set telnet config and commands executed via telnet terminal. This can be done directly on the router but through interface is not. disadvantage is that Telnet lacks encryption making it less secure compared to SSH.

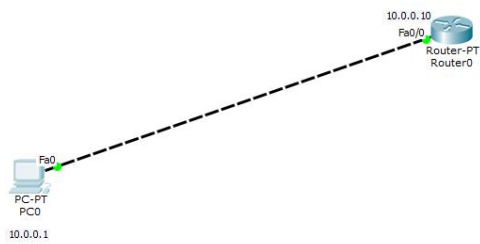
By the  
author

## Topology:

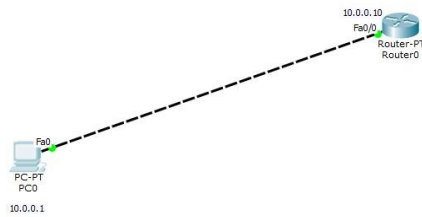


## Output:





```
PC0
Physical Config Desktop Custom Interface
Command Prompt
Packet Tracer PC Command Line 1.0
PC> ping 10.0.0.10
Pinging 10.0.0.10 with 32 bytes of data:
Reply from 10.0.0.10: bytes=32 time=0ms TTL=255
Reply from 10.0.0.10: bytes=32 time=3ms TTL=255
Reply from 10.0.0.10: bytes=32 time=1ms TTL=255
Reply from 10.0.0.10: bytes=32 time=0ms TTL=255
Ping statistics for 10.0.0.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 3ms, Average = 1ms
PC>
```



```
PC0
Physical Config Desktop Custom Interface
Command Prompt
Pinging 10.0.0.10 with 32 bytes of data:
Reply from 10.0.0.10: bytes=32 time=0ms TTL=255
Reply from 10.0.0.10: bytes=32 time=3ms TTL=255
Reply from 10.0.0.10: bytes=32 time=1ms TTL=255
Reply from 10.0.0.10: bytes=32 time=0ms TTL=255
Ping statistics for 10.0.0.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 3ms, Average = 1ms
PC>telnet 10.0.0.10
Trying 10.0.0.10 ...Open

User Access Verification
Password:
R1>
R1>enable
Password:
R1#
```