

18/12/2024

Experiment 10

Observation Book:

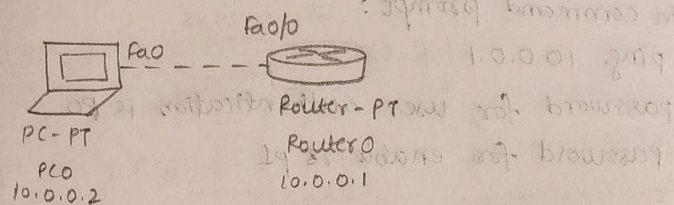
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exp-10

Question: To construct/understand the operation of TELNET

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

Topology:



A router connected to a single PC via a fastethernet interface with copper cross-over cable.

* Procedure:

1. Open Cisco packet tracer and drag a PC and a router.
2. Connect the PC to the router via fastethernet interface with a copper cross-over cable.
3. Assign the IP address to the PC - 10.0.0.2 with gateway as 10.0.0.1

Configure the router:

```
Router > enable
```

```
Router#config t
```

```
Router(config)# hostname R1
```

```
R1(config)# enable secret P1
```

```
R1(config)# interface fastethernet 0/0
```

```
R1(config-if)# ip address 10.0.0.1 255.0.0.0
```

```
R1(config-if)# no shut
```

```
R1(config-if)# line vty 0 5
```

```
R1(config-if)# login
```

```
R1(config-line)# password P0
```

```
R1(config-line)# exit
```

```
R1(config)# exit
```

```
R1# wr
```

On command prompt:

```
ping 10.0.0.1
```

password for user authentication is P0

password for enable is P1

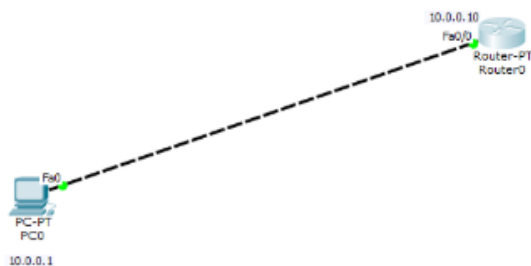
Observations:

Telnet is a protocol for remote access to servers.

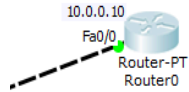
It allows command-line communication over a network.

The PC is able to send the data to the router and indicates that the gateway is available and connected.

Topology:



Output:



```
Router0
Physical Config CLI
IOS Command Line Interface

Router>enable
Router#config t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#hostname R1
R1(config)#enable secret r123
R1(config)#interface fastethernet 0/0
R1(config-if)#ip address 10.0.0.10 255.255.255.0
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
line vty 0 3
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
R1(config-line)#password pl
R1(config-line)#exit
R1(config)#exit
R1#
%SYS-5-CONFIG_I: Configured from console by console
wr
Building configuration...
[OK]
R1#
```

```
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>
```

