

20/8/23

Experiment - 11

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

Topology:



PC0
10.0.0.2



Router1
10.0.0.1

Procedure:-

- 1) configure topology as above. use copper ~~straight~~^{cross over} through wire. IP address of PC & gateway and router configuration as normal.

In Router (R1)

Router> enable

Router # config t

Router(Config) # hostname R1

R1(Config) # enable secret p1

R1(Config) # interface fastethernet 0/0

R1(Config) # ip address 10.0.0.1 255.0.0.0

R1(Config-if) # no shut

R1(Config-if) # line vty 0 5

R1(Config-line) # login

1. login disabled on line 132, until 'password' is set

1. login disabled on line 133, until 'password' is set

1. login disabled on line 134, until 'password' is set

1. login disabled on line 135, until 'password' is set

1. login disabled on line 136, until 'password' is set

1. login disabled on line 137, until 'password' is set

R1(Config-line) # password p0

R1(Config-line) # exit

PTO

Y1# wr

Building configuration...

[OK]

Y1#

Result: in PC

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, lost=0 (0% loss),

Approximate round trip time in milliseconds:

Minimum=0ms, Maximum=0ms, Average=0ms

PC > telnet 10.0.0.1

Trying 10.0.0.1... open

User Access Verification

Password: (typed P0)

P1 > enable

Password: (typed P1)

Y1# show ip route

Code:

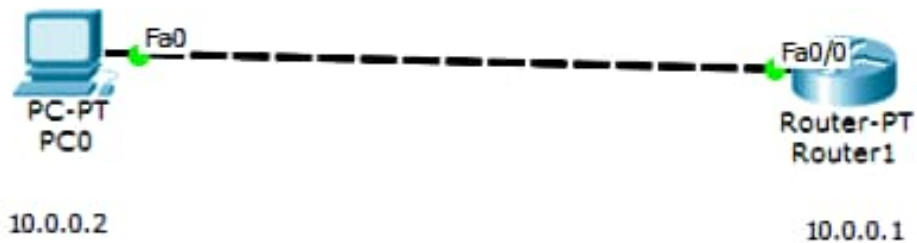
Gateway of last resort is not set

C 10.0.0.0/8 is directly connected, FastEthernet

Y1#

Observation:-

- i) TELNET is used by terminal emulation programs that allow you to log into a remote host.
- ii) we logged into 10.0.0.1 through 10.0.0.2 device.
- iii) The password when typed is not visible.



```
Cisco Internetwork Operating System Software
IOS (tm) PT1000 Software (PT1000-I-M), Version 12.2(28), RELEASE SOFTWARE (fc5)
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2005 by cisco Systems, Inc.
Compiled Wed 27-Apr-04 19:01 by miwang
```

```
PT 1001 (PTSC2005) processor (revision 0x200) with 60416K/5120K bytes of memory
```

```
Processor board ID PT0123 (0123)
```

```
PT2005 processor: part number 0, mask 01
```

```
Bridging software.
```

```
X.25 software, Version 3.0.0.
```

```
4 FastEthernet/IEEE 802.3 interface(s)
```

```
2 Low-speed serial(sync/async) network interface(s)
```

```
32K bytes of non-volatile configuration memory.
```

```
63488K bytes of ATA CompactFlash (Read/Write)
```

```
--- System Configuration Dialog ---
```

```
Continue with configuration dialog? [yes/no]: n
```

```
Press RETURN to get started!
```

```
Router>enable
```

```
Router#config t
```

```
Enter configuration commands, one per line. End with CNTL/Z.
```

```
Router(config)#hostname rl
```

```
rl(config)#enable secret p1
```

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

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

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

```
rl(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
```

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

```
rl(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
```

```
rl(config-line)#password p0
```

```
rl(config-line)#
```

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

```
rl(config)#exit
```

```
rl#
```

```
%SYS-5-CONFIG_I: Configured from console by console
```

```
rl#wr
```

```
Building configuration...
```

```
[OK]
```

```
rl#
```


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=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, Lost = 0 (0% loss),

Approximate round trip times in milli-seconds:

Minimum = 0ms, Maximum = 0ms, Average = 0ms

PC>telnet 10.0.0.1

Trying 10.0.0.1 ...Open

User Access Verification

Password:

rl>enable

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#