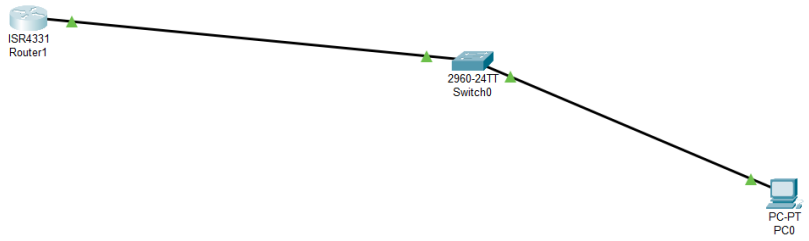
Marwadi University Marwadi Chandarana Group	**Marwadi University** **Faculty of Engineering and Technology** **Department of Information and Communication Technology**	
Subject: Computer Networks (01CT0503)	**Aim: Configure the router to secure the port and Telnet from unauthorized users. Analyze enable secret and password login commands in detail**	
Experiment No: 04	**Date:**	**Enrolment No: 92301733041**

Aim: Configure the router to secure the port and Telnet from unauthorized users. Analyze enable secret and password login commands in detail.

Step 1: make physical connection of router, switch, and pc using straight copper cable



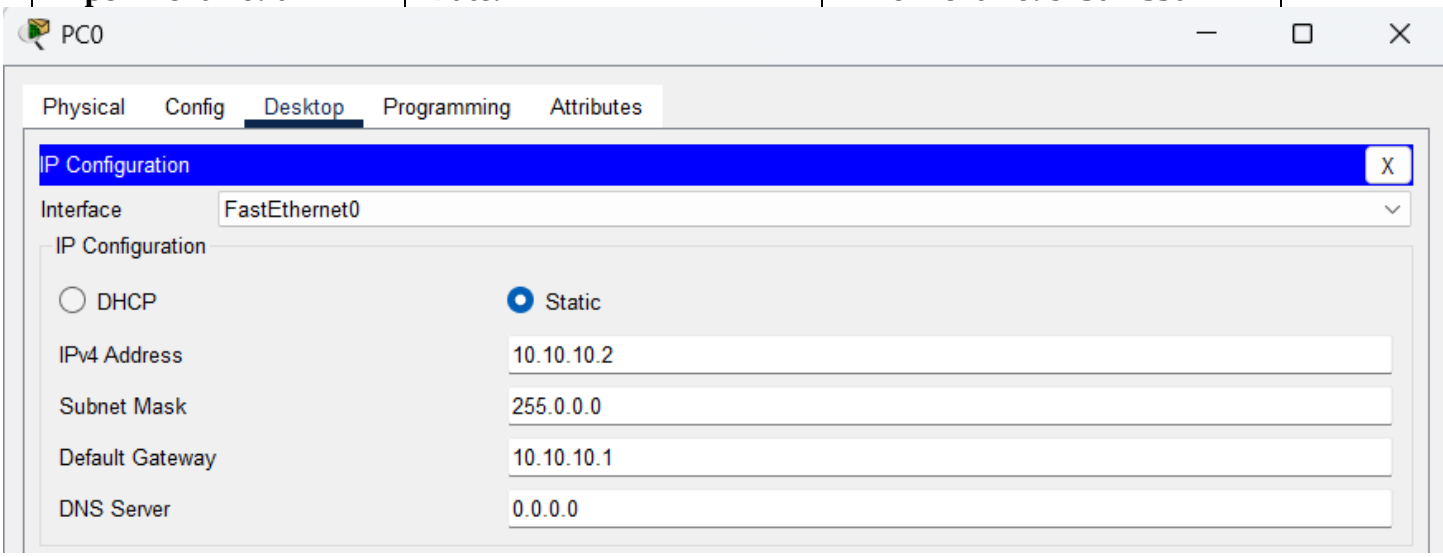
Step 2: select that port where u have made connection and assign the IP address to that port also assign the IP add and subnet mast and gateway(ip add of router port)to the pc.

```
Router>en
Router>enable
Router#config t
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#int g0/0/0
Router(config-if)#ip add 10.10.10.1 255.0.0.0
Router(config-if)#no shut

Router(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0/0, changed state to up
```

Marwadi University Marwadi Chandarana Group	**Marwadi University** **Faculty of Engineering and Technology** **Department of Information and Communication Technology**	
Subject: Computer Networks (01CT0503)	**Aim: Configure the router to secure the port and Telnet from unauthorized users. Analyze enable secret and password login commands in detail**	
Experiment No: 04	**Date:**	**Enrolment No: 92301733041**



Step 3:config the router

1.firstly here I secure the mode by using enable secret command

```
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#enable sec
Router(config)#enable secret 1011
Router(config)#
```

2.and then secure the physical(console) and remote lines

```
Router>en
Router>enable
Password:
Router#conf
Router#config t
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#line conso
Router(config)#line console 0
Router(config-line)#pa
Router(config-line)#pass
Router(config-line)#password 7077
Router(config-line)#login
Router(config-line)#exit
Router(config)#ex
Router(config)#exit
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#exit
```

```
Router>enable
Router#config t
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#enable sec
Router(config)#enable secret 1011
Router(config)#line vty 0 2
Router(config-line)#password 333
Router(config-line)#login
Router(config-line)#
```

Step 4: check the connectivity after doing connection and configuration

```
C:\>ping 10.10.10.1

Pinging 10.10.10.1 with 32 bytes of data:

Reply from 10.10.10.1: bytes=32 time<1ms TTL=255
Reply from 10.10.10.1: bytes=32 time=1ms TTL=255
Reply from 10.10.10.1: bytes=32 time<1ms TTL=255
Reply from 10.10.10.1: bytes=32 time<1ms TTL=255

Ping statistics for 10.10.10.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms
```

Step 5: Now connect the router from pc using remote access and CLI command will use is Telnet for this purpose.

Marwadi University Marwadi Chandarana Group	**Marwadi University** **Faculty of Engineering and Technology** **Department of Information and Communication Technology**	
Subject: Computer Networks (01CT0503)	**Aim: Configure the router to secure the port and Telnet from unauthorized users. Analyze enable secret and password login commands in detail**	
Experiment No: 04	**Date:**	**Enrolment No: 92301733041**

```
C:\>telnet 10.10.10.1
Trying 10.10.10.1 ...Open


User Access Verification

Password:
Router>enable
Password:
Router#show running config
                  ^
% Invalid input detected at '^' marker.

Router#show running-\config
                  ^
% Invalid input detected at '^' marker.

Router#show running-config
Building configuration...

Current configuration : 757 bytes
!
version 15.4
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname Router
!
```

Here it is able to connect with that router and it is asking for authentication that we had done it before.

Step 6: Now make some change in router's configuration and cross check it.

```
Router#
Router#config t
Enter configuration commands, one per line.  End with CNTL/Z
Router(config)#hostname MJ
MJ(config)#exit
MJ#exit
```

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

User Access Verification

Password:

MJ>ena
Password:
Password:
MJ#
```

In both side the hostname is changed so its working perfectly.

Conclusion: In this exp I came to know about the connection between router and pc using switch and via remotely. Also, I learnt how to secure the router access using ‘enable secret’ command and console lines and remote access using ‘’password login’ command. After assigning IP add to one of the ports of router, we have to active it using ‘no shut’ command. Then checked the connectivity between pc and router using ‘ping’ command and then connect the router remotely using ‘telnet’ command and after running it asked for authentication.