

Basic Firewall Configuration in Cisco Packet Tracer

AIM: To Configure and Verify Firewall in Cisco Packet Tracer.

Step 1: First, open the Cisco packet tracer desktop and select the devices given below:

S.NO	DEVICE	MODEL NAME	QUANTITY
1.	PC	PC	3
2.	Server	PT-Server	1
3.	Switch	PT-Switch	1

IP Addressing Table:

S.NO	DEVICE	IPv4 ADDRESS	SUBNET MASK
1.	Server	1.0.0.1	255.0.0.0
2.	PC0	1.0.0.2	255.0.0.0
3.	PC1	1.0.0.3	255.0.0.0
4.	PC2	1.0.0.4	255.0.0.0

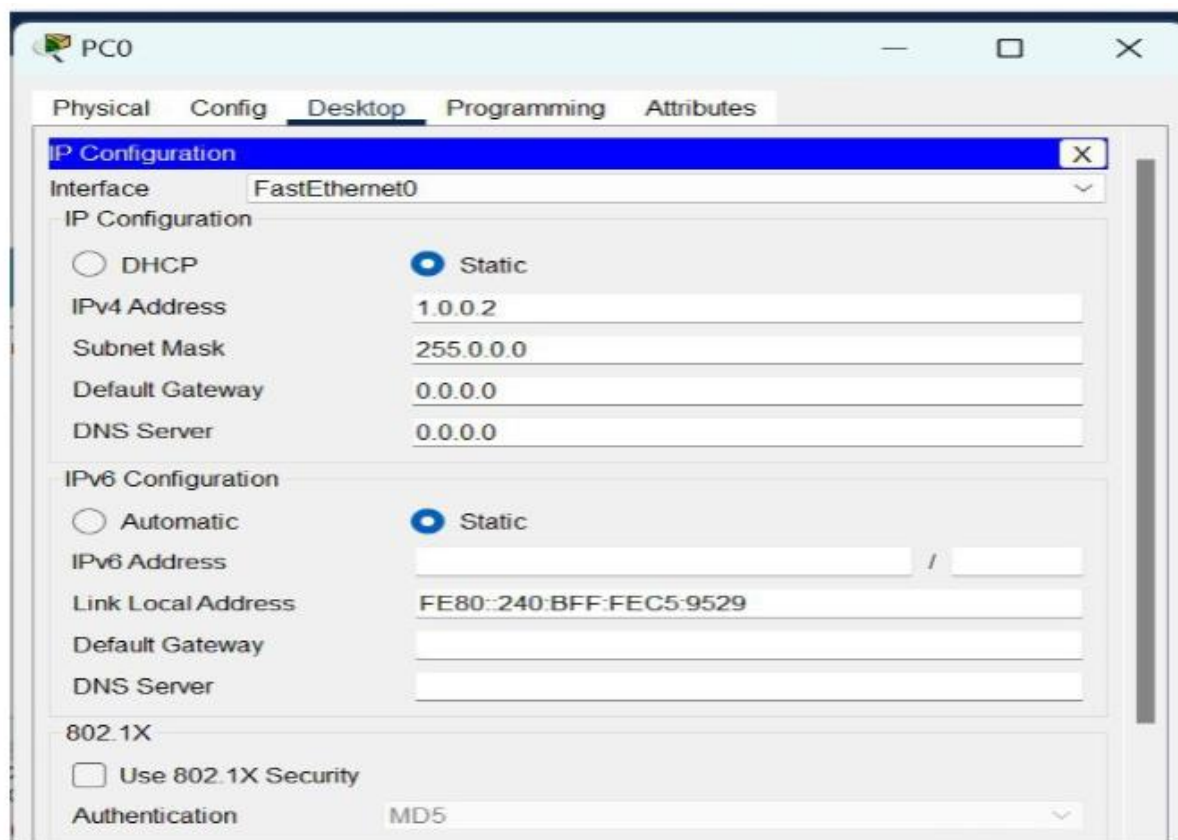
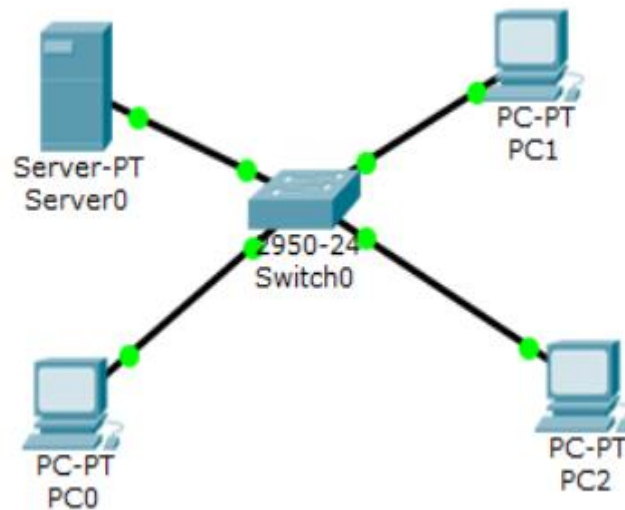
- ☐ Then, create a network topology as shown below the image.
- ☐ Use an Automatic connecting cable to connect the devices with others.

Step 2: Configure the PCs (hosts) and server with IPv4 address and Subnet Mask according to the IP addressing table given above.

- ☐ To assign an IP address in PC0, click on PC0.
- ☐ Then, go to desktop and then IP configuration and there you will IPv4

configuration.

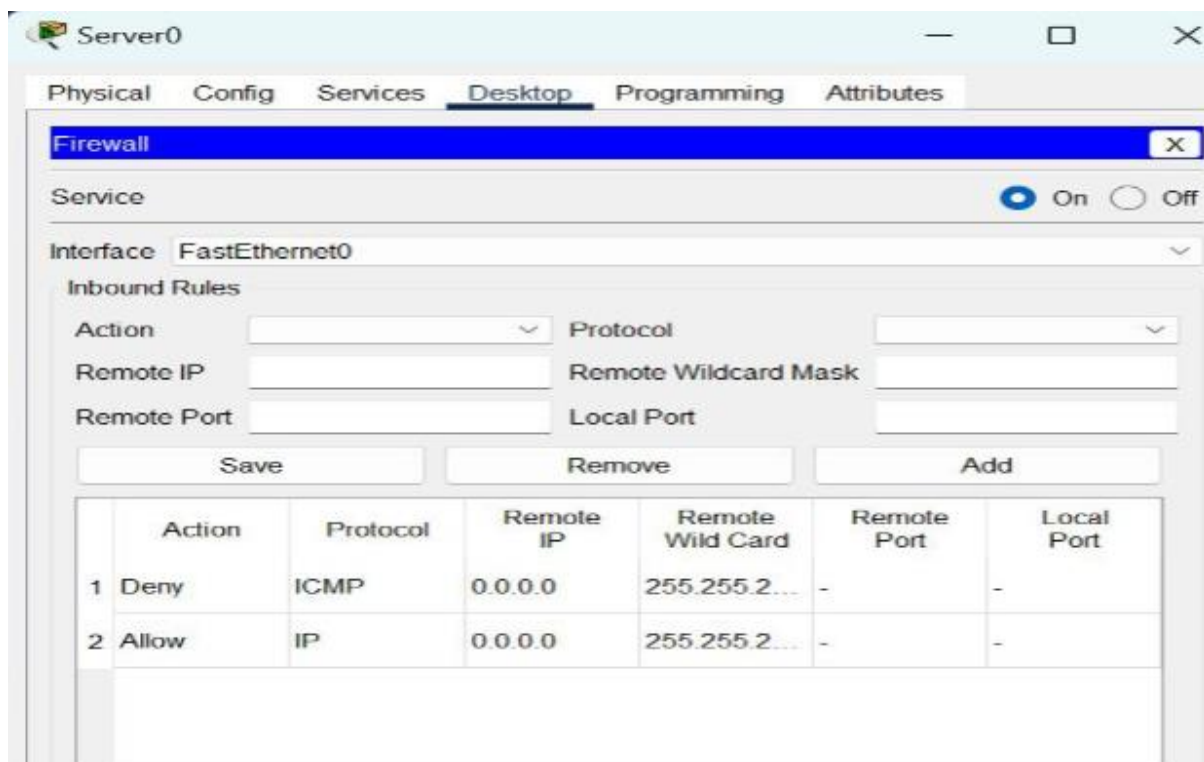
- ☐ Fill IPv4 address and subnet mask.
- ☐ Repeat the same procedure with the server.



Step 3: Configuring the firewall in a server and blocking packets and allowing

web browser.

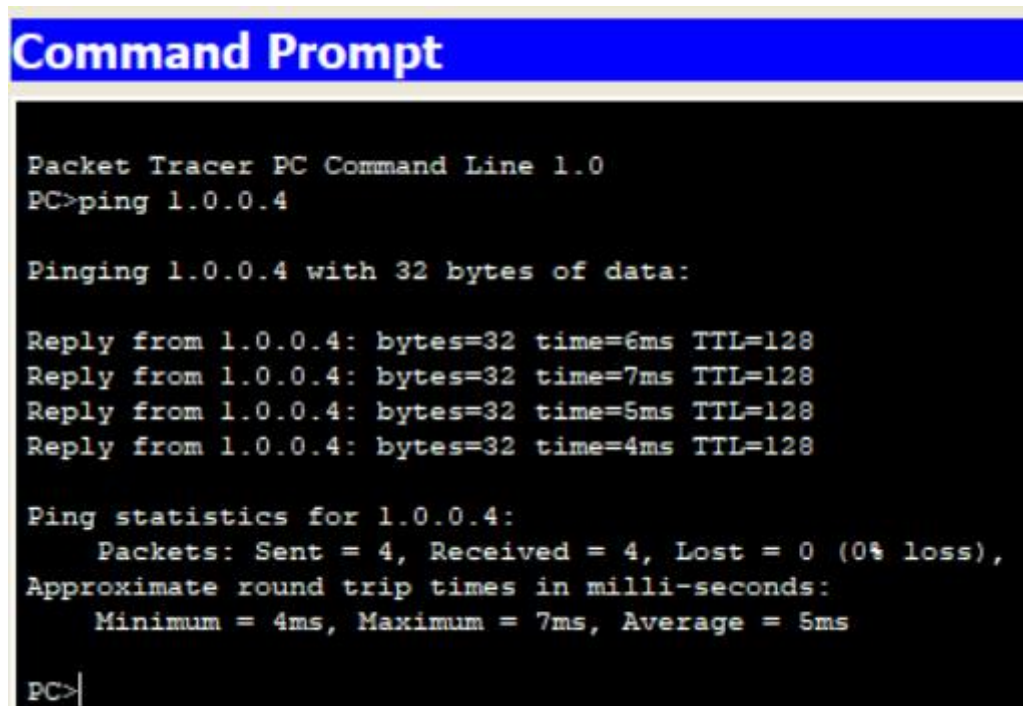
- ☐ Click on server0 then go to the desktop.
- ☐ Then click on firewall IPv4.
- ☐ Turn on the services.
- ☐ First, Deny the ICMP protocol and set remote IP to 0.0.0.0 and Remote wildcard mask to 255.255.255.255.
- ☐ Then, allow the IP protocol and set remote IP to 0.0.0.0 and Remote wildcard mask to 255.255.255.255.
- ☐ And add them.



Step 4: Verifying the network by pinging the IP address of any PC.

- ☐ We will use the ping command to do so.
- ☐ First, click on PC2 then Go to the command prompt.
- ☐ Then type ping <IP address of targeted node>.
- ☐ We will ping the IP address of the server0.
- ☐ As we can see in the below image we are getting no replies which means

the packets are blocked.



```
Command Prompt

Packet Tracer PC Command Line 1.0
PC>ping 1.0.0.4

Pinging 1.0.0.4 with 32 bytes of data:

Reply from 1.0.0.4: bytes=32 time=6ms TTL=128
Reply from 1.0.0.4: bytes=32 time=7ms TTL=128
Reply from 1.0.0.4: bytes=32 time=5ms TTL=128
Reply from 1.0.0.4: bytes=32 time=4ms TTL=128

Ping statistics for 1.0.0.4:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 4ms, Maximum = 7ms, Average = 5ms

PC>
```

Check the web browser by entering the IP address in the URL.

- ☐ Click on PC2 and go to desktop then web browser.

OUTPUT:



RESULT:

Thus the basic firewall configuration in Cisco Packet Tracer is configured and verified.