Program 16: Configure VPN using Packet Tracer/GNS3

Components needed is

1 router (2911)

1 switch

3 servers

1 PC

Steps:

1. Connect all the devices and rename the server name as

File server

Web server

Mail server

2. Connectivity

Connect Servers to switch

Connect the routers to the switch

Connect the PC to router

On the server

Click on desktop-→ip configuration

File Server: IP address: 172.16.1.10

Default Gateway: 172.16.1.1

Web Server: IP address: 172.16.1.11

Default Gateway: 172.16.1.1

Mail Server: IP address: 172.16.1.12

Default Gateway: 172.16.1.1

And router as 10.10.10.11 (Click on router->Config-> Gigabit Ethernet 0/0 -ON- Specify IPv4 address as 10.10.10.11)

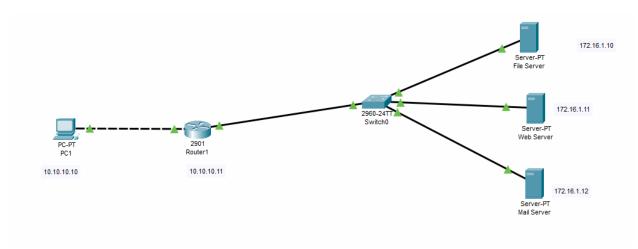
Click on Gigabit Ethernet 0/1 -> Click on ON

Set the IP to the pc as 10.10.10.10

Select PC-> Ipconfig -> IP address as 10.10.10.10

Default Gateway is router address that is 10.10.10.11

The Final Setup of Topology:



Assign IP (172.16.1.1) to the router

Follow the steps

Click on the router

Select →CLI-→ Press return

Type enable (Enabling the router)

Type configure terminal

Type interface GigabitEthernet 0/0

Type ip address 172.16.1.1 255.255.255.0

Type noshutdown

```
Router*configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)*interface GigabitEthernet 0/0
Router(config-if)*ip address 172.16.1.1 255.255.255.0
Router(config-if)*no shutdown
Router*
%SYS-5-CONFIG_I: Configured from console by console

Router*
Router*no shutdown

^
% Invalid input detected at '^' marker.

Router*noshutdown
Translating "noshutdown"...domain server (255.255.255.255)
% Unknown command or computer name, or unable to find computer address

Router*
```

OUTPUT:

Check the working condition from each server to gateway as

Click on File Server -> Desktop -> Command Prompt

Ping to the Default Gateway 172.16.1.1

From File Server

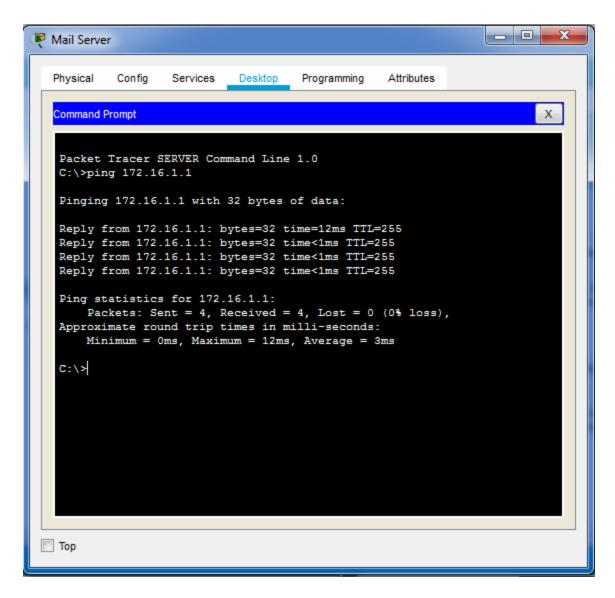
```
_ D X
<section-header> File Server
                                                              Desktop
                                                                                                             Attributes
     Physical
                        Config
                                          Services
                                                                                  Programming
     Command Prompt
                                                                                                                                                            Х
      C:\>
C:\>
C:\>
      C:\>
C:\>
C:\>
C:\>
      C:\>
C:\>
C:\>
C:\>ping 172.16.1.1
      Pinging 172.16.1.1 with 32 bytes of data:
      Reply from 172.16.1.1: bytes=32 time=1ms TTL=255 Reply from 172.16.1.1: bytes=32 time=3ms TTL=255 Reply from 172.16.1.1: bytes=32 time<1ms TTL=255 Reply from 172.16.1.1: bytes=32 time<1ms TTL=255
      Ping statistics for 172.16.1.1:

Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),

Approximate round trip times in milli-seconds:

Minimum = 0ms, Maximum = 3ms, Average = 1ms
 Тор
```

From Mail Server



Ping from PC to Router

