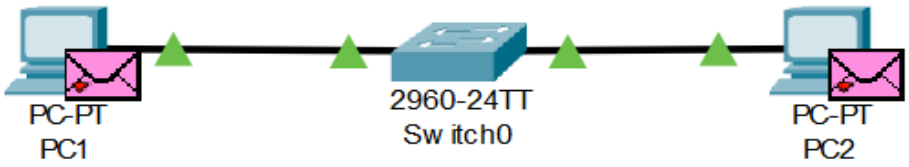
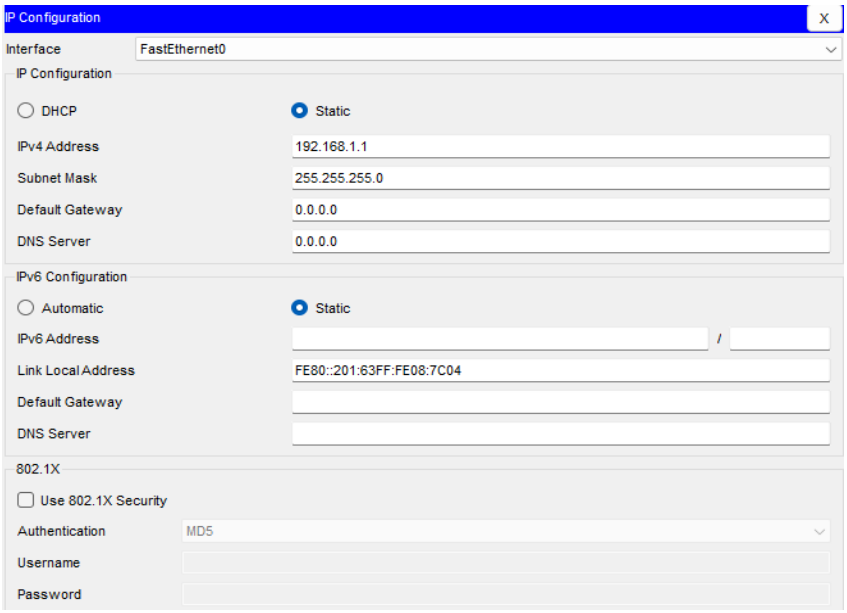
Day one (simple ping)

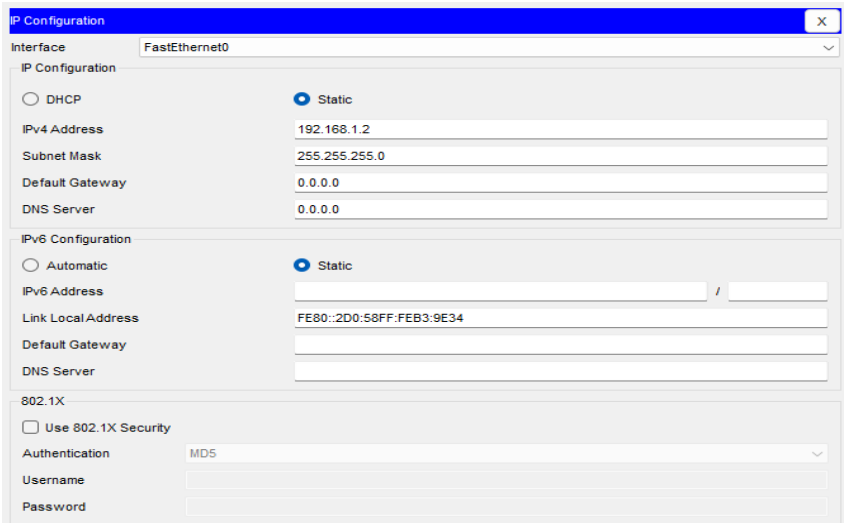


Used a local connection of two PC's and a Switch in Cisco Packet Tracer



PC1 assigned an IP of: 192.168.1.1/24.

Subnet Mask automatically assigned: 255.255.255.0 to mask both network address and host address.



PC2 assigned an IP of:

192.168.1.2/24

```
C:\>ping 1992.168.1.2
Ping request could not find host 1992.168.1.2. Please check the name and try again.
C:\>ping 192.168.1.2

Pinging 192.168.1.2 with 32 bytes of data:

Reply from 192.168.1.2: bytes=32 time=2ms TTL=128
Reply from 192.168.1.2: bytes=32 time<1ms TTL=128
Reply from 192.168.1.2: bytes=32 time<1ms TTL=128
Reply from 192.168.1.2: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.1.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 2ms, Average = 0ms

C:\>
```

Using PC1, I pinged the IP address of PC2 showing the amount of packets that was sent by the PC delivered on the cable, through a switch then to PC2. It received all 4 packets of data and the time it took.

OSI Model observed:

Physical: Straight cables connecting in both the pc and the switched showed complete connection (green lines) throughout the simulation.

```
Switch>
Switch>enable
Switch#show mac address-table
          Mac Address Table
-------------------------------------------

Vlan    Mac Address       Type        Ports
----    -----------       --------    -----

   1    0001.6308.7c04    DYNAMIC     Fa0/1
   1    00d0.58b3.9e34    DYNAMIC     Fa0/2
Switch#
```

Data Link: Switch learning the Mac Address of both PC's

Figure on the left shows the connection and VLAN, the type being Dynamic and what ports the PC's use. In this case Fast Ethernet ports 1 and 2.

Network: IP address used to forward the data, so that PC's know where the destination of the receiver is.

Transport: ICMP uses ports and reliability checks

Application: which is the interface we can see, i.e. the Ping result.