

PC1(192.168.1.2) and PC2 (192.168.1.3) are to be configured to communicate with each other. You are about to use the switch as an intermediate device in this experiment. Configure Cisco 2960 switch with the two PCs mentioned above. Experiment and observe that the data transfer between two computers is reliable.

### Aim:

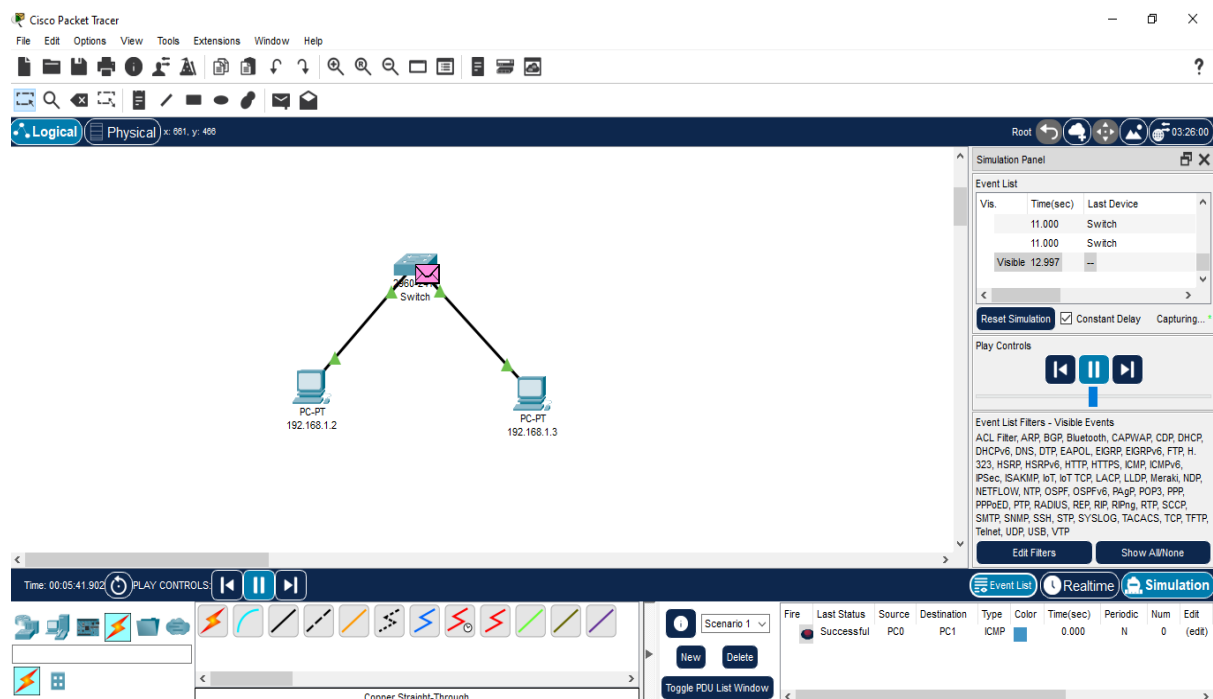
Configure Cisco 2960 switch with the two PCs and observe that the data transfer between two computers is reliable.

### Requirements

- Windows PC / Laptop
- CISCO Packet Tracer Software ( Student Version)

### Procedure

- Open the CISCO Packet tracer software
- Drag and drop 2 pcs using End Device Icons on the left corner
- Cisco 2960 switch from switch icon list in the left bottom corner
- Make the connections using Straight through Ethernet cables
- Give IP address of the PC1 and PC2 as 192.168.1.2 and 192.168.1.3 respectively, ping between PCs and observe the transfer of data packets in real and simulation mode.



### Theory

A local area network (LAN) is a collection of devices connected together in one physical

location, such as a building, office, or home. A LAN can be small or large, ranging from a home network with one user to an enterprise network with thousands of users and devices in an office or school.

A LAN comprises cables, access points, switches, routers, and other components that enable devices to connect to internal servers, web servers, and other LANs via wide area networks.

The advantages of a LAN are the same as those for any group of devices networked together. The devices can use a single Internet connection, share files with one another, print to shared printers, and be accessed and even controlled by one another.

### **OUTPUT (PINGING FROM PC0-PC1)**

Packet Tracer PC Command Line 1.0

**C:\>ping 192.168.1.3**

Pinging 192.168.1.3 with 32 bytes of data:

Reply from 192.168.1.3: bytes=32 time<1ms TTL=128  
Reply from 192.168.1.3: bytes=32 time<1ms TTL=128  
Reply from 192.168.1.3: bytes=32 time<1ms TTL=128  
Reply from 192.168.1.3: bytes=32 time=13ms TTL=128

Ping statistics for 192.168.1.3:

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

Approximate round trip times in milli-seconds:

Minimum = 0ms, Maximum = 13ms, Average = 3ms

### **LAN - MAC ADDRESS TABLE**

Switch>en

Switch#show mac-address-table

Mac Address Table

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Vlan Mac Address Type Ports

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1 0040.0b86.916b DYNAMIC Fa0/1

1 0090.213e.7d06 DYNAMIC Fa0/2

### **Result**

Hence, Cisco 2960 switch is configured with the two PCs and observed that the data transfer between two computers was reliable.