

21BAI1844  
Shlok Kamath

## CRYPTOGRAPHY- LAB-14

NAME: Shlok Kamath

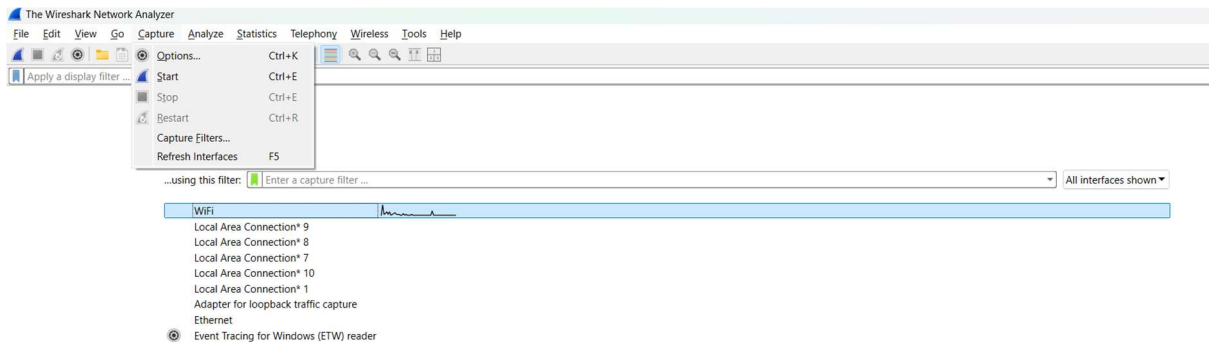
REG NO: 21BAI1844

### 1. ANALYSE PACKET WITH WIRESHARK

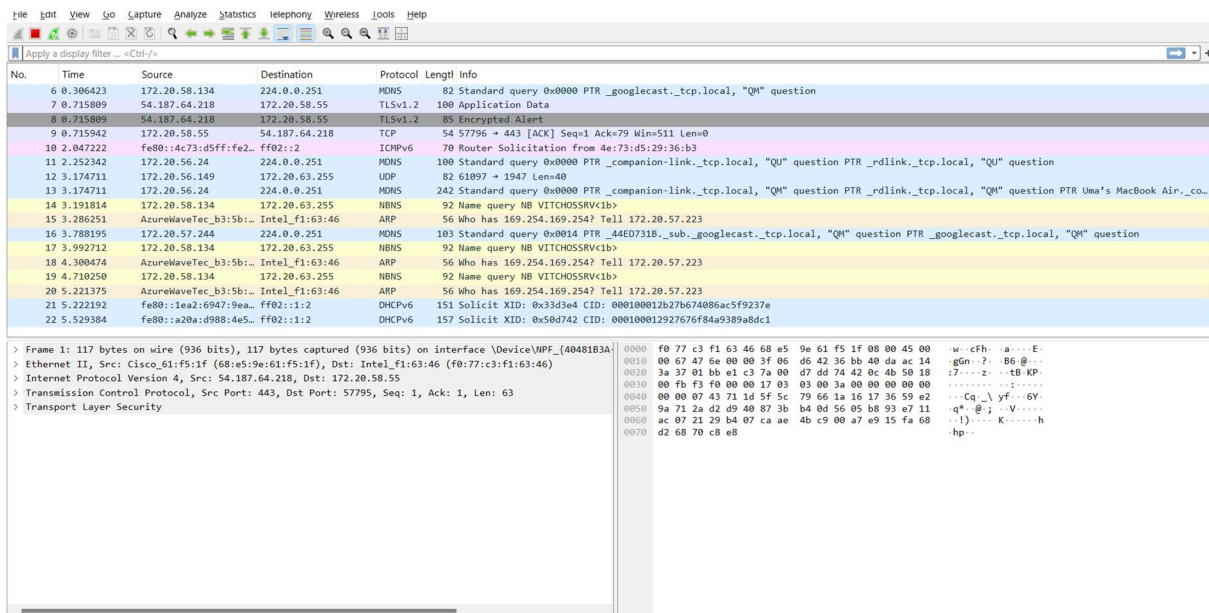
- Start wireshark and select the network- here we have used wifi



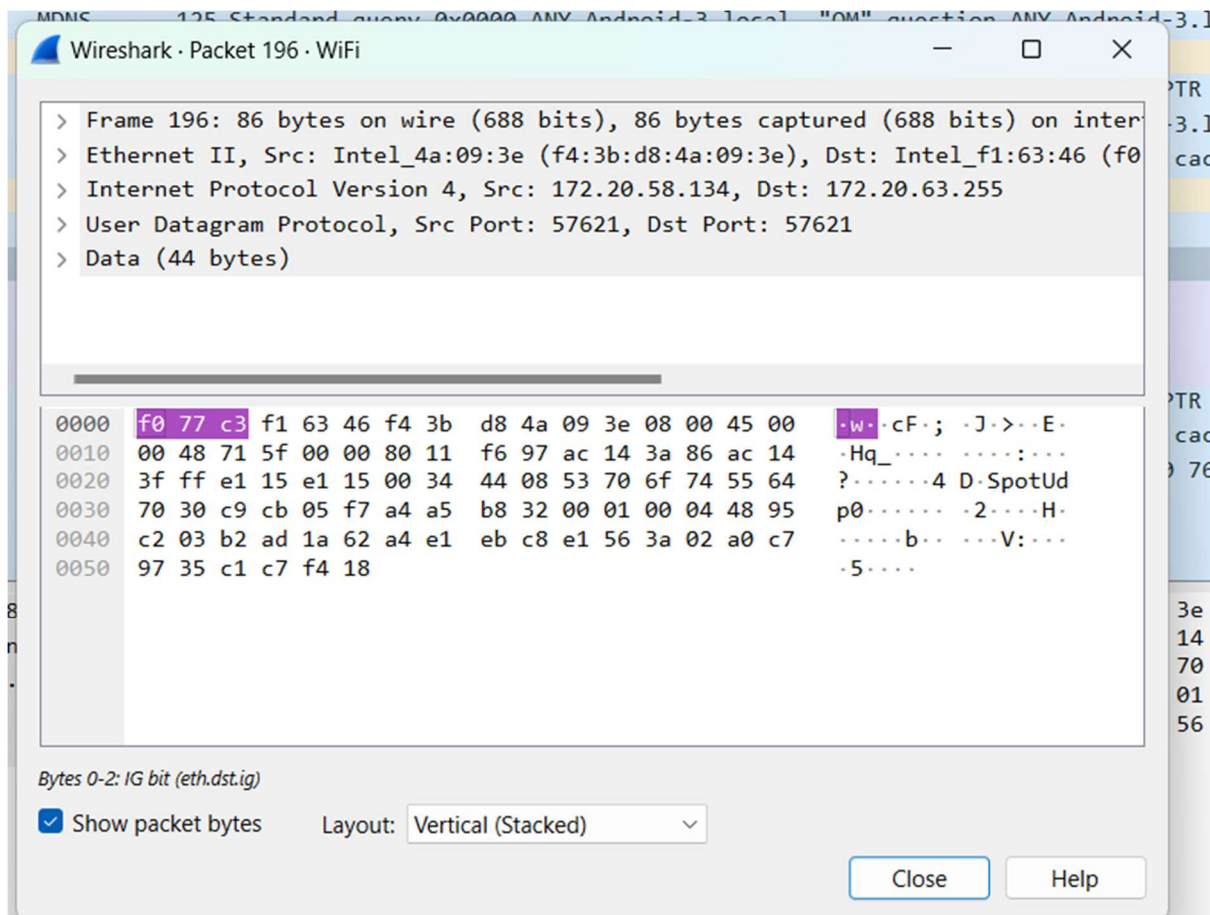
- Open the capture option and select start for the selected network



- List of packets will be shown

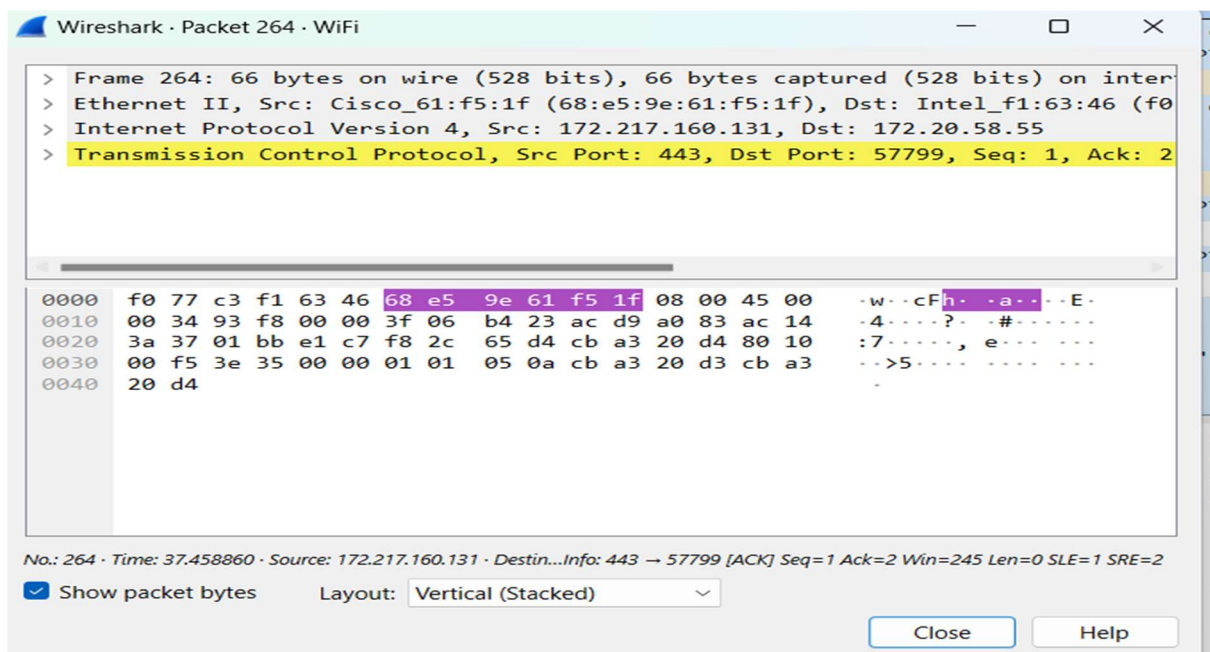


- Select a packet with any protocol to find details and bytes used in the packet



Here Internet protocol version 4 is used with source as 172.20.58.134 and destination as 172.20.63.255, it is UDP protocol with source as 57621 and destination as 57621.

Another example using TCP protocol:



## 2. ANALYSE PACKET WITH PACKET TRACER

Implementation:

Step 1: From the Secondary Toolbar at the top, select 'Add sample PDU' that is the second last icon.

**Implementation:**

Follow the below steps to implement the connection:

**Step 1:** From the bottom toolbar, click on '**End Devices**' and select '**PC**' and then click on the screen (for two PC's do this step twice).



*Bottom toolbar->End devices->PC*

This is how it will appear on the screen



**Step 2:** Now to connect the PC's, we require a wire; we use cross-over wire to connect similar devices.

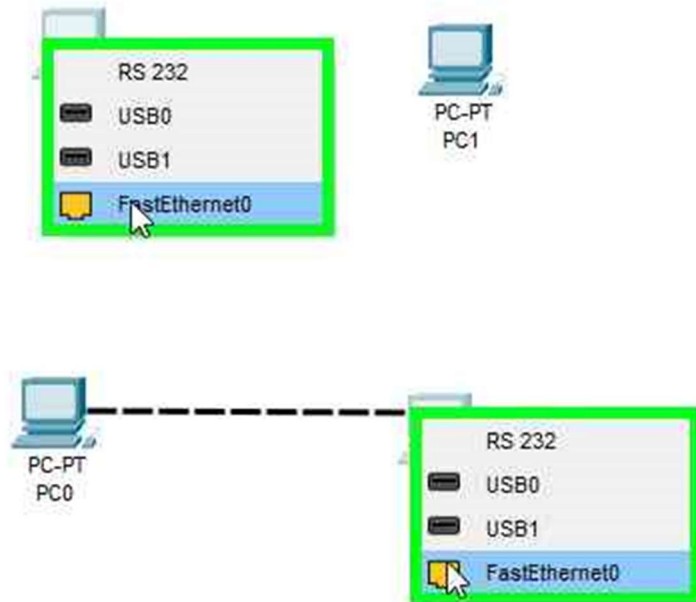
Select Connections from the bottom toolbar, and select cross-over wire (that is the fourth wire).



A **Cross-Over Wire** is largely used to connect the computing gadgets, additionally, cross wire cables are used to connect devices of equal type.

**Step 3:** After selecting the wire click on the computer on the screen(here PC0) and select FastEthernet0.

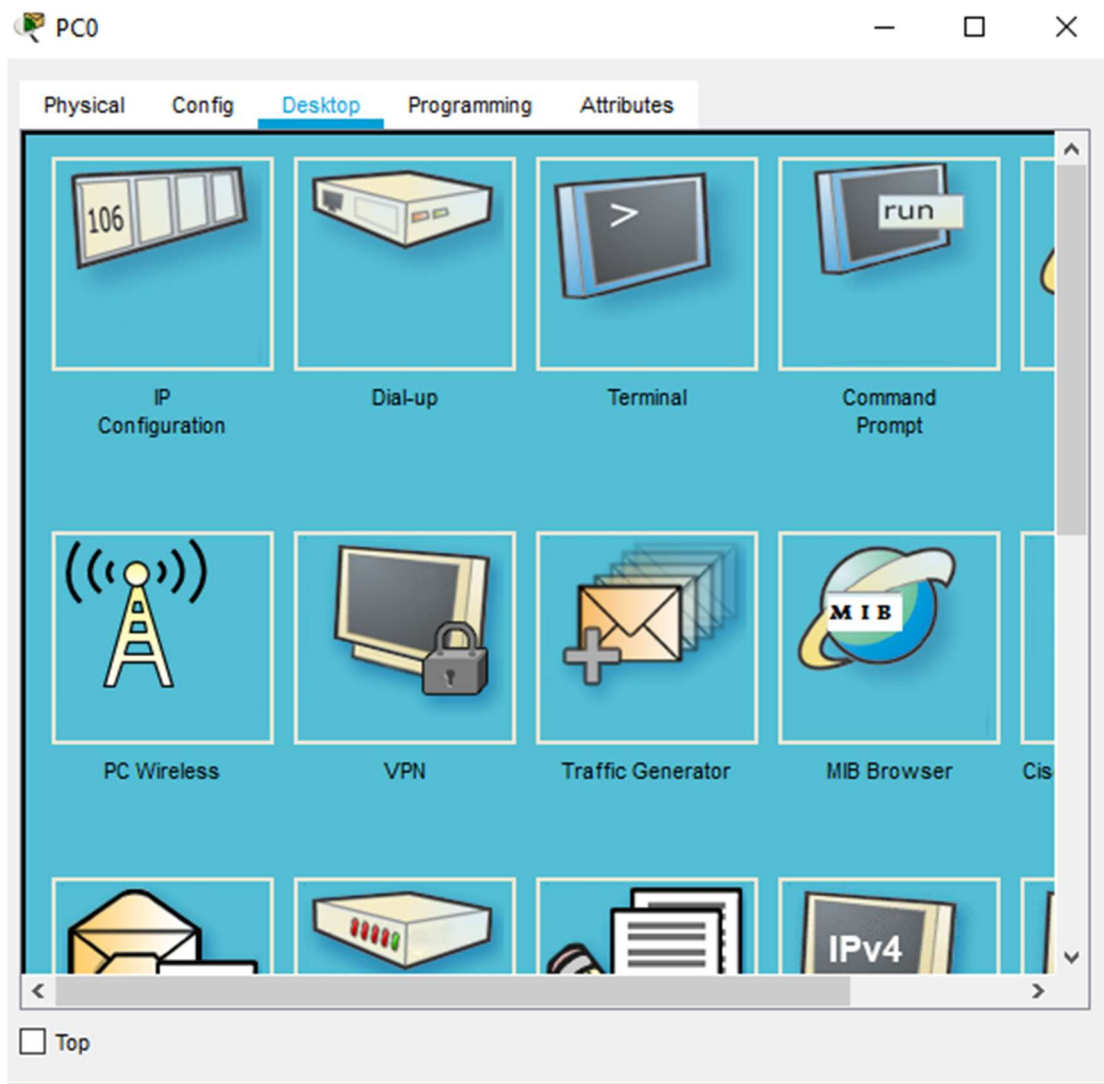
Then, drag the wire to the other pc (here PC1) and do the same.



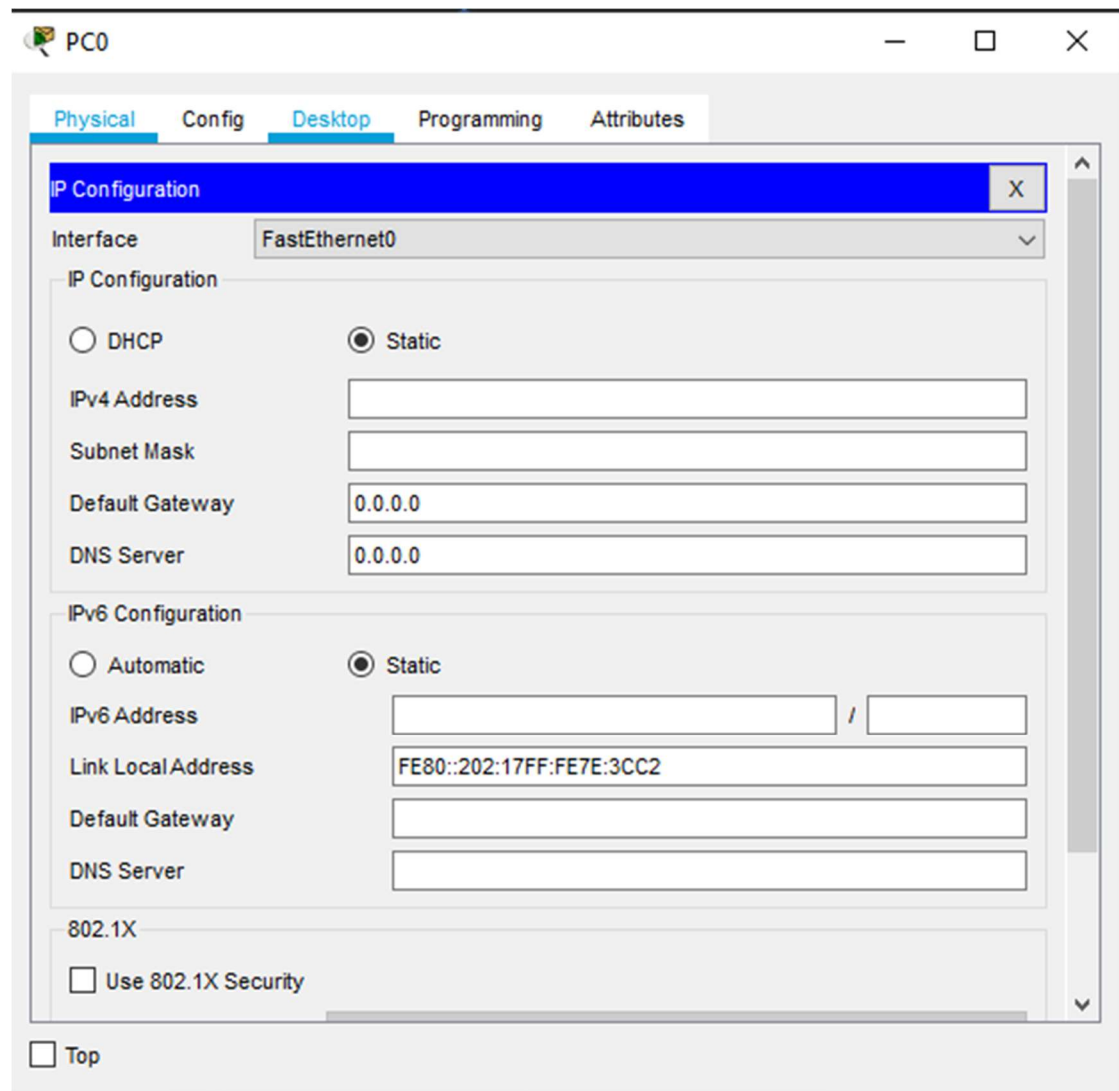
**Step 4:** Now, we will assign the IP address to both the PCs (PC0 & PC1).

An **IP address** (Internet Protocol) is nothing but the numerical designation of the devices connected to the network, that use the Internet protocol as a communication medium.

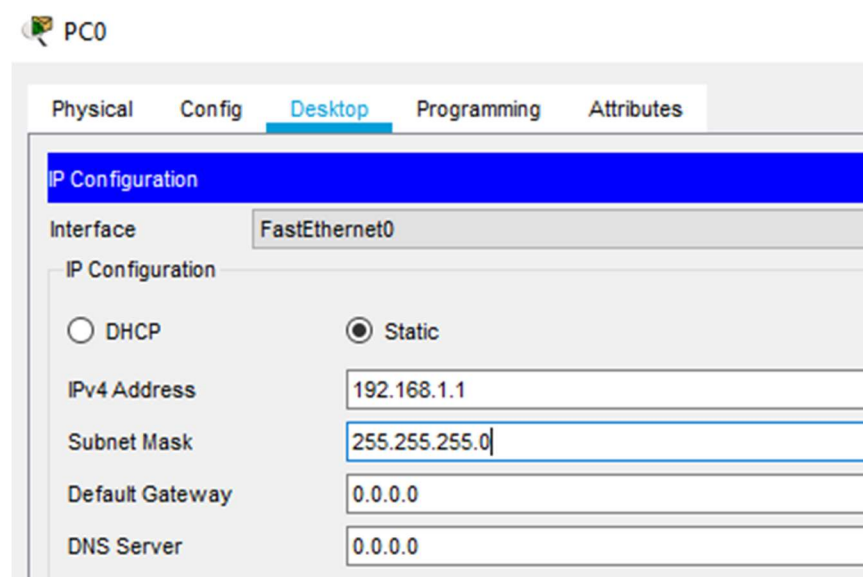
Click on PC0. A dialog box will appear on the screen, select Desktop and then select IP configuration:



After clicking on IP configuration this is what will appear



Now in IPv4 Address, write 192.168.1.1, Subnet mask will be 255.255.255.0



Similarly, assign 192.168.1.2 to PC1

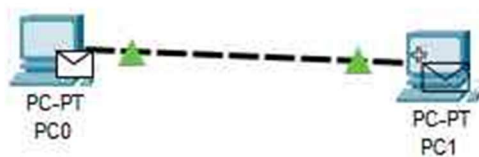
**We have successfully connected two computers.**

Now to check this, we will transfer data from one computer to another and check whether the transfer is successful or not. To do so follow the below steps:

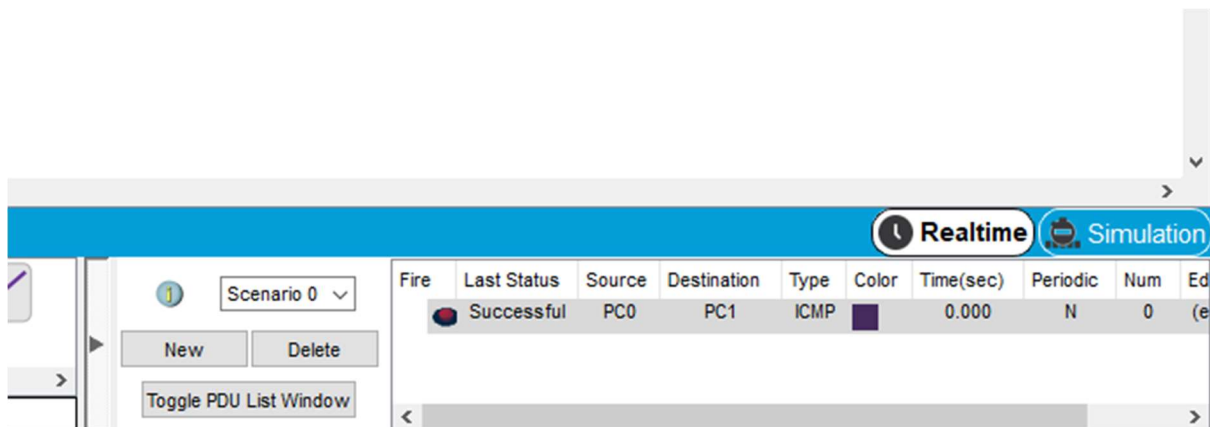
**Step 1:** From the Secondary Toolbar at the top, select 'Add sample PDU' that is the second last icon.



**Step 2:** Now click on PC0 and then PC1.



Now if in Realtime box- PDU list window it shows successful, that means all the connections are correct and the data transfer is successful



You have successfully connected two computers, using the virtual program Cisco Packet Tracer.

Step 2: Now click on PC0 and then PC1.



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You have successfully connected two computers, using the virtual program Cisco Packet Tracer.

Successful message sends Screenshot:

The screenshot displays the Cisco Packet Tracer interface. The main workspace shows a network topology with two PCs (PC0 and PC1) connected to a central switch (Switch0). The Simulation Panel on the right is open, showing the Event List with the following data:

Vis.	Time(sec)	Last Device	At Device	Type
	0.003	Switch0	PC1	ICMP
	0.003	PC1	Switch0	ICMP
	0.003	PC0	Switch0	ICMP
	0.004	PC1	Switch0	ICMP
	0.004	Switch0	PC0	ICMP
	0.005	Switch0	PC0	ICMP
	0.970	--	Switch0	ICMP
	0.971	Switch0	PC1	ICMP
	0.971	Switch0	PC0	ICMP
	2.967	Switch0	PC1	ICMP

The bottom of the image contains a detailed table of the event list data:

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	Successful	PC0	PC1	ICMP		0.000	N	0	(edit)	(delete)
	Successful	PC1	PC0	ICMP		0.000	N	1	(edit)	(delete)
	Successful	PC0	PC1	ICMP		0.000	N	2	(edit)	(delete)