Laboratory No: 01

Title: Configuration and Implementation of Multiple LAN Network

Problem Statement:

To learn how to Configuration and Implementation of Multiple LAN Network in Cisco packet tracer simulation software.

Hypothesis:

First, we established a proper connection by assigning IP addresses to each PC and configuring a proper switch and hub configuration for packet transmission between six or more LANs.

Materials:

- Cisco Packet Tracer Software (version- 6.2)

Procedure:

- Design the connection using Cisco Packet Tracer Software like figure 1

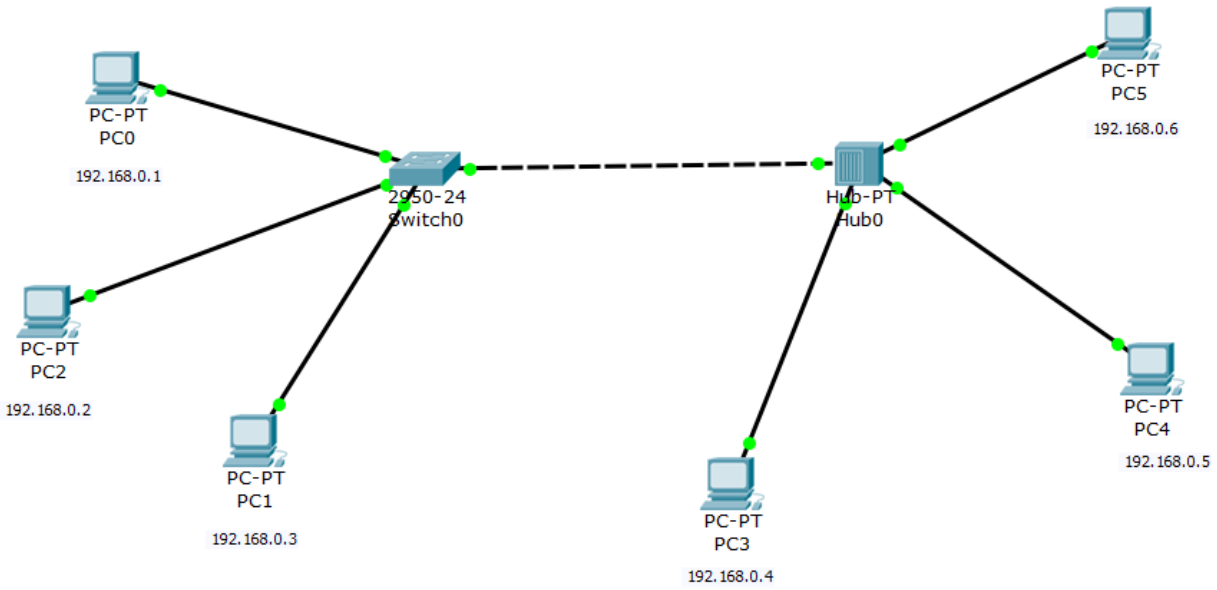


Figure:01

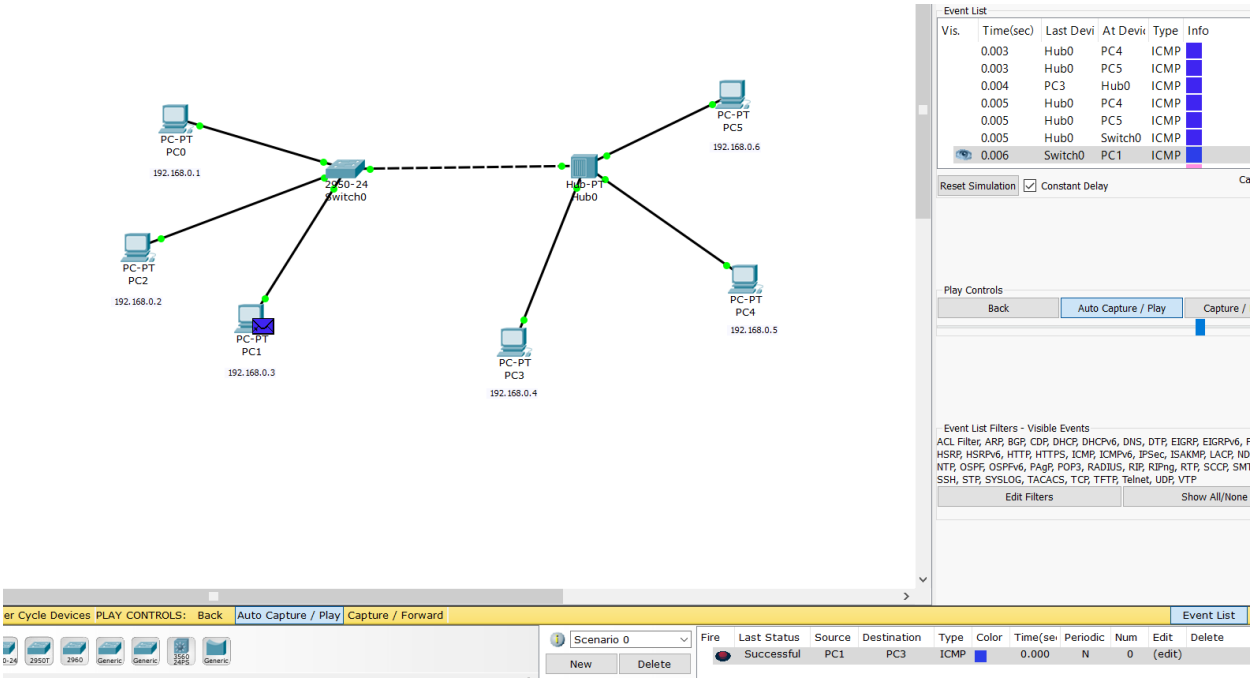
- Connect Switch0(2950-24) and Hub0(Hub-PT) with both PCs
- Switch are Hub are connected parallelly
  -> PC0, PC1, PC2 with Switch0(2950-24)
  -> PC-3, PC4, PC5 with Hub0(Hub-PT)

- Set IP address for each pc

  -> PC0 IP address =192.168.0.1
  -> PC1 IP address =192.168.0.3
  -> PC2 IP address =192.168.0.2
  -> PC3 IP address =192.168.0.4
  -> PC4 IP address =192.168.0.5
  -> PC5 IP address =192.168.0.6

- All of the PCs are connected to different networks and are configured with a switch and a hub.
  - Because all of the configuration has been completed correctly, the connections are green.
- Select the Message option and enter the sender and receiver information.
- If the connections are properly established and the networks are properly configured, we can send packets from one network to another.

Results (Data):



- We simulate the network here by sending packets from PC1 to PC3. And the switch sends the packet to the Hub, who then sends the packet to all network users.
- After successfully sending all packets, the simulation tab displays successful.

We have completed testing by transmitting data through following procedure:

Fire	Last Status	Source	Destination	Type	Color	Time(se	Periodic	Num	Edit	Delete
	Successful	PC4	PC5	ICMP		0.000	N	0	(edit)	(delete)
	Successful	PC3	PC1	ICMP		6.278	N	1	(edit)	(delete)
	Successful	PC0	PC1	ICMP		12.287	N	2	(edit)	(delete)

-> Transmitting message from PC4 to PC5
-> Transmitting message from PC3 to PC1
-> Transmitting message from PC0 to PC1

Simulation Panel:

Event List

Vis.	Time(sec)	Last Devi	At Devi	Type	Info
	324.129	Hub0	PC4	DTP	
	324.129	Hub0	PC5	DTP	
	324.570	--	Switch0	STP	
	324.571	Switch0	PC2	STP	
	324.571	Switch0	PC0	STP	
	324.571	Switch0	Hub0	STP	
	324.571	Switch0	PC1	STP	

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Conclusions:

- After Successfully doing our simulation, so we conclude that our Hypothesis is accepted.
- Hypothesis accepted because we connected network between switch and hub and it's transfer packets for both connected network simultaneously.
- The flow of this network was Hub, because when switch just specific send the packet to any user . There Hub is sent a packet to all user of that's Hub network.