

Lab-2

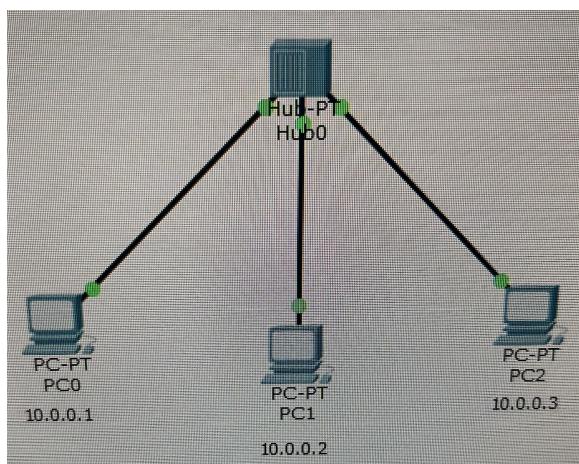
Title: Packet Tracer using Hub and Switch Topology

Aim:

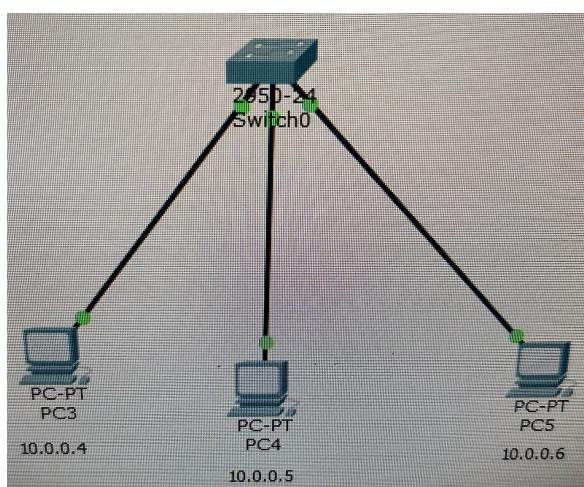
Create a topology and simulate sending a simple PDU from source to destination using hub and switch as connecting devices and demonstrate ping messages.

Topology

Hub:



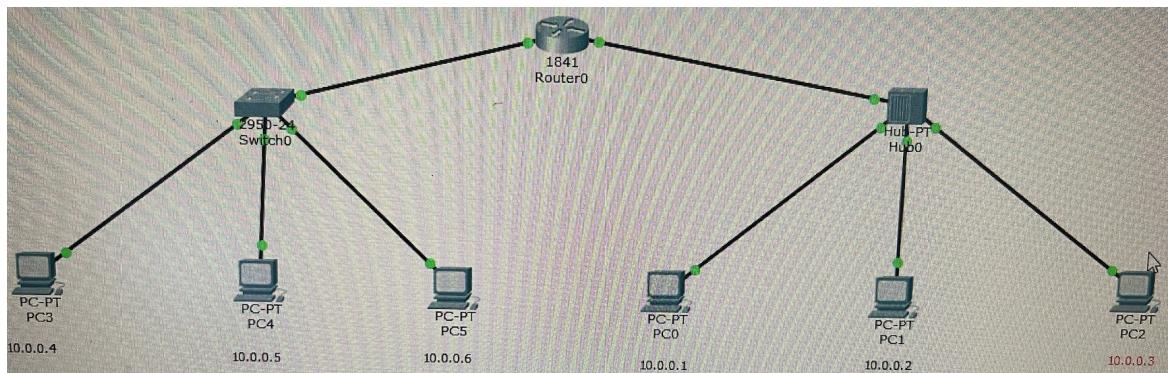
Switch:



Toggle the PDU List Window

PDU List Window											
Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete	
●	Successful	PC0	PC2	ICMP	Dark Blue	0.000	N	0	(edit)		
●	Successful	PC0	PC1	ICMP	Yellow	0.000	N	1	(edit)		
●	Successful	PC1	PC2	ICMP	Dark Blue	0.000	N	2	(edit)		
●	Successful	PC4	PC5	ICMP	Green	0.000	N	3	(edit)		
●	Successful	PC3	PC5	ICMP	Dark Purple	0.000	N	4	(edit)		
●	Successful	PC3	PC4	ICMP	Purple	0.000	N	5	(edit)		

Router:



Procedure for Hub:

- Select the end devices and change their IP addresses suitably.
- Select the hub as the connecting device.
- Use copper straight-through cables to connect the end devices to the hub.
- Connect the FastEthernet ports of each device to the hub's ports.
- Select a message and click on the source device, then the destination device.
- Observe the packet transmission and acknowledgment receiving procedure.

Procedure for Switch:

- Select the end devices and change their IP addresses suitably.
- Select the switch as the connecting device.
- Use copper straight-through cables to connect the end devices to the switch.
- Connect the FastEthernet ports of each device to the switch's ports.
- Select a message and click on the source device, then the destination device.
- Observe the packet transmission and acknowledgment receiving procedure.

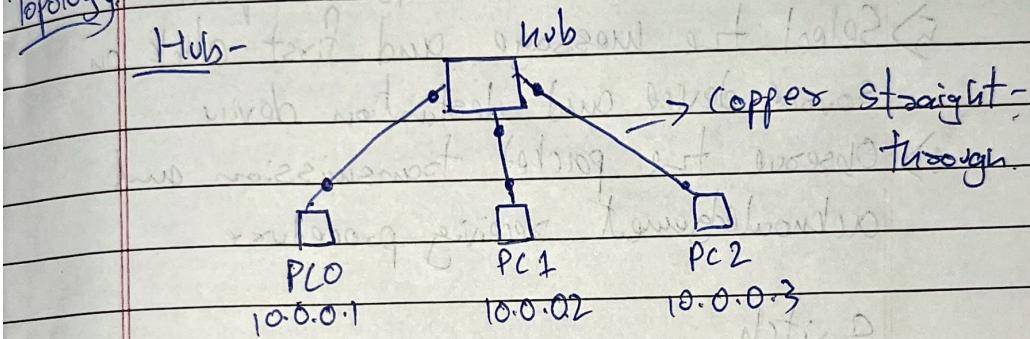
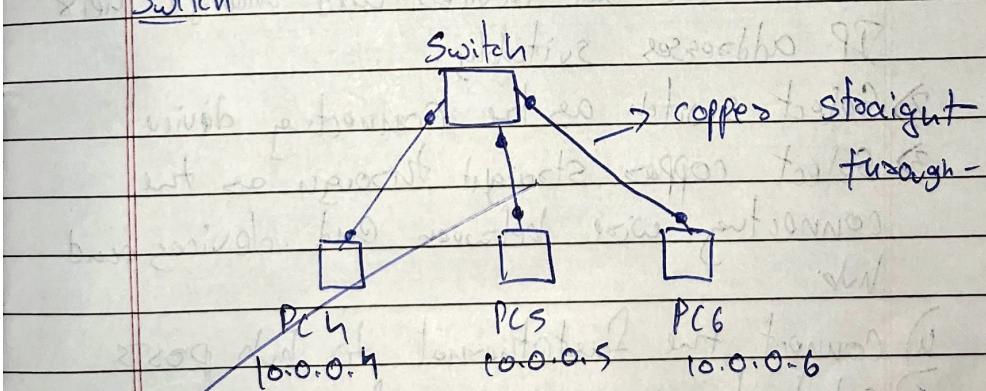
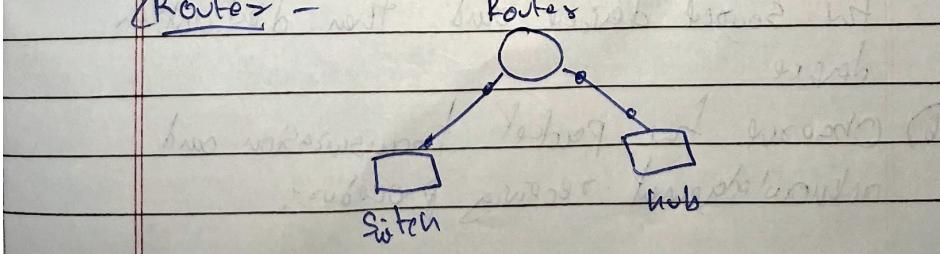
Procedure for Router:

- Select the end devices and change their IP addresses suitably.
- Select the Router as the connecting device.
- Use copper straight-through cables to connect the switch and the hub to the router.
- Connect the FastEthernet ports of each device to the router's ports.

LAB-1

Title: Packet traces using hub and switch topology

Aim: Create a topology and simulate sending a simple PDU from source to destination using hub and switch as connecting devices and demonstrate ping message.

TopologySwitch -Router -

Procedure:Hub

- 1) Select the end devices and change their IP addresses suitably.
- 2) Select hub as the connecting device.
- 3) Select copper straight through as the connecting wire between end devices and hub.
- 4) Connect the fastethernet to hub port.
- 5) Select the message and first click on source device and destination device.
- 6) Observe the packet transmission and acknowledgement receiving procedure.

Switch

- 1) Select the end devices and change their IP addresses suitably.
- 2) Select switch as the connecting device.
- 3) Select copper straight through as the connecting wire between end devices and hub.
- 4) Connect the fastethernet to hub ports.
- 5) Select the message and first click on the source device and then destination device.
- 6) Observe the packet transmission and acknowledgement receiving procedure.

Router :-

- 1) Select the routers and change the IP addresses.
- 2) Select Router as the connecting device.
- 3) Select copper straight-through as the connecting wire between hub, switch & Router.
- 4) Connect the fast ethernet to Router port.

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