

Name - Tanya Gupta
Course / Sec - MCA - 2 - B
Univ. Roll no - 2001157

Subject Name - Computer Networks
Subject Code - TMC-203
Student Id - 20712068

Question - 1

Problem Statement :- There is an organization A with multiple departments. Design a n/w for the HR department & the size of the department is 10 users. Also, show the Communication b/w user number 1 & user number 5 of the n/w.

Objective :- To understand how to create a network within an organization using a switch, PCs and Copper Straight-Through. (To create a wired LAN using switch)

Description of Steps :-

Step 1 : Designing the required Network

Step 2 : Assigning IP to every PC/user

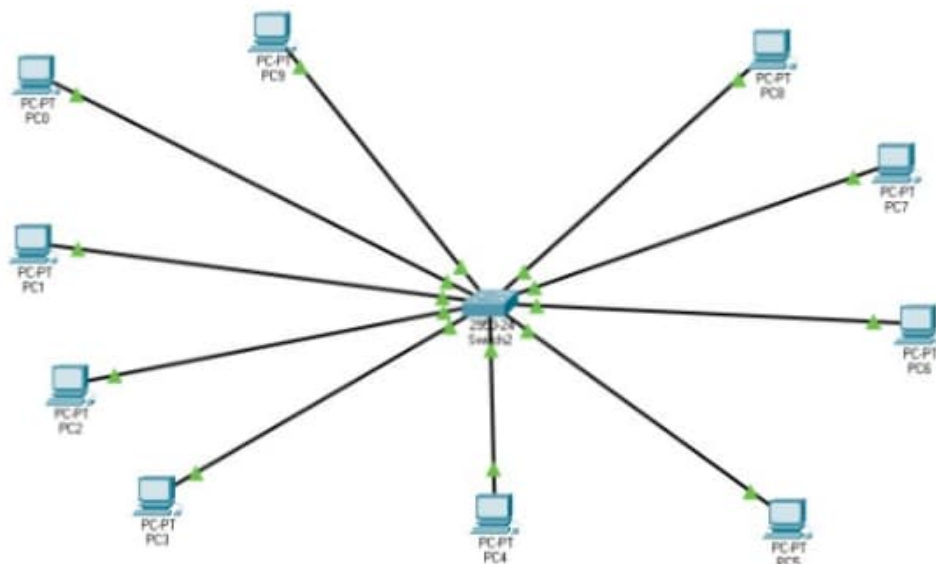
Step 3 : Confirming the network by sending message ~~1 to 5~~ from PC1 to PC5

Tanya



Logical Physical 11:244, p. 334

[Root] 06:43:30



Simulation Panel

Event List

Vis.	Time(sec)	Last Device	At Device
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Reset Simulation ☒ Constant Delay Captured to: (no captures)

Play Controls



Event List Filters - Visible Events

ACL Filter, ARP, BGP, Bluetooth, CAPWAP, CDP, DHCP, DHCPv6, DNS, DTP, EAPOL, EIGRP, EIGRPv6, FTP, H.323, HSRP, HSRPv6, HTTP, HTTPS, ICMP, ICMPv6, IPSec, ISAKMP, IoT, IoT TCP, LACP, LLDP, NDP, NETFLOW, NTP, OSPF, OSPFv6, PAgP, POP3, PPP, PPPoE, PTP, RADIUS, REP, RIP, RIPng, RTP, SCCP, SMTP, SNMP, SSH, STP, SYSLOG, TACACS, TCP, TFTP, Telnet, UDP, USB, VTP

Edit Filters

Show All/None

Time: 00:02:41.910 PLAY CONTROLS:



Serial DTE

Scenario 0

New

Delete

Toggle PDU List Window

Event List Realtime Simulation

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	D
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Cisco Packet Tracer - C:\Users\LENOVO\Downloads\questi

File Edit Options View Tools Extensions Window

Logical Physical 1107, p. 360

PCPT PC0

PCPT PC1

PCPT PC2

PCPT PC3

Time: 00:03:10.277 PLAY CONTROLS: [Play] [Stop] [Reset] [Fast Forward] [Fast Backward]

Serial DTE

PC6

Physical Config Desktop Programming Attributes

106

Configure Dialup Settings

run

http:

IP Configuration

Dialup

Terminal

Command Prompt

Web Browser

PC Wireless

VPN

Traffic Generator

MIB Browser

Cisco IP Communicator

Email

PPPoE Dialer

Text Editor

Firewall

IPv4

IPv6

IPv6 Firewall

Top

[Root] [Back] [Forward] [Home] [Search] 09:01:00

Simulation Panel

Event List

Vis.	Time(sec)	Last Device	At Device
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Reset Simulation [x] Constant Delay Captured to (no captures)

Play Controls

Event List Filters - Visible Events

ACL Filter, ARP, BGP, Bluetooth, CAPWAP, CDP, DHCP, DHCPv6, DNS, DTP, EAPOL, EIGRP, EIGRPv6, FTP, H.323, HSRP, HSRPv6, HTTP, HTTPS, ICMP, ICMPv6, IPsec, ISAKMP, IoT, IoT TCP, LACP, LLDP, NDP, NETFLOW, NTP, OSPF, OSPFv6, PaP, POP3, PPP, PPPoE, PTP, RADIUS, REP, RIP, RIPng, RTP, SCCP, SMTP, SNMP, SSH, STP, SYSLOG, TACACS, TCP, TFTP, Telnet, UDP, USB, VTP

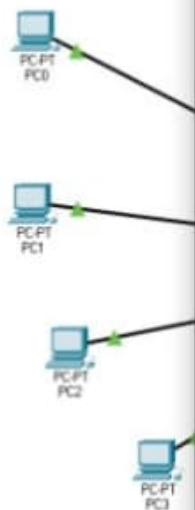
Edit Filters Show All/None

Event List Realtime Simulation

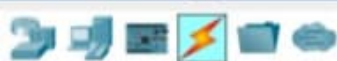
Destination	Type	Color	Time(sec)	Periodic	Num	Edit
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Logical Physical n: 107, g: 360



Time: 00:03:10.277 PLAY CONTROLS



PC6

Physical Config **Desktop** Programming Attributes

IP Configuration

Interface FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 198.68.10.7

Subnet Mask 255.255.255.0

Default Gateway 0.0.0.0

DNS Server 0.0.0.0

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address /

Link Local Address FE80::2E0:8FFF:FE36:DC92

Default Gateway

DNS Server

802.1X

☐ Use 802.1X Security

Authentication MD5

Username

Password

☐ Top

[Root]

Simulation Panel

Event List

Vis.	Time(sec)	Last Device	At Device
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Reset Simulation ☒ Constant Delay Captured to: (no captures)

Play Controls

Event List Filters - Visible Events

ACL Filter, ARP, BGP, Bluetooth, CAPWAP, CDP, DHCP, DHCPv6, DNS, DTP, EAPOL, EIGRP, EIGRPv6, FTP, H.323, HSRP, HSRPv6, HTTP, HTTPS, ICMP, ICMPv6, IPSec, ISAKMP, IoT, IoT TCP, LACP, LLDP, NDP, NETFLOW, NTP, OSPF, OSPFv6, PAgP, POP3, PPP, PPPoE, PTP, RADIUS, REP, RIP, RIPng, RTP, SCCP, SMTP, SNMP, SSH, STP, SYSLOG, TACACS, TCP, TFTP, Telnet, UDP, USB, VTP

Edit Filters Show All/None

Event List Realtime Simulation

Destination Type Color Time(sec) Periodic Num Edit De

Serial DTE

Toggle PDU List Window

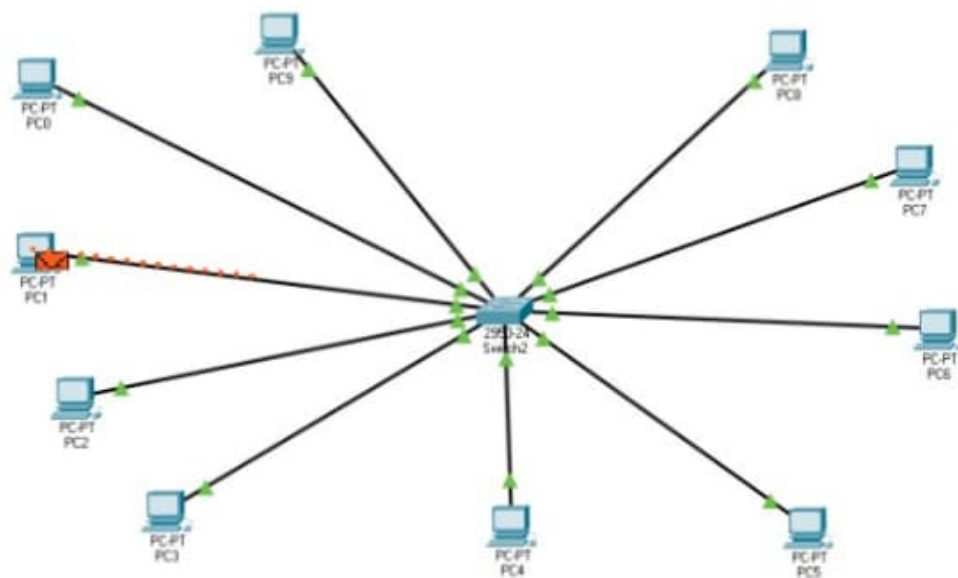


Logical Physical 1:321, p. 614

[Root]



12:59:00



Simulation Panel

Event List

Vis.	Time(sec)	Last Device	At Device
	0.000	--	PC1
	0.001	PC1	Switch2
	0.002	Switch2	PC5
	0.003	PC5	Switch2
<input checked="" type="checkbox"/>	0.004	Switch2	PC1

Reset Simulation

☒ Constant Delay

Captured to 0.004

Play Controls



Event List Filters - Visible Events

ACL Filter, ARP, BGP, Bluetooth, CAPWAP, CDP, DHCP, DHCPv6, DNS, DTP, EAPOL, EIGRP, EIGRPv6, FTP, H.323, HSRP, HSRPv6, HTTP, HTTPS, ICMP, ICMPv6, IPsec, ISAKMP, IoT, IoT TCP, LACP, LLDP, NDP, NETFLOW, NTP, OSPF, OSPFv6, PAgP, POP3, PPP, PPPoE, PTP, RADIUS, REP, RIP, RIPng, RTP, SCCP, SMTP, SNMP, SSH, STP, SYSLOG, TACACS, TCP, TFTP, Telnet, UDP, USB, VTP

Edit Filters

Show All/None

Time: 00:04:20.404 PLAY CONTROLS



Scenario 0

New

Delete

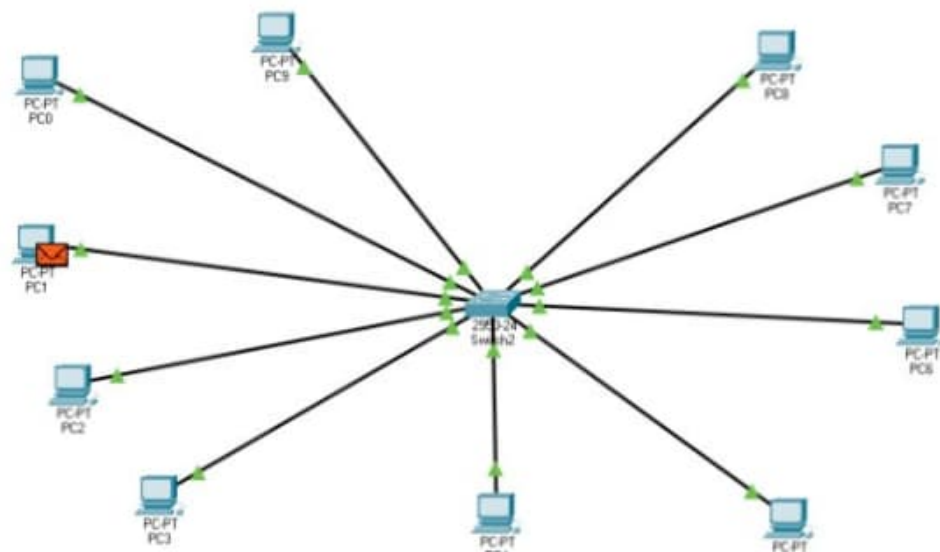
Toggle PDU List Window

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit
<input checked="" type="checkbox"/>	Successful	PC1	PC5	ICMP		0.000	N	0	[edit]



Logical Physical 321,964

[Root] 12:43:00



Simulation Panel

Event List

Vis.	Time(sec)	Last Device	At Device
	0.000	--	PC1

Reset Simulation

☒ Constant DelayCaptured to:
0.000 s

Play Controls



Event List Filters - Visible Events

ACL Filter, ARP, BGP, Bluetooth, CAPWAP, CDP, DHCP, DHCPv6, DNS, DTP, EAPOL, EIGRP, EIGRPv6, FTP, H.323, HSRP, HSRPv6, HTTP, HTTPS, ICMP, ICMPv6, IPSec, ISAKMP, IoT, IoT TCP, LACP, LLDP, NDP, NETFLOW, NTP, OSPF, OSPFv6, PAgP, POP3, PPP, PPPoE, PTP, RADIUS, REP, RIP, RIPng, RTP, SCCP, SMTP, SNMP, SSH, STP, SYSLOG, TACACS, TCP, TFTP, Telnet, UDP, USB, VTP

Edit Filters

Show All/None

Time: 00:04:20.400 PLAY CONTROLS:



Play (Hands Free) (Alt+P)



Serial DTE



Scenario 0

New

Delete

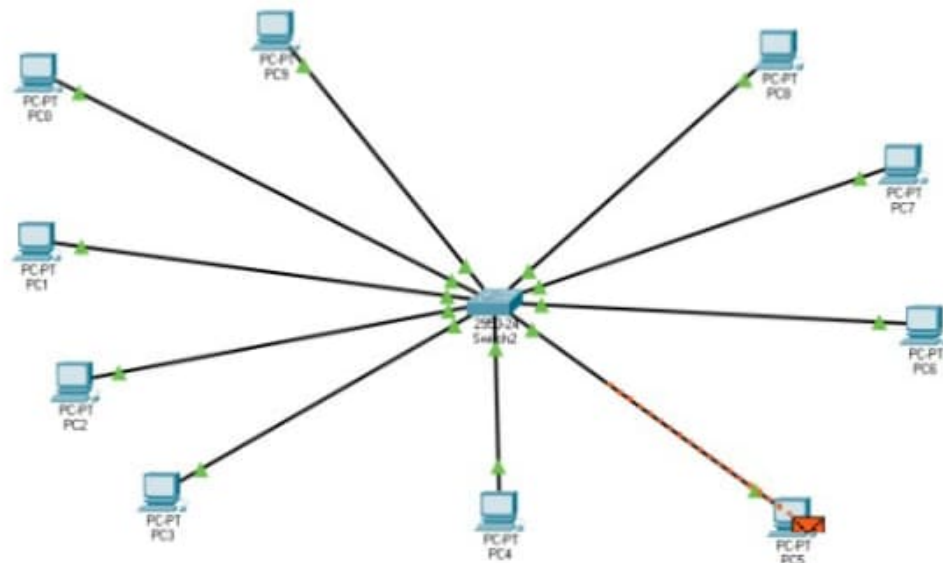
Toggle PDU List Window

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	De
	In Progress	PC1	PC5	ICMP		0.000	N	0	(edit)	(de



Logical Physical 1:321, p. 614

[Root] 12:53:00



Simulation Panel

Event List

Vis.	Time(sec)	Last Device	At Device
	0.000	-	PC1
	0.001	PC1	Switch2
<input checked="" type="checkbox"/>	0.002	Switch2	PC5

Reset Simulation

☒ Constant Delay

Captured to: 0.002 s

Play Controls



Event List Filters - Visible Events

ACL Filter, ARP, BGP, Bluetooth, CAPWAP, CDP, DHCP, DHCPv6, DNS, DTP, EAPOL, EIGRP, EIGRPv6, FTP, H.323, HSRP, HSRPv6, HTTP, HTTPS, ICMP, ICMPv6, IPSec, ISAKMP, IoT, IoT TCP, LACP, LLDP, NDP, NETFLOW, NTP, OSPF, OSPFv6, PAgP, POP3, PPP, PPPoE, PTP, RADIUS, REP, RIP, RIPng, RTP, SCCP, SMTP, SNMP, SSH, STP, SYSLOG, TACACS, TCP, TFTP, Telnet, UDP, USB, VTP

Edit Filters

Show All/None

Time: 00:04:20.403 PLAY CONTROLS



Serial DCE



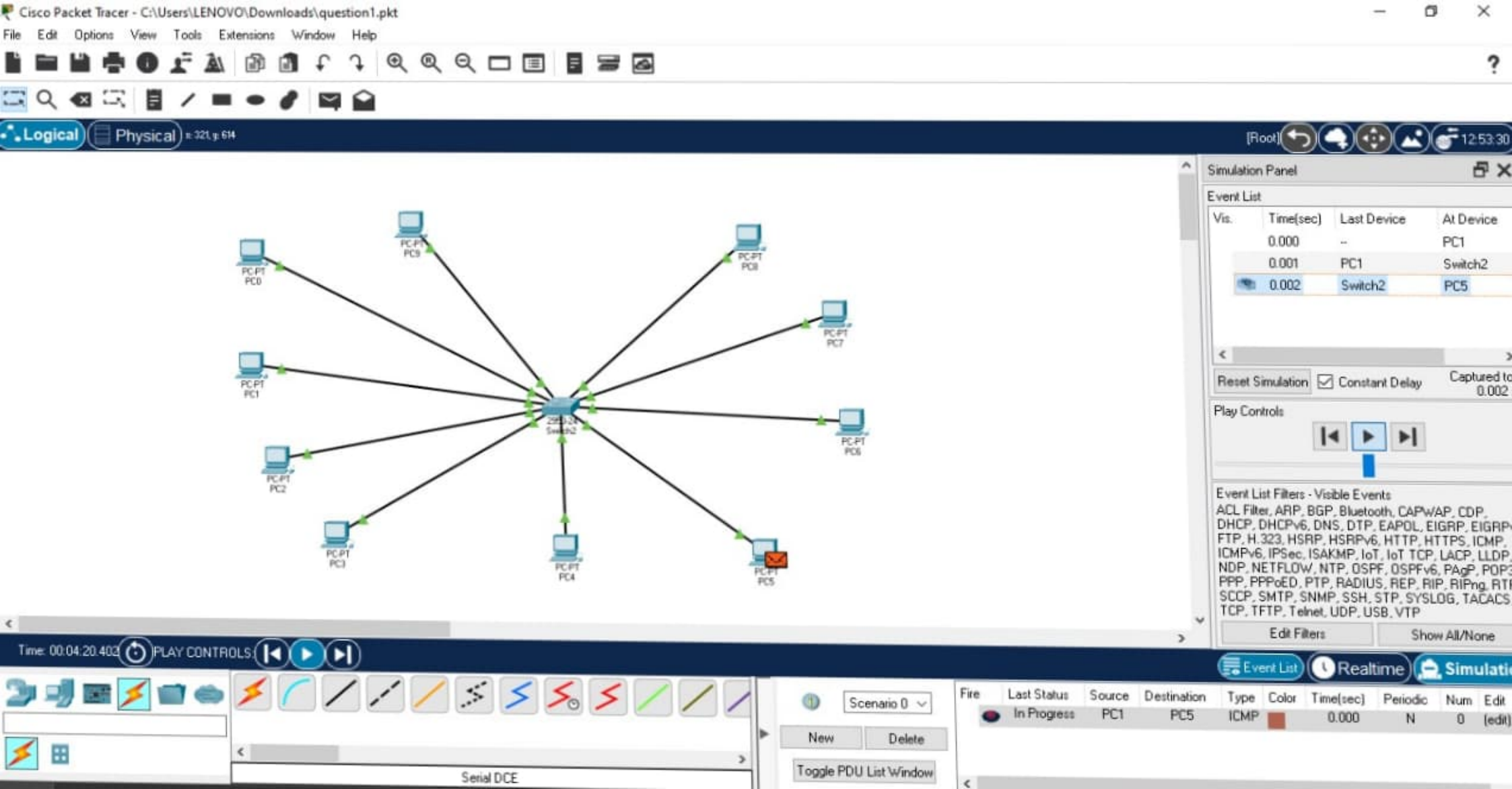
Scenario 0

New

Delete

Toggle PDU List Window

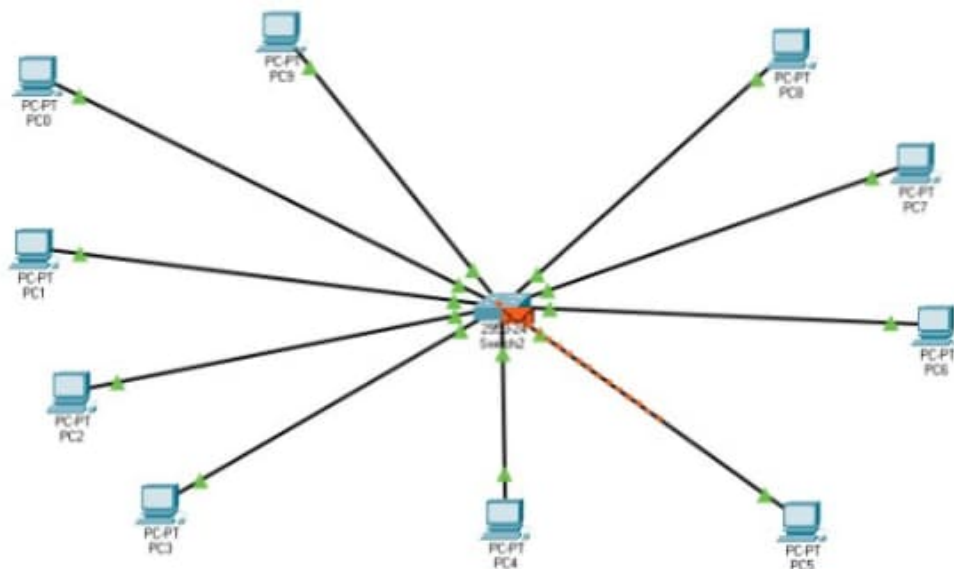
File	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	De
<input checked="" type="checkbox"/>	In Progress	PC1	PC5	ICMP		0.000	N	0	(edit)	(de





Logical Physical n: 321, p: 614

[Root] 12:59



Simulation Panel

Event List

Vis.	Time(sec)	Last Device	At Device
	0.000	-	PC1
	0.001	PC1	Switch2
	0.002	Switch2	PC5
<input checked="" type="checkbox"/>	0.003	PC5	Switch2

Reset Simulation

☒ Constant DelayCaptured
0.00

Play Controls



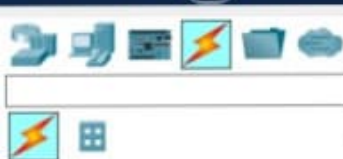
Event List Filters - Visible Events

ACL Filter, ARP, BGP, Bluetooth, CAPWAP, CDP, DHCP, DHCPv6, DNS, DTP, EAPOL, EIGRP, EIGRPv6, FTP, H.323, HSRP, HSRPv6, HTTP, HTTPS, ICMP, ICMPv6, IPsec, ISAKMP, IoT, IoT TCP, LACP, LLDP, NDP, NETFLOW, NTP, OSPF, OSPFv6, PAgP, POP3, PPP, PPPoE, PTP, RADIUS, REP, RIP, RIPng, RTSP, SCCP, SMTP, SNMP, SSH, STP, SYSLOG, TACACS, TCP, TFTP, Telnet, UDP, USB, VTP

Edit Filters

Show All/None

Time: 00:04:20.403 PLAY CONTROLS



Scenario 0

New

Delete

Toggle PDU List Window

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit
<input checked="" type="checkbox"/>	In Progress	PC1	PC5	ICMP	Red	0.000	N	0	(edit)