

Name - Shubham Kumar

Class -

Course - MCA (B)

Subject - Computer Network

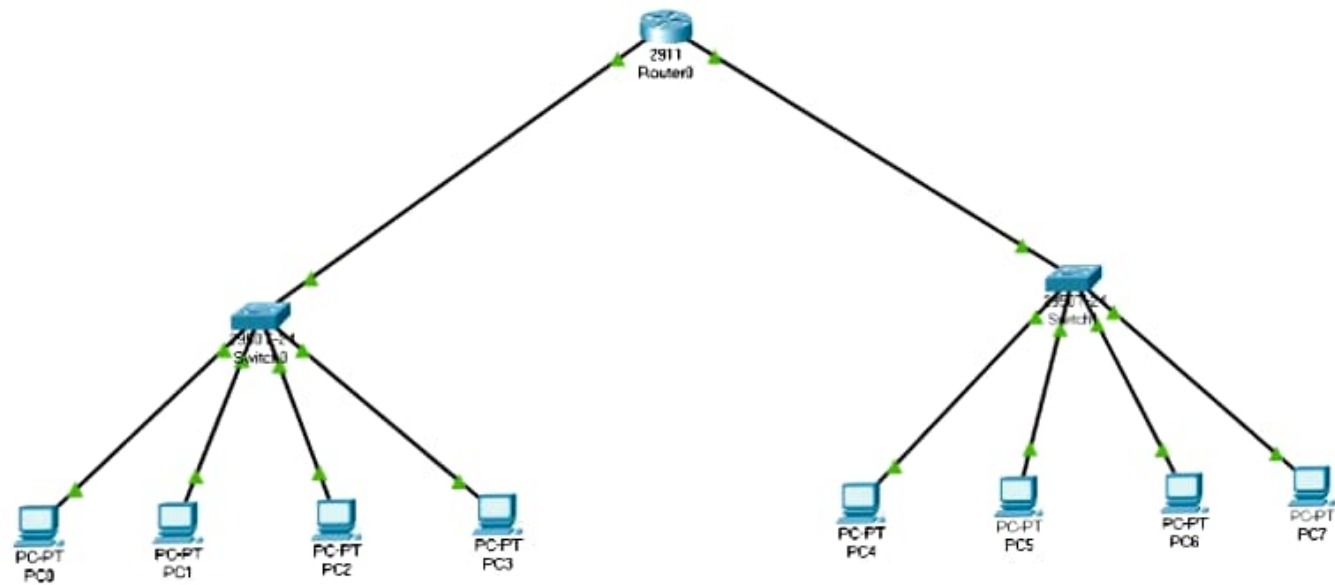
Roll no. - 2001145

Q: There is an organisation A with multiple department Design a network for the HR Department & size of the department is 10 users. Also, show the communication b/w user number 1 & user number 5 of the network.

Ans: Objective - The objective is to establish connection b/w the two organisations with the help of wires & network devices.

Steps:

- 1.) first place PC, Routers & Switch on the screen
- 2.) Then connect them using copper wire
- 3.) Connect switch & router with wires
- 4.) Then start configuring the device



IP Configuration

Interface FastEthernet0

IP Configuration

☐ DHCP☒ Static

IPv4 Address

192.168.1.1

Subnet Mask

255.255.255.0

Default Gateway

192.168.1.5

DNS Server

0.0.0.0

IPv6 Configuration

☐ Automatic☒ Static

IPv6 Address

Link Local Address

FE80:202:18FF:FEA2:C30B

Default Gateway

DNS Server

802.1X

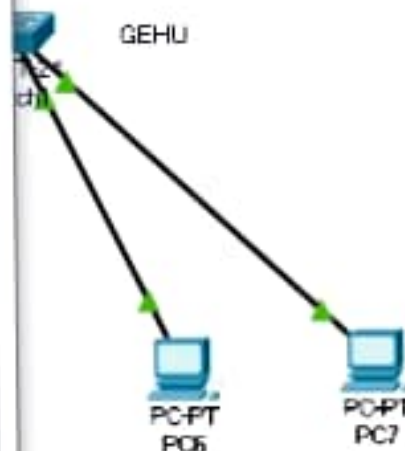
☐ Use 802.1X Security

Authentication

MD5

Username

Password

☐ Top

PC0

Physical Config Desktop Programming Attributes

IP Configuration

Interface: FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address: 10.0.0.1

Subnet Mask: 255.0.0.0

Default Gateway: 10.0.0.5

DNS Server: 0.0.0.0

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address: /

Link Local Address: FE80:2E0:A3FF:FE11:85AE

Default Gateway:

DNS Server:

802.1X

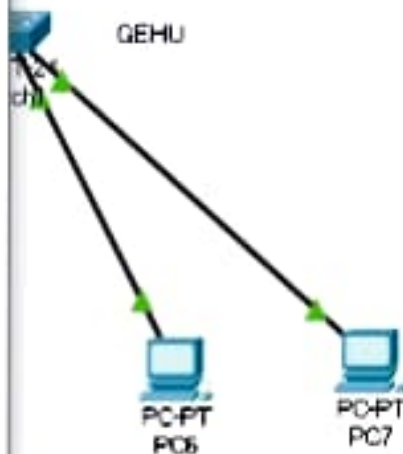
☐ Use 802.1X Security

Authentication: MD5

Username:

Password:

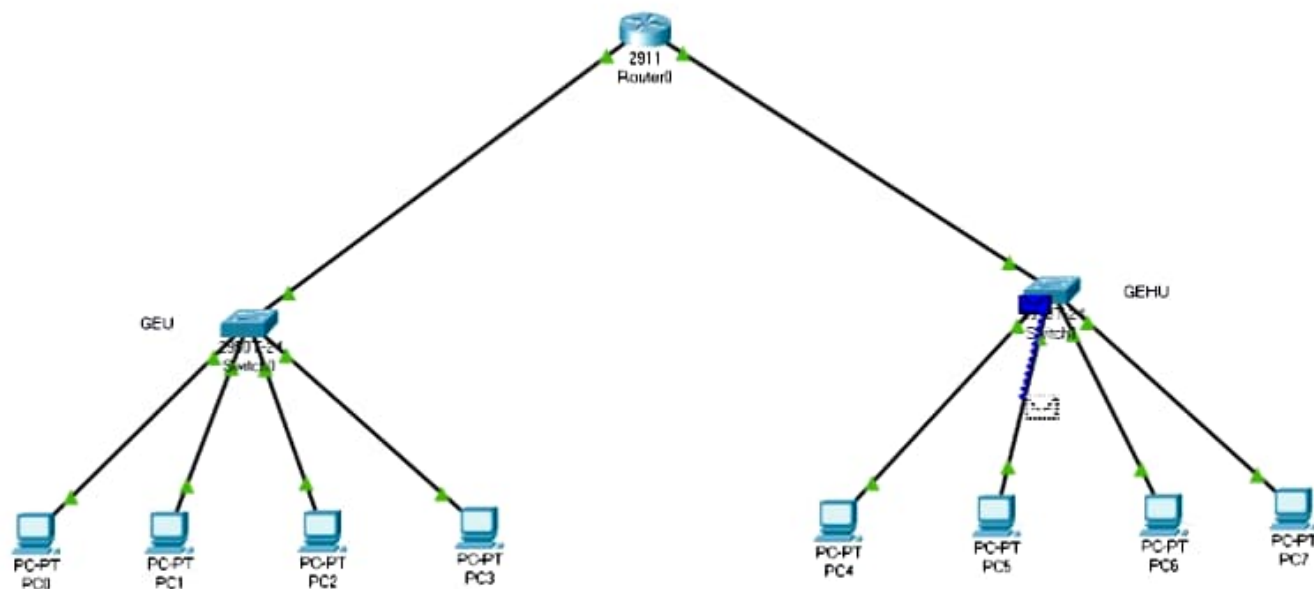
☐ Top





Logical Physical x 1549, y 371

[Root] 10.09.30



Simulation Panel

Event List

Vis.	Time(sec)	Last Device	At Device	T
	0.000	-	PC0	
	0.001	PC0	Switch0	
	0.002	Switch0	Router0	
	0.003	Router0	Switch1	
	0.004	Switch1	PC5	
	0.005	PC5	Switch1	
	0.006	Switch1	Router0	
	0.007	Router0	Switch0	
	0.008	Switch0	PC0	
	0.381	-	Switch1	

Reset Simulation ☒ Constant Delay Captured to 0.381 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, Meraki, 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 00:17:45.016 PLAY CONTROLS

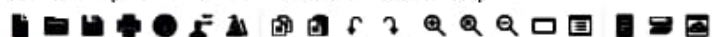


Scenario 0

New Delete

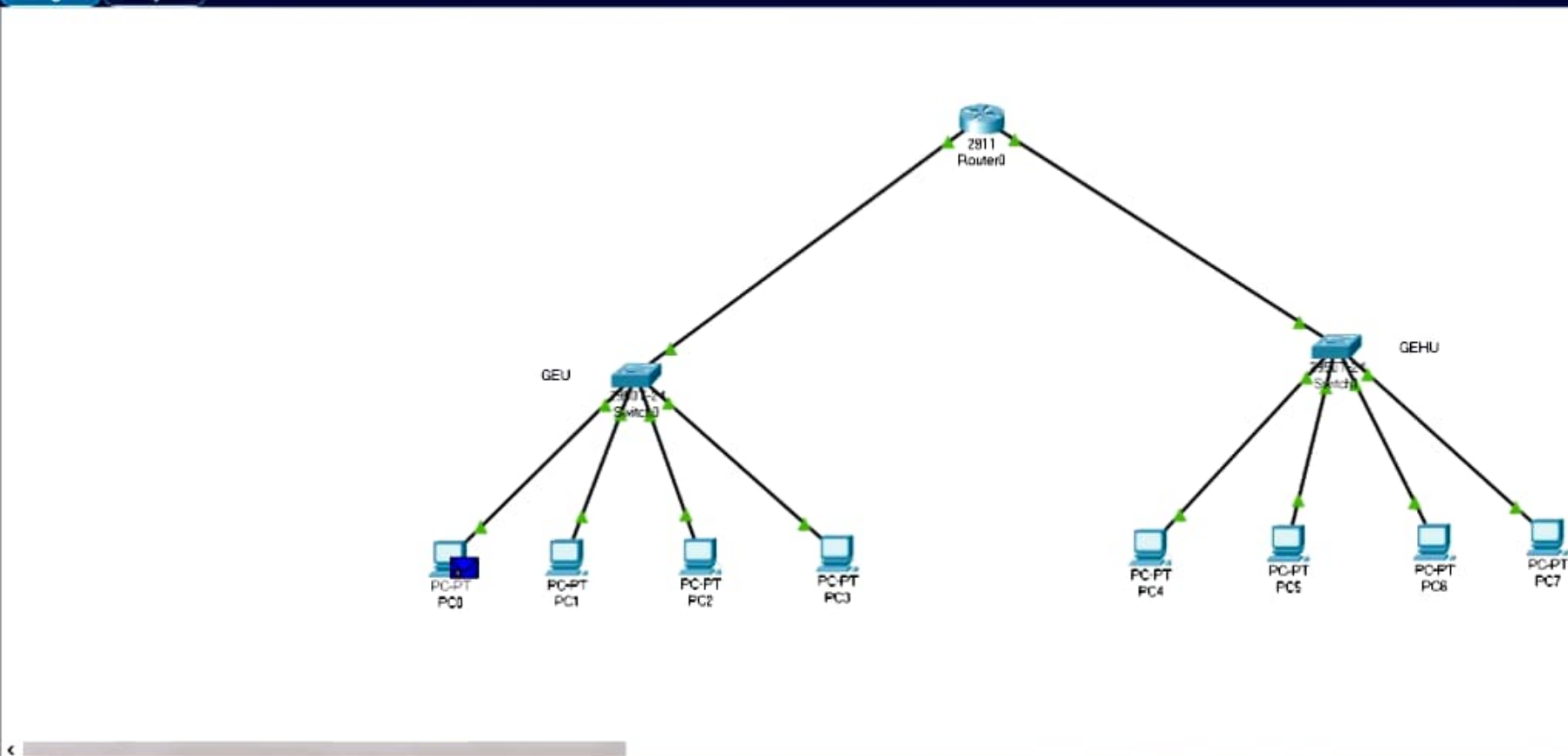
Toggle PDU List Window

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	Successful	PC0	PC5	ICMP		0.000	N	0	(edit)	(delete)



Logical Physical x 1553, y 500

[Root] 10.23.00



Simulation Panel

Event List

Vis.	Time(sec)	Lost Device	At Device	T
	0.000	-	PC0	
	0.001	PC0	Switch0	
	0.002	Switch0	Router0	
	0.003	Router0	Switch1	
	0.004	Switch1	PC5	
	0.005	PC5	Switch1	
	0.006	Switch1	Router0	
	0.007	Router0	Switch0	
	0.008	Switch0	PC0	
	0.381	-	Switch1	

Reset Simulation ☒ Constant Delay Captured to 0.381 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, Meraki, NDP, NETFLOW, NTP, OSPF, OSPFv6, PAgP, POP3, PPP, PPPoE, PTP, RADIUS, REP, RIP, RIPng, RTP, SCOP, SMTP, SNMP, SSH, STP, SYSLOG, TACACS, TCP, TFTP, Telnet, UDP, USB, VTP

Edit Filters

Show All/None

Time: 00:17:46.018 PLAY CONTROLS



Scenario 1

New

Delete

Toggle PDU List Window

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	Successful	PC0	PC5	ICMP		0.000	N	0	(edit)	(delete)

