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Class → MCA - B

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Sub → PNC (202) Computer Network.

Q1 → There is an organisation with multiple departments. Design a network for the HR department and the size of the department is 10 users. Also show the communication between user number 1 and user number 5 of network.

Soll → Objective: The objective is to establish connection between the two organisation with the help of wires and networking devices.

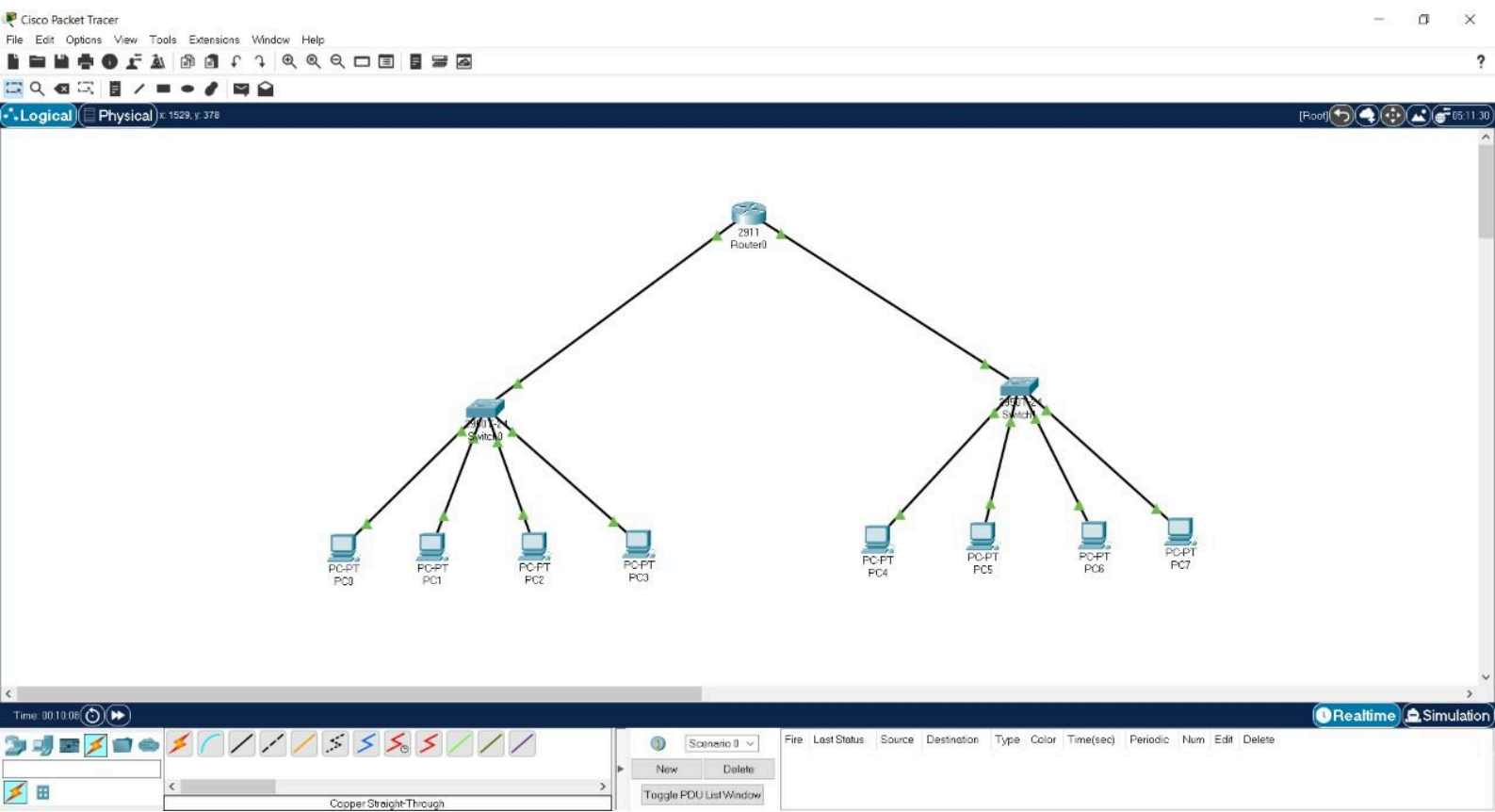
Step: 17 First place PC, router and switch on screen.

27 Then connect them using copper wire.

37 Connect switch and router with wires.

47 Then start configuring the devices.

Raj



Cisco Packet Tracer

File Edit Options View Tools Extensions Window Help

Logical Physical x 539, y 494 [Root] 03:08:30

PC0

Physical Config Desktop Programming Attributes

P 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

GEU

PC-PT PC0

PC-PT PC1

GEU

PC-PT PC6

PC-PT PC7

Time: 00:17:35.639 PLAY CONTROLS

Scenario 0

New Delete

Toggle PDU List Window

Fire Last Status Source Destination Type Color Time(sec) Periodic Num Edit Delete

Copper Straight-Through

Cisco Packet Tracer

File Edit Options View Tools Extensions Window Help

Logical Physical x 1388, y 707

[Root]

2911 Router

GEU Switch

PC-PT PC0 PC-PT PC1 PC-PT PC2 PC-PT PC3

GEU Switch

PC-PT PC4 PC-PT PC5 PC-PT PC6 PC-PT PC7

Simulation Panel

Event List

Vis.	Time(sec)	Lost Device	At Device
	0.000	-	PC0
	0.001	PC0	Switch0

Reset Simulation ☒ Constant Delay Capturing

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, Mangle, 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

Scenario 0

New Delete

Toggle PDU List Window

Time: 00:17:45.939

PLAY CONTROLS

Copper Straight-Through

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	In Progress	PC0	PC5	ICMP		0.030	N	0	(edit)	(delete)

Cisco Packet Tracer

File Edit Options View Tools Extensions Window Help

Logical Physical x 1553, y 500

[Foot] 10:23:00

2911 Router0

GEU Switch0

GEHU Switch1

PC-PT PC0, PC-PT PC1, PC-PT PC2, PC-PT PC3, PC-PT PC4, PC-PT PC5, PC-PT PC6, PC-PT PC7

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, Mmrk, NDP, NETFLOW, NTP, OSPF, OSPFv6, PAgP, POP3, PPP, PPPoE, PTP, RADIUS, REP, RIP, RIPng, RTP, SOAP, SMTP, SNMP, SSH, STP, SYSLOG, TACACS, TCP, TFTP, Telnet, UDP, USB, VTP

Edit Filters Show All/None

Time: 00:17:46.016 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)
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