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Course - MCA

Roll no. - 2001161

Subject - Computer Networks

Subject Code - TMC-203

Q2 There are 2 organizations in a city named GEU and GEHU, design a network b/w the SOC department of GEU & GEHU. Also, show the comm. b/w user no. 1 of GEU & user no. 2 of GEHU.

Ans Objective - To connect 2 LANs

Description -

Step 1 - Drag and drop 2 PCs on the screen. Add a 2950-24 switch on the screen. Join the 2 PCs to the switch using Copper Straight Through Cable.

Step 2 - Again drag & drop 2 PCs on the other side of the screen. Drop a 2950-24 switch on the screen and join the two PC

Step 3 - Configure the IP addresses of all the PCs by clicking on each PC and then Config tab. Select the Fast Ethernet 0 and set the new IP address. Go to Global settings and setup the Default Gateway.

Step 4 - Now Drop a 2811 router at the center of the two connections. Connect the two other LANs to the router using a Copper Straight through.

Step 5 - Configure the Router by ~~Clicking~~ clicking on it and adding the IP address to Fast Ethernet 0/0 & 0/1 in the Config tab.

~~Step 6 - Setup the~~

Cisco Packet Tracer - C:\Users\Acer\Cisco Packet Tracer 8.0\saves\Connection of LANs using router.pkt

File Edit Options View Tools Extensions Window Help

Logical Physical x: 846, y: 110 [Root] 02:40:00

```
graph LR; PC0[PC-PT PC0] --- S0[2950-24 Switch0]; PC1[PC-PT PC1] --- S0; S0 --- R0[2811 Router0]; R0 --- S1[2950-24 Switch1]; S1 --- PC2[PC-PT PC2]; S1 --- PC3[PC-PT PC3];
```

Time: 00:05:12 Realtime Simulation

2960 PT-Switch PT-Empty 3560 24PS 3650 24PS IE 2000 PT-Bridge 2950-24 2950T

Copper Straight-Through

Scenario 0 New Delete Toggle PDU List Window

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	D
	..	PC1	PC3	ICMP	Blue	0.000	N	9	(edit)	(d)
	..	Switch0	Router0	ICMP	Black	0.000	N	10	(edit)	(d)
	Failed	PC0	PC3	ICMP	Red	0.000	N	11	(edit)	(d)

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File Edit Options View Tools Extensions Window

Logical Physical

PC-PT PC0

PC-PT PC1

2950-24T Switch0

Time: 00:05:54

2960 PT-Switch PT-Empty

Copper Straight-Through

PC0

Physical Config Desktop Programming Attributes

GLOBAL Settings Algorithm Settings INTERFACE FastEthernet0 Bluetooth

Global Settings

Display Name PC0

Interfaces FastEthernet0

Gateway/DNS IPv4

DHCP

Static

Default Gateway 192.168.1.254

DNS Server

Gateway/DNS IPv6

Automatic

Static

Default Gateway

DNS Server

Top

Toggle PDU List Window

Realtime Simulation

Location	Type	Color	Time(sec)	Periodic	Num	Edit	Details
PC3	ICMP	Blue	0.000	N	9	(edit) (d)	
Router0	ICMP	Black	0.000	N	10	(edit) (d)	
PC3	ICMP	Red	0.000	N	11	(edit) (d)	

10:36 AM 6/22/2021



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File Edit Options View Tools Extensions Window

Logical Physical x: 176, y: 79

PC-PT PC0

2950-24 Switch0

PC-PT PC1

Time: 00:07:08

2960 PT-Switch PT-Emul

Copper Straight-Through

Toggle PDU List Window

PC0

Physical Config Desktop Programming Attributes

GLOBAL

Settings

Algorithm Settings

INTERFACE

FastEthernet0

Bluetooth

FastEthernet0

Port Status ☒ On

Bandwidth ☒ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex ☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address 00E0.8F3B.58B2

IP Configuration

☐ DHCP

☒ Static

IPv4 Address 192.168.1.1

Subnet Mask 255.255.255.0

IPv6 Configuration

☐ Automatic

☒ Static

IPv6 Address /

Link Local Address: FE80::2E0:8FFF:FE3B:58B2

[Root]

03:40:00

Realtime Simulation

Location	Type	Color	Time(sec)	Periodic	Num	Edit	Details
PC3	ICMP	Blue	0.000	N	9	(edit)	(d)
Router0	ICMP	Black	0.000	N	10	(edit)	(d)
PC3	ICMP	Red	0.000	N	11	(edit)	(d)

10:37 AM 6/22/2021

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File Edit Options View Tools Extensions Window

Logical Physical x: 571, y: 199

PC-PT PC0

2950-24 Switch0

PC-PT PC1

Time: 00:07:34

Router0

Physical Config CLI Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

SWITCHING

VLAN Database

INTERFACE

FastEthernet0/0

FastEthernet0/1

FastEthernet0/0

Port Status ☒ On

Bandwidth ☒ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex ☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address 0001.96A3.5101

IP Configuration

IPv4 Address 192.168.1.254

Subnet Mask 255.255.255.0

Tx Ring Limit 10

Equivalent IOS Commands

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up

Router>enable
Router#
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface FastEthernet0/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface FastEthernet0/0
Router(config-if)#
```

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Toggle PDU List Window

Realtime Simulation

Location	Type	Color	Time(sec)	Periodic	Num	Edit	Details
PC3	ICMP	Blue	0.000	N	9	(edit)	(d)
Router0	ICMP	Black	0.000	N	10	(edit)	(d)
PC3	ICMP	Red	0.000	N	11	(edit)	(d)

Copper Straight-Through

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