

Ques 2)

Problem Statement: There are two organizations in a city named GED and GEHD, ~~under~~ design a network between the SOC department of GED and GEHD. Also show the communication between user number 1 of GED and user number 2 of GEHD.

Objective: In this there is a two organization GED and GEHD. So we design a network between the SOC department of GED and GEHD by using different device or network used in computer networks and also we show the communication between the <sup>user</sup> number 1 of GED and user number 2 of GEHD.

Steps for network creation:

- Step 1: Create LAN-1 with 4 PCs and create LAN 2 with 4 PCs.
- Step 2: Connect both LAN with router and configure the router.
- Step 3: Default Gateway for LAN-1 is 10.0.0.5  
Default Gateway for LAN-2 is 192.168.1.5
- Step 4: Sending PDU to see if connection is established.

Cisco Packet Tracer

File Edit Options View Tools Extensions Window Help

Logical Physical x: 1560, y: 377

PC4

Physical Config Desktop Programming Attributes

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 FE80:2B2:16FF:FEA2:C3DB

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: 00:17:45.935 PLAY CONTROLS

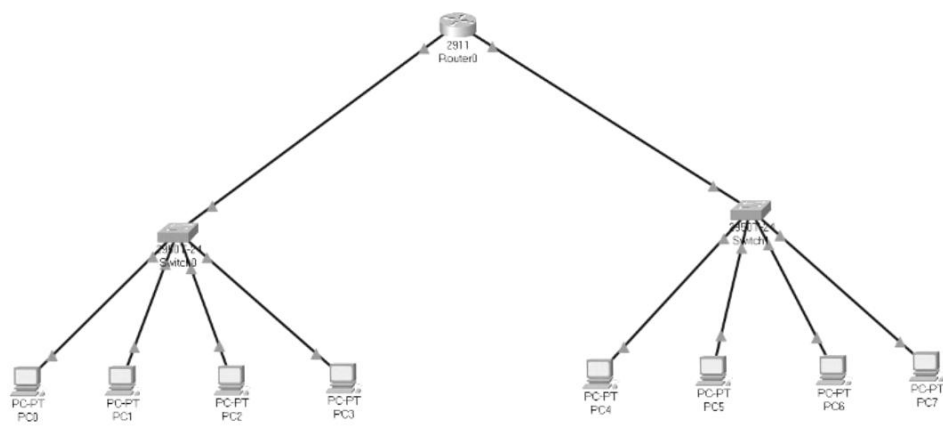
Scenario 0

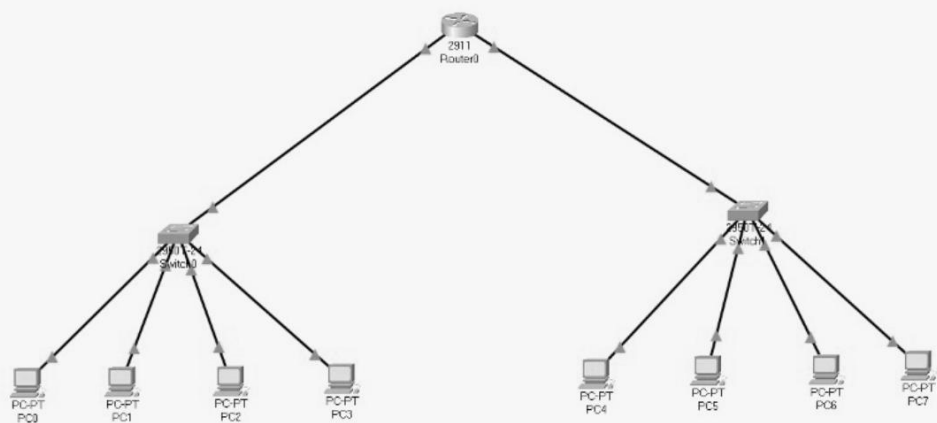
New Delete

Toggle PDU List Window

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

Copper Straight-Through





Time: 00:10:00

Realtime Simulation

Scenario 0

New Delete

Toggle PDU List Window

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
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Copper Straight-Through

Cisco Packet Tracer

File Edit Options View Tools Extensions Window Help

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

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

GEU

PC-PT PC0

PC-PT PC1

GEU

PC-PT PC6

PC-PT PC7

Time: 00:17:35.535 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:1553, y:500

[Root]

```
graph TD
    Router0[2811 Router0] --- GEU[GEU]
    Router0 --- GEHU[GEHU]
    GEU --- PC0[PC0]
    GEU --- PC1[PC1]
    GEU --- PC2[PC2]
    GEU --- PC3[PC3]
    GEHU --- PC4[PC4]
    GEHU --- PC5[PC5]
    GEHU --- PC6[PC6]
    GEHU --- PC7[PC7]
```

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	
	0.391	-	Switch1	

Reset Simulation ☒ Constant Delay Captured to: 0.391 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, MIB, NDP, NETFLOW, NTP, OSPF, OSPFv6, PAggr, 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

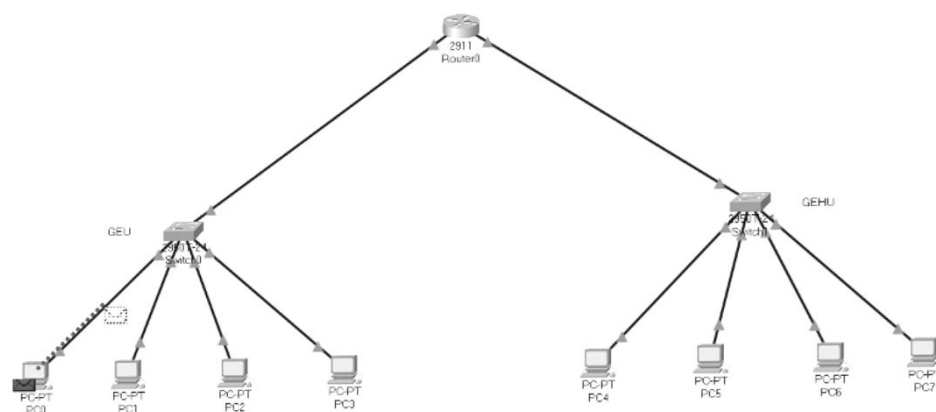
Time: 00:17:46.016 PLAY CONTROLS

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)



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

Event List Filters - Visible Events  
 ACLFilter, 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, Mirek, 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

Event List  
 In Progress PC0 PC5 ICMP 0.000 N 0 (edit) (delete)