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Course MCA
Semester 2 Section B
Student ID 20711069
Paper name Computer network
Paper code TMC 203

Q2

Problem Statement: There are two organization in city named Gcu and Gchu design a network between the SOC department of Gcu & Gchu. Also show the communication b/w user number 1 of Gcu and user number 2 of Gchu.

Objective: By this question we have learn how to connect 2 Lan of different organization by the help of router.

Steps of network

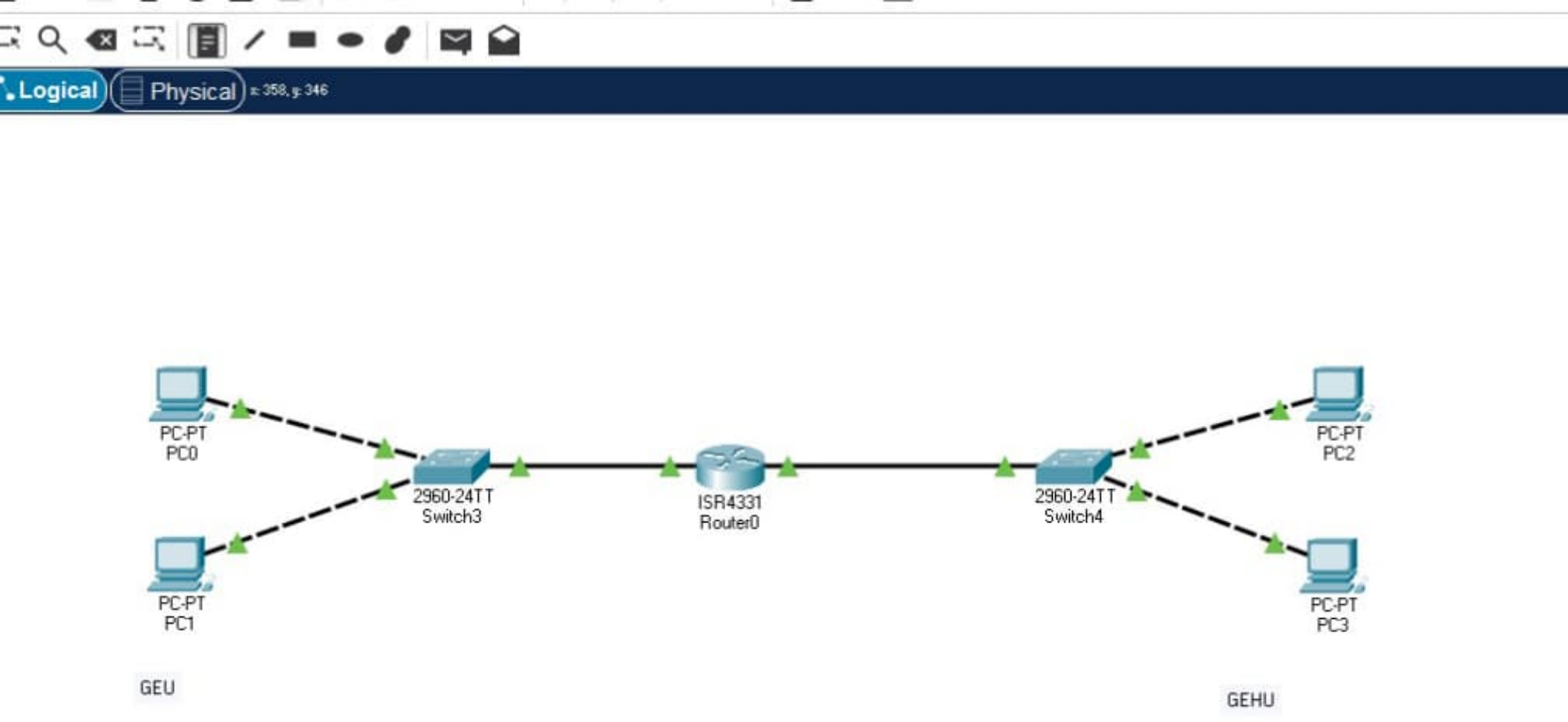
Step1: Design a network for Gcu and Gchu and connection both with help of router.

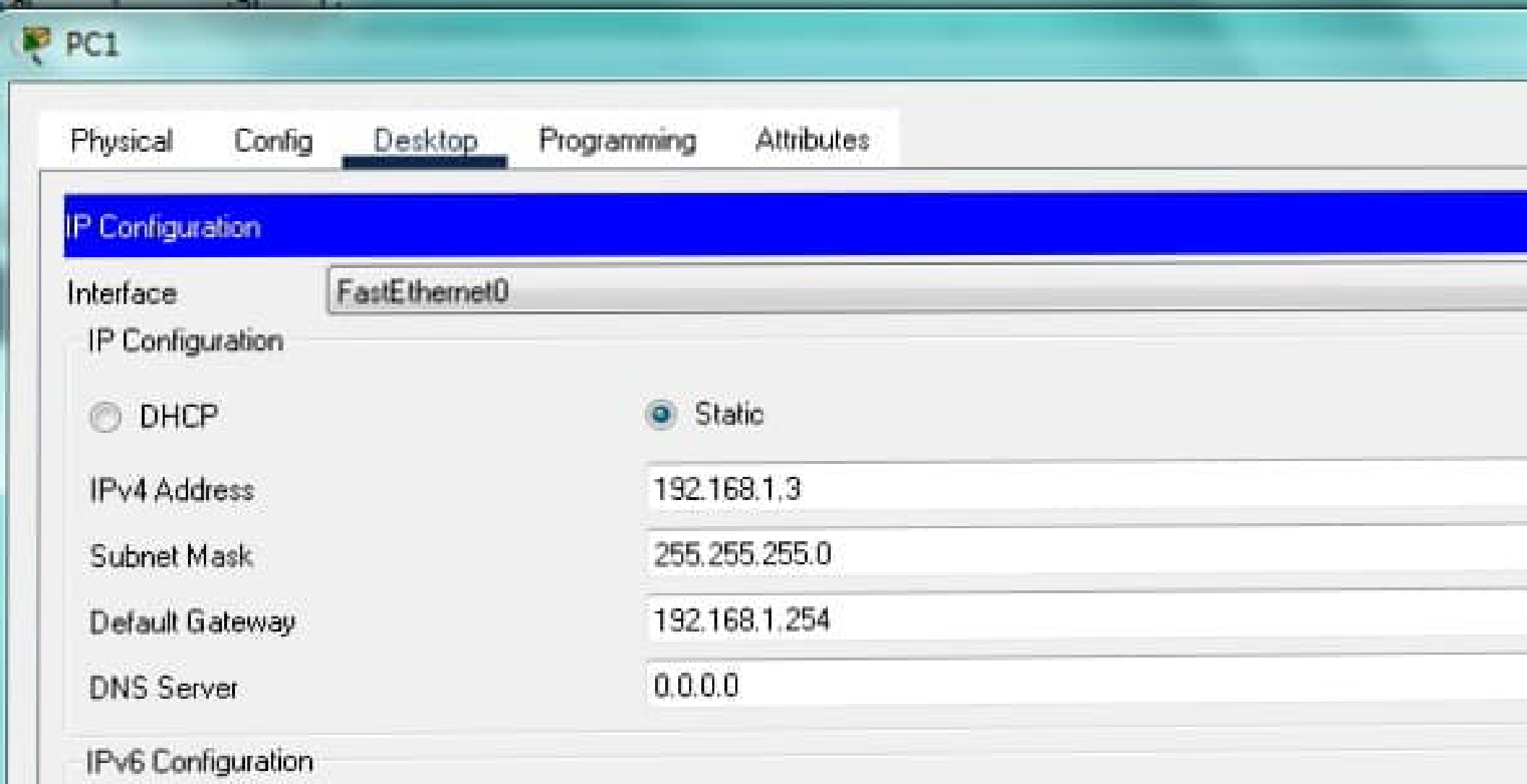
Step2: Assign IP address and subnet mask to pc of both network

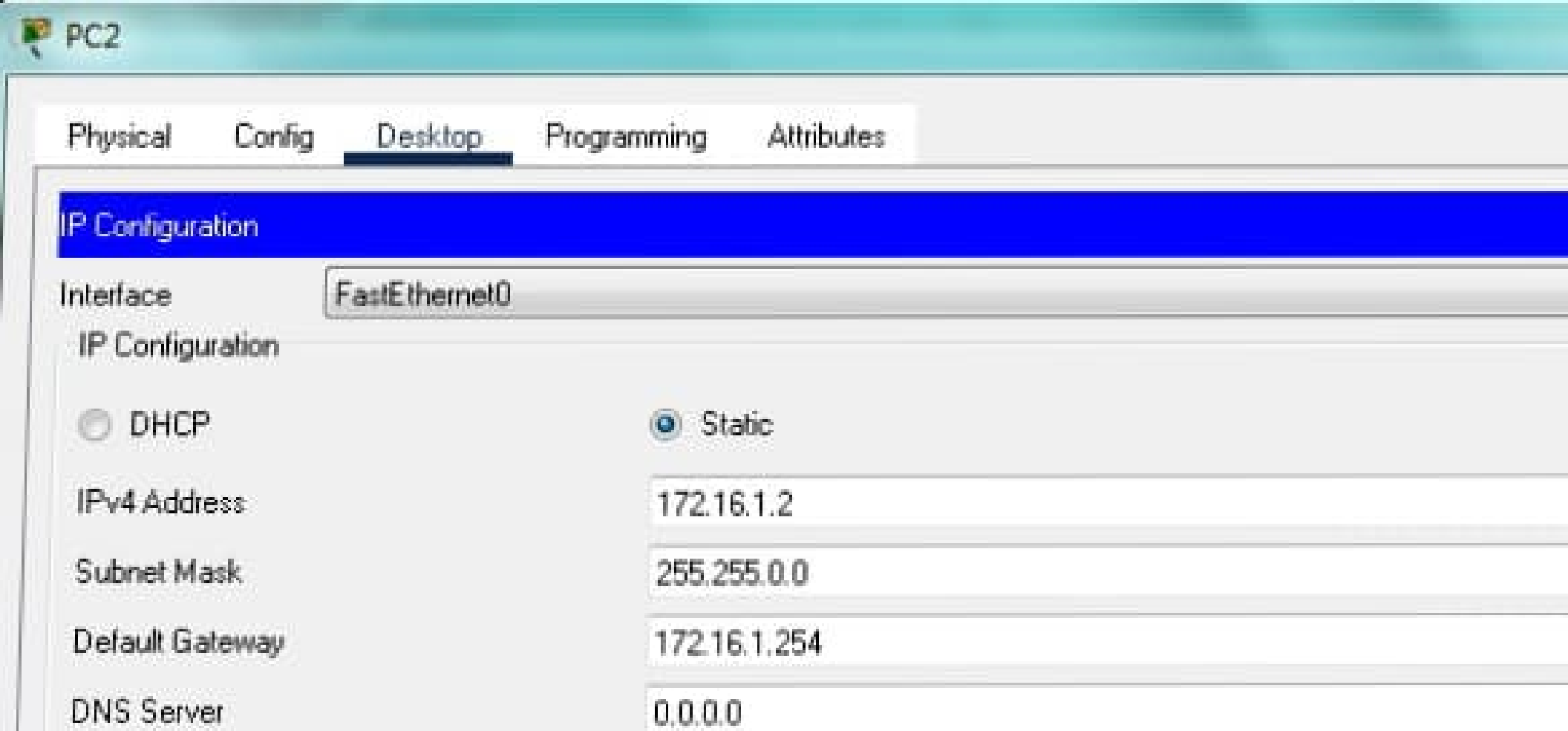
Step3: Assign IP address and subnet mask to router which will act as a default gateway of respective Lan.

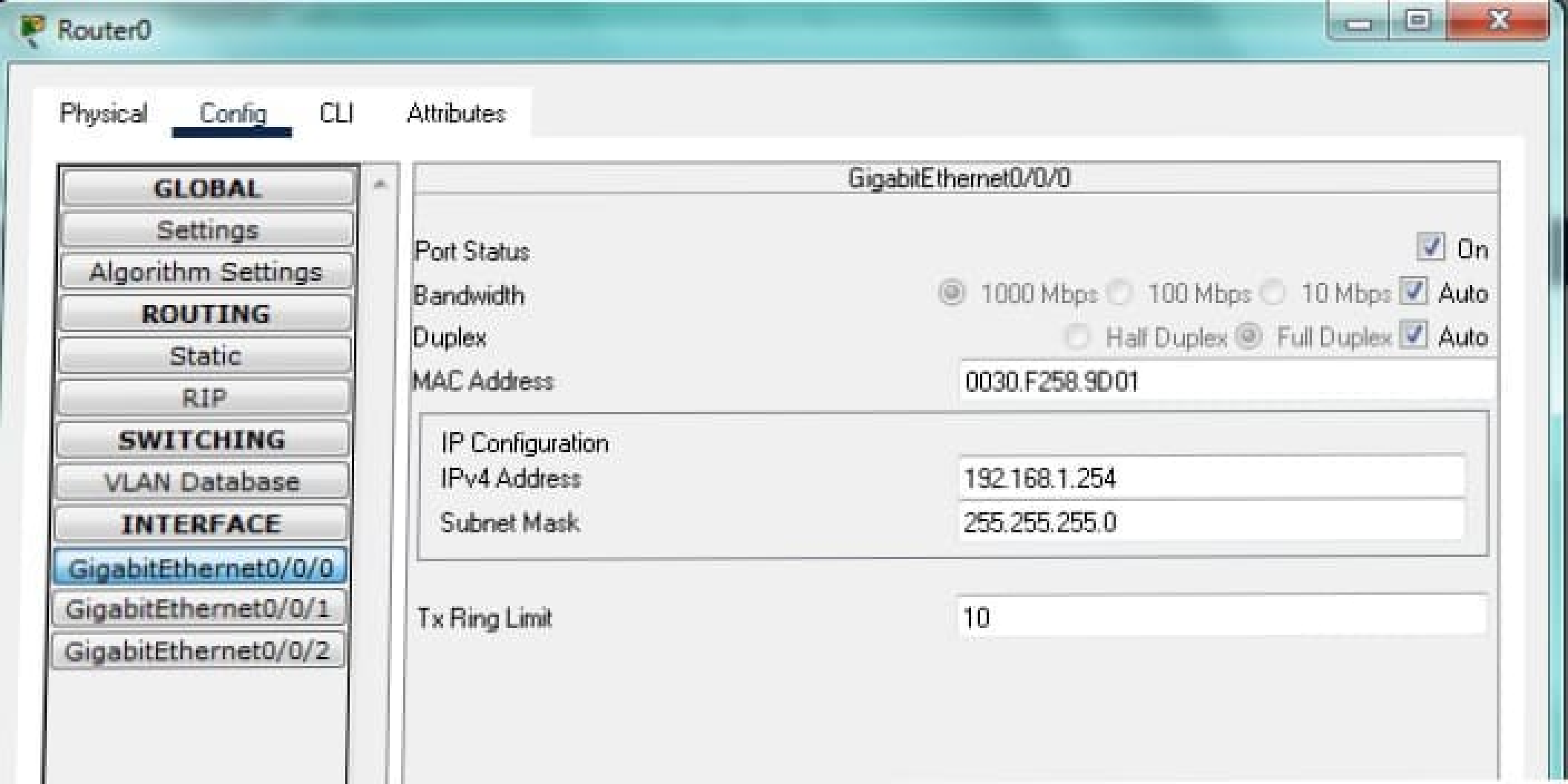
Step4: Sending a message from PC1 of Gcu to PC2 to Gchu to check the connection.

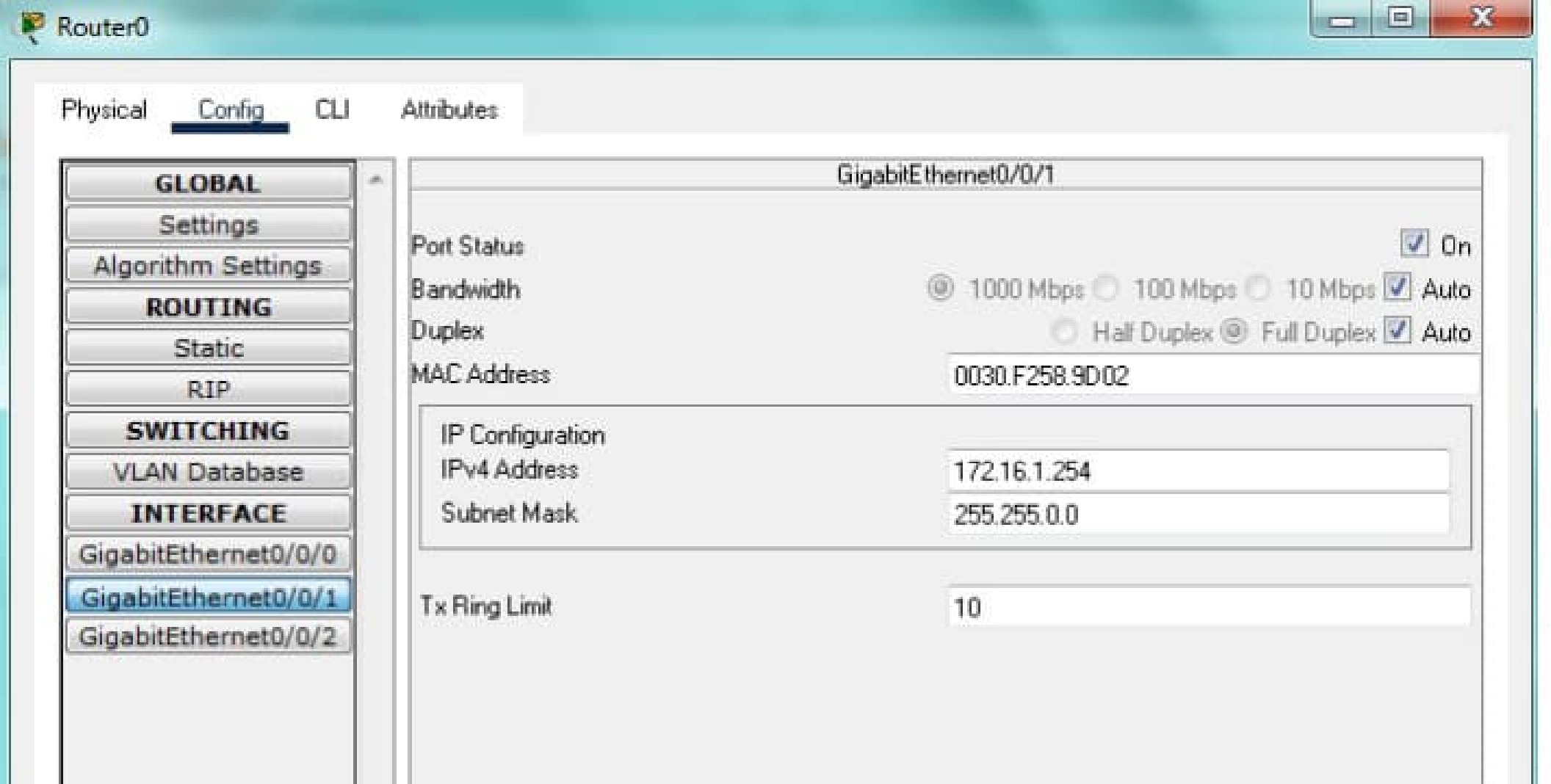
Sagar.

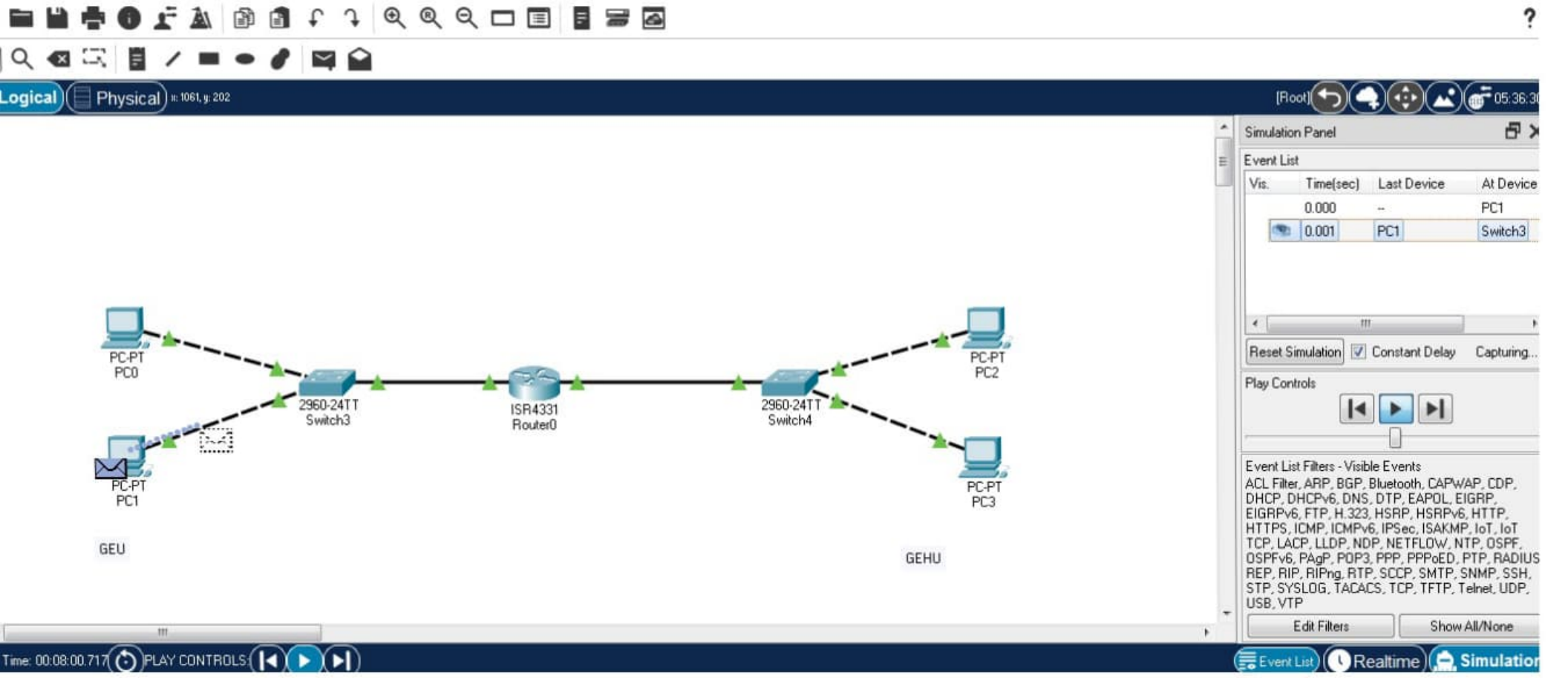

Logical
Physical
x: 358, y: 346
PC-PT
PC0
PC-PT
PC1
2960-24TT
Switch3
ISR4331
Router0
2960-24TT
Switch4
PC-PT
PC2
PC-PT
PC3
GEU
GEHU


PC1
Physical
Config
Desktop
Programming
Attributes
IP Configuration
Interface
FastEthernet0
IP Configuration
DHCP
Static
IPv4 Address
192.168.1.3
Subnet Mask
255.255.255.0
Default Gateway
192.168.1.254
DNS Server
0.0.0.0
IPv6 Configuration


PC2
Physical
Config
Desktop
Programming
Attributes
IP Configuration
Interface
FastEthernet0
IP Configuration
DHCP
Static
IPv4 Address
172.16.1.2
Subnet Mask
255.255.0.0
Default Gateway
172.16.1.254
DNS Server
0.0.0.0

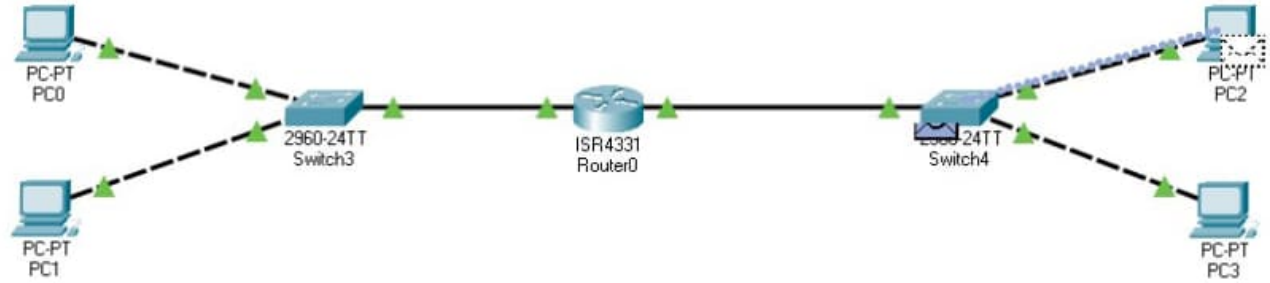

Router0
Physical
Config
CLI
Attributes
GLOBAL
Settings
Algorithm Settings
ROUTING
Static
RIP
SWITCHING
VLAN Database
INTERFACE
GigabitEthernet0/0/0
GigabitEthernet0/0/1
GigabitEthernet0/0/2
GigabitEthernet0/0/0
Port Status
On
Bandwidth
1000 Mbps
100 Mbps
10 Mbps
Auto
Duplex
Half Duplex
Full Duplex
Auto
MAC Address
0030.F258.9D01
IP Configuration
IPv4 Address
192.168.1.254
Subnet Mask
255.255.255.0
Tx Ring Limit
10


Router0
Physical
Config
CLI
Attributes
GLOBAL
Settings
Algorithm Settings
ROUTING
Static
RIP
SWITCHING
VLAN Database
INTERFACE
GigabitEthernet0/0/0
GigabitEthernet0/0/1
GigabitEthernet0/0/2
GigabitEthernet0/0/1
Port Status
On
Bandwidth
1000 Mbps
100 Mbps
10 Mbps
Auto
Duplex
Half Duplex
Full Duplex
Auto
MAC Address
0030.F258.9D02
IP Configuration
IPv4 Address
172.16.1.254
Subnet Mask
255.255.0.0
Tx Ring Limit
10


Logical
Physical
x: 1061, y: 202
[Root]
05:36:30
PC-PT
PC0
2960-24TT
Switch3
ISR4331
Router0
2960-24TT
Switch4
PC-PT
PC2
PC-PT
PC1
PC-PT
PC3
GEU
GEHU
Simulation Panel
Event List
Vis.
Time(sec)
Last Device
At Device
0.000
--
PC1
0.001
PC1
Switch3
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, NDP, NETFLOW, NTP, OSPF, OSPFv6, PAgP, POP3, PPP, PPPoED, 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: 00:08:00.717
PLAY CONTROLS:
Event List
Realtime
Simulation

File Edit Options View Tools Extensions Window Help

Logical Physical x: 1053, y: 306 [Root] 05:46:



Simulation Panel

Event List

Vis.	Time(sec)	Last Device	At Devic
	0.000	--	PC1
	0.001	PC1	Switch3
	0.002	Switch3	Router0
	0.003	Router0	Switch4
	0.004	Switch4	PC2

Reset Simulation | Constant Delay | Captured 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, PPPoED, PTP, RADIU REP, RIP, RIPng, RTP, SCCP, SMTP, SNMP, SSH STP, SYSLOG, TACACS, TCP, TFTP, Telnet, UDP, USB, VTP

Edit Filters | Show All/None

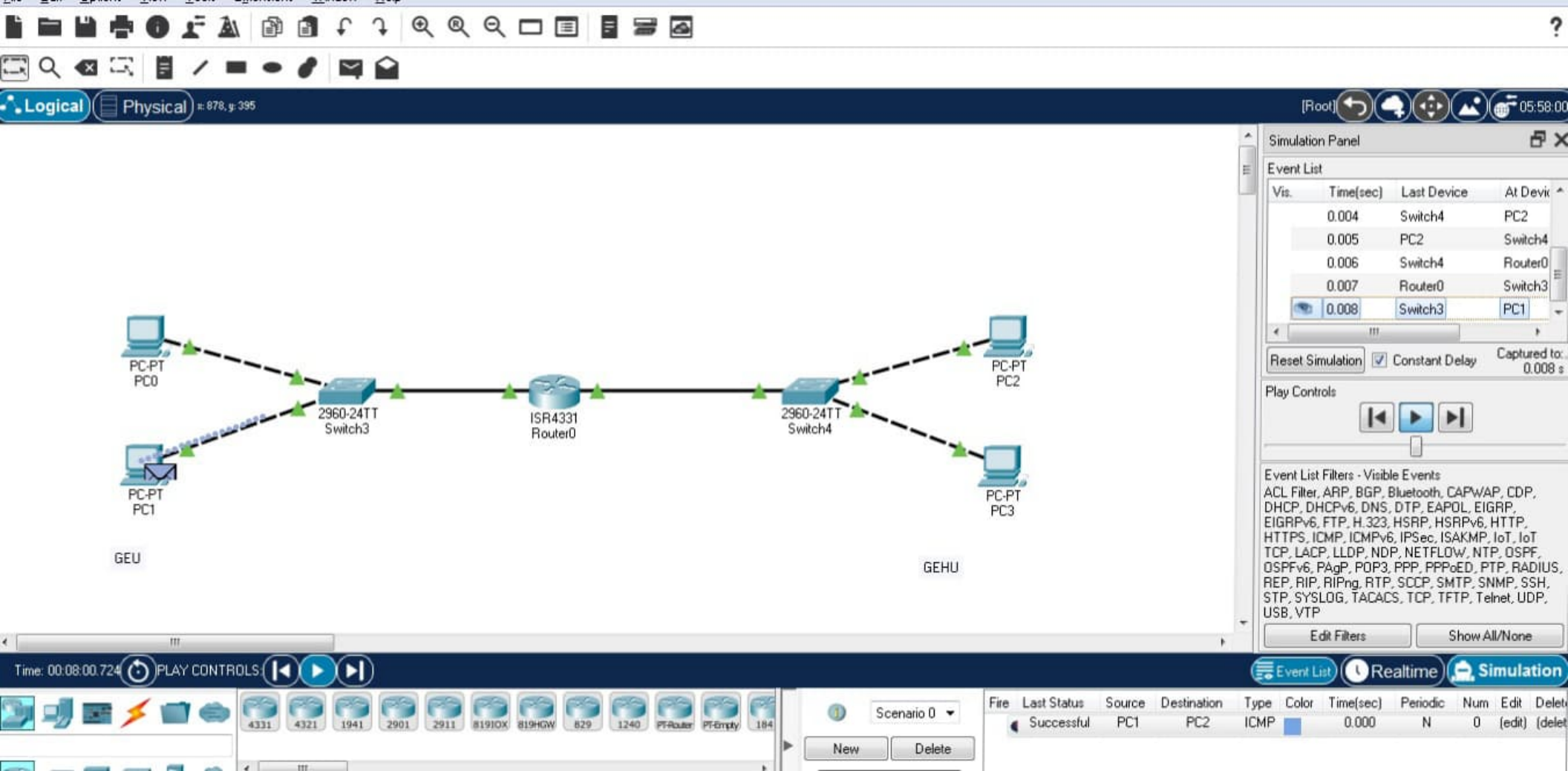
Time: 00:08:00.720 PLAY CONTROLS: Event List Realtime Simulatio

4331 4321 1941 2901 2911 819IOX 819HGW 829 1240 PT-Router PT-Empty 184

Scenario 0

New Delete

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	D
	In Progress	PC1	PC2	ICMP		0.000	N	0	(edit)	(c


Logical
Physical
[Root]
05:58:00
PC-PT
PC0
2960-24TT
Switch3
ISR4331
Router0
2960-24TT
Switch4
PC-PT
PC2
PC-PT
PC1
PC-PT
PC3
GEU
GEHU
Simulation Panel
Event List
Vis.
Time(sec)
Last Device
At Devi
0.004
Switch4
PC2
0.005
PC2
Switch4
0.006
Switch4
Router0
0.007
Router0
Switch3
0.008
Switch3
PC1
Reset Simulation
Constant Delay
Captured to:
0.008 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, PPPoED, 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: 00:08:00.724
PLAY CONTROLS:
Event List
Realtime
Simulation
4331
4321
1941
2901
2911
819IOX
819HGW
829
1240
PT-Router
PT-Empty
Scenario 0
New
Delete
Fire
Last Status
Source
Destination
Type
Color
Time(sec)
Periodic
Num
Edit
Successful
PC1
PC2
ICMP
0.000
N
0
(edit)