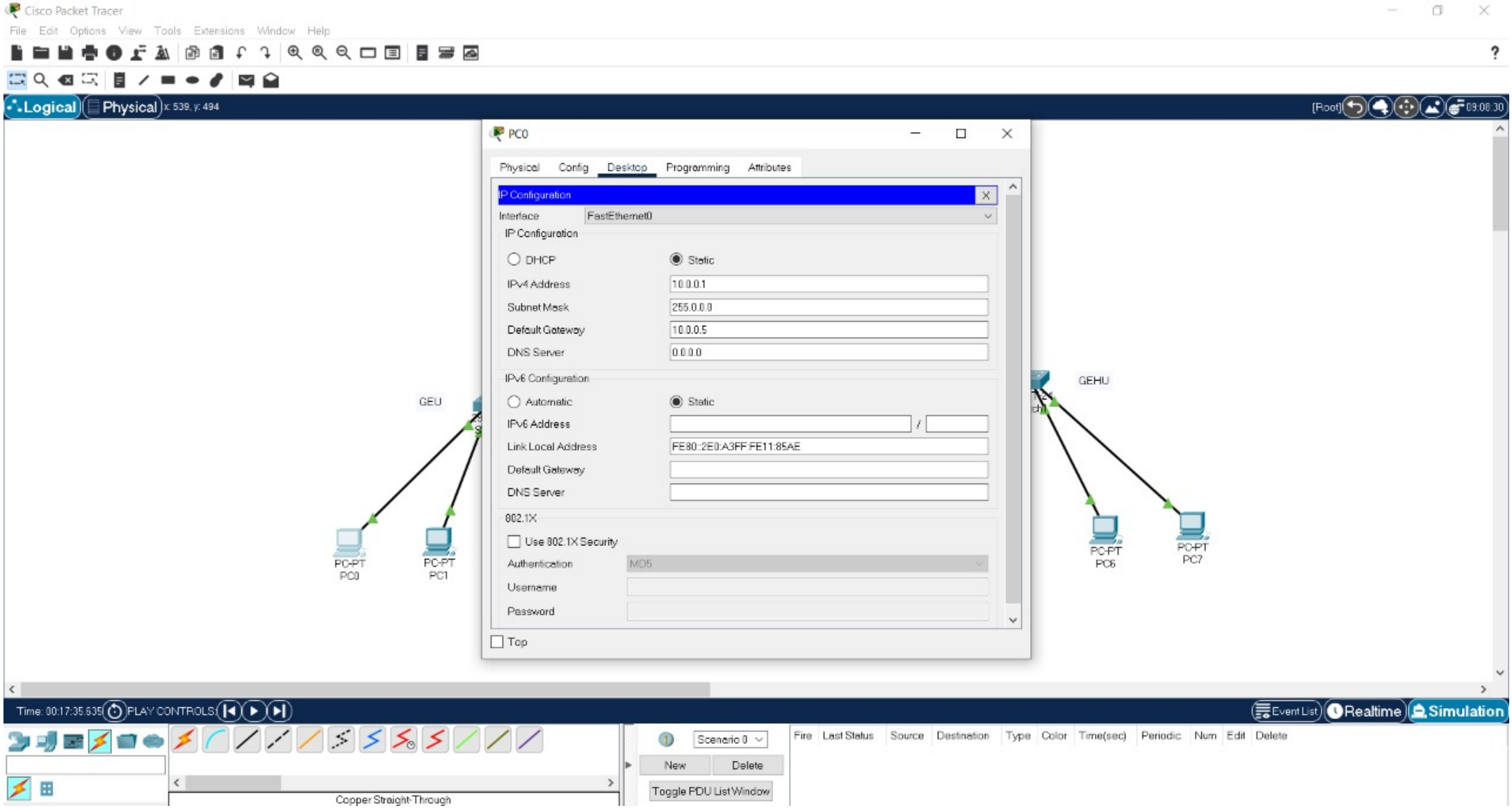
Name → Shubham Uniyal
Class → MCA-B
Roll no → 2001149
Subject → Computer Networks (TMC-203)

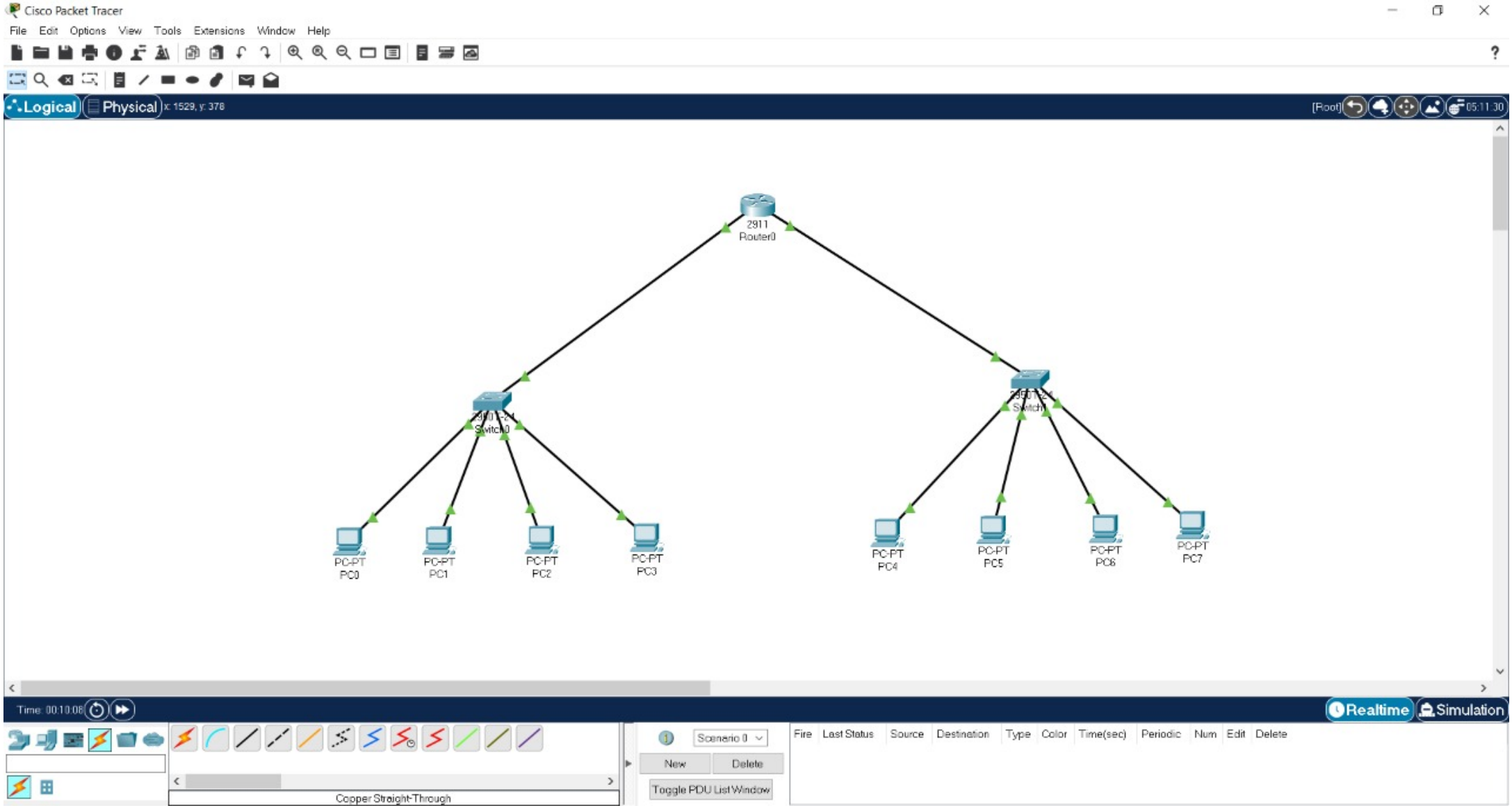
Ans2 → Problem statement → There are 2 organizations in a city named GEU and GEHU, design a network between the SoC department of GEU and GEHU. Also, show the communication b/w user number 1 of GEU and 2 of GEHU.

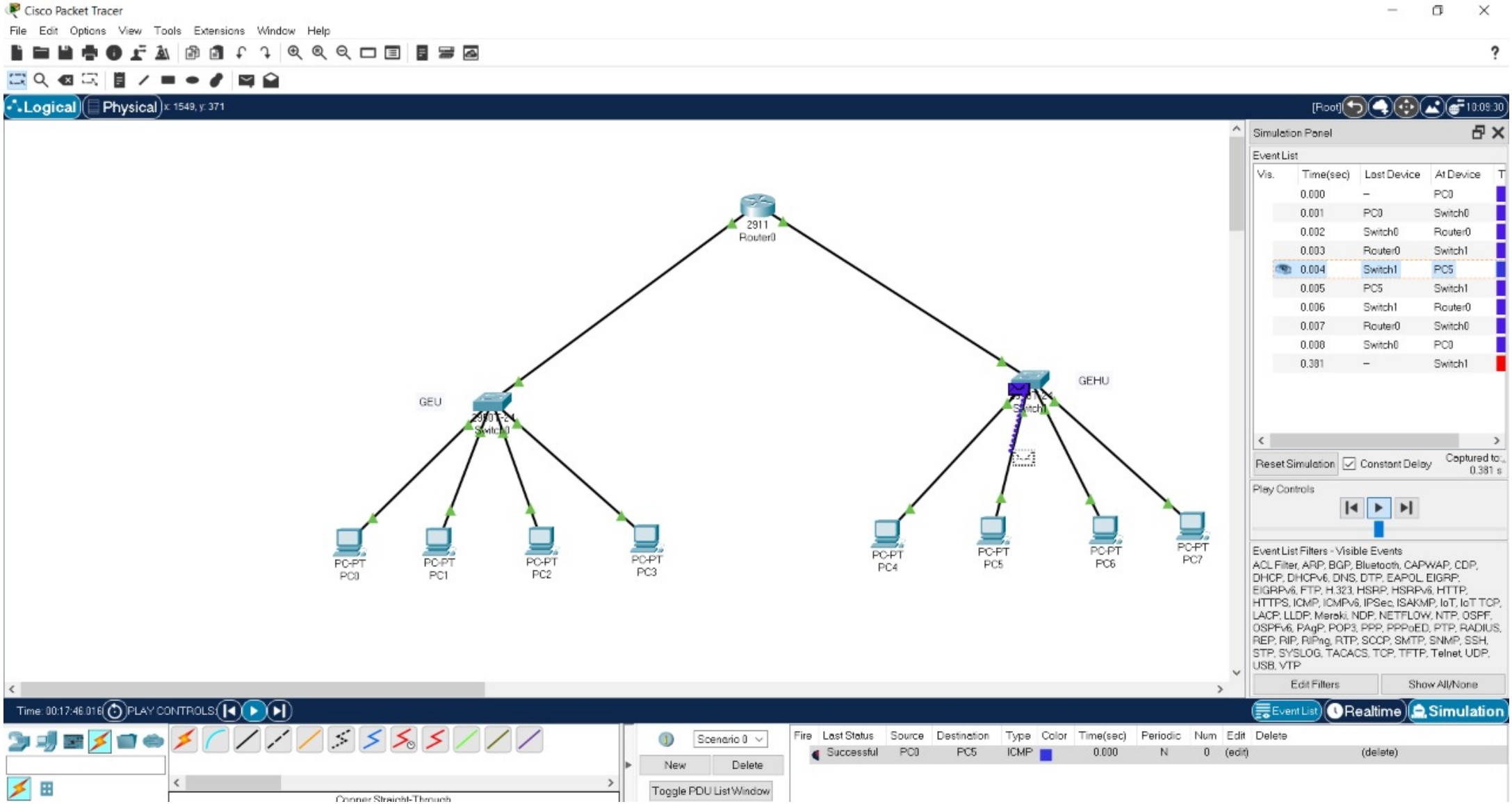
Objective → Design a network between two departments

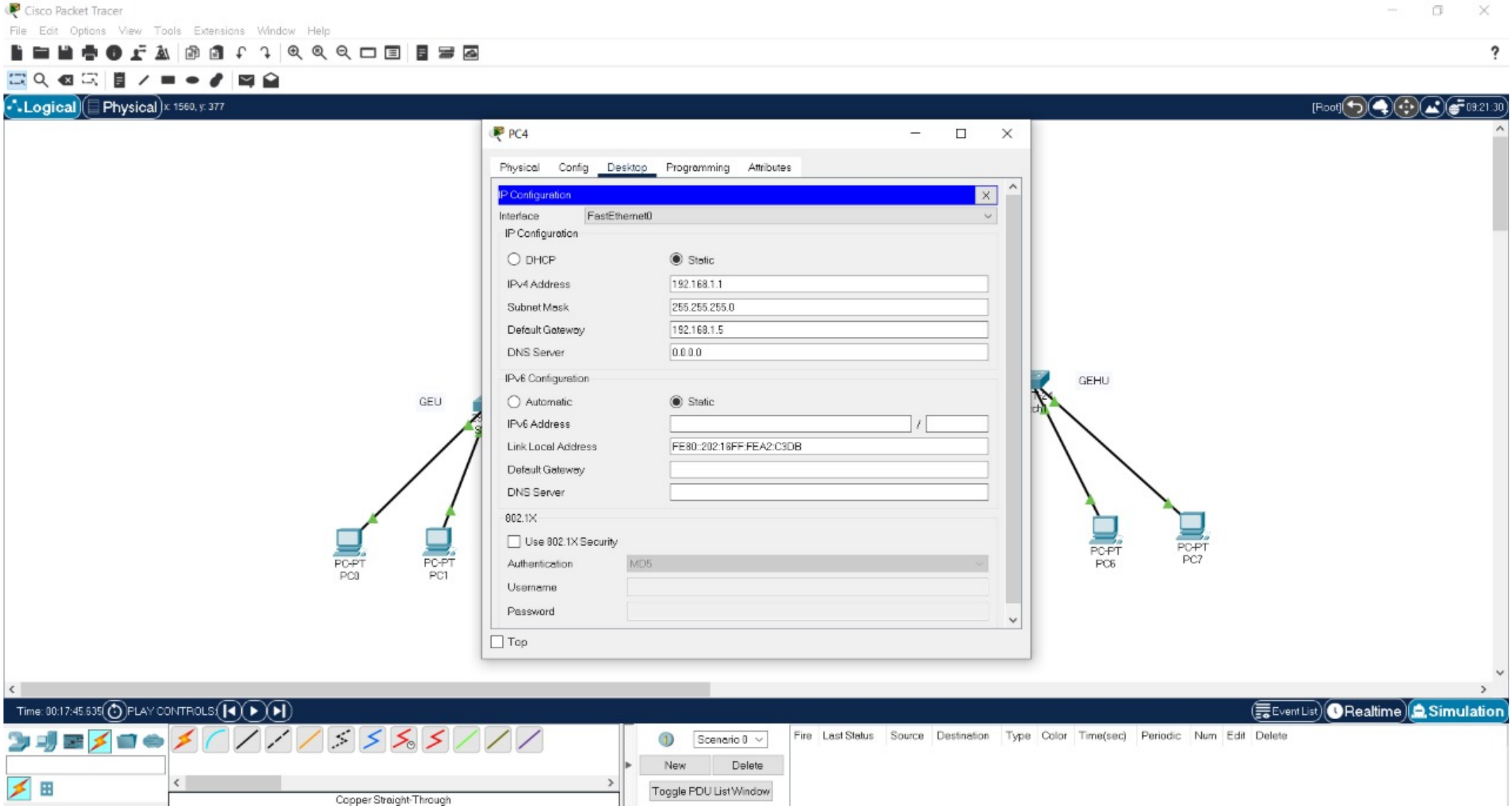
Description → Use packet tracer

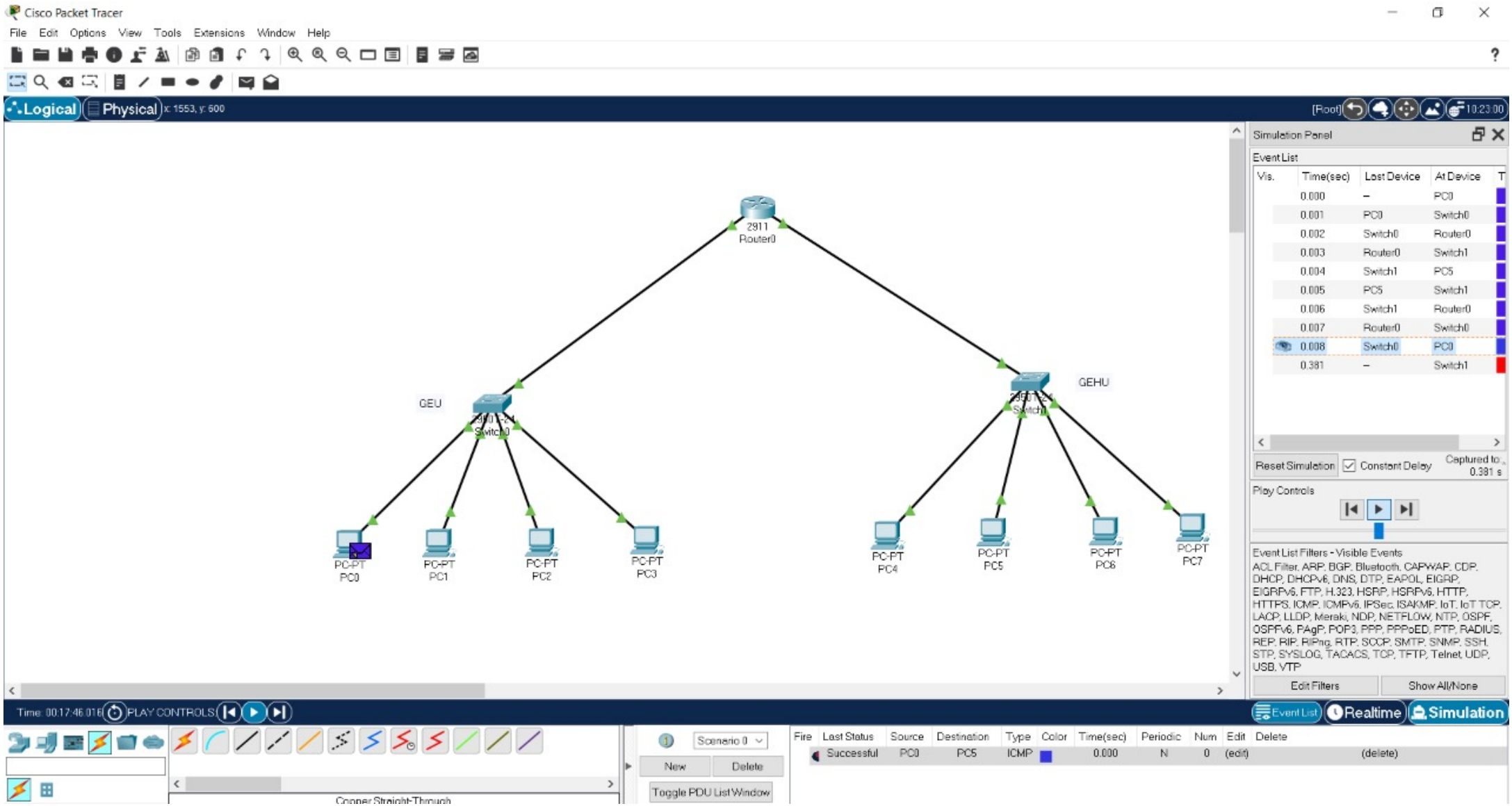
Steps → 1) Create LAN-1 with 4 PC and create LAN-2 with 4 PCs.
2) Connect both LAN with router and configure the router
3) Default gateway for LAN 1 is 10.0.0.5
Default gateway for LAN2 is 192.168.1.5
4) Sending PDU to see if connection is established

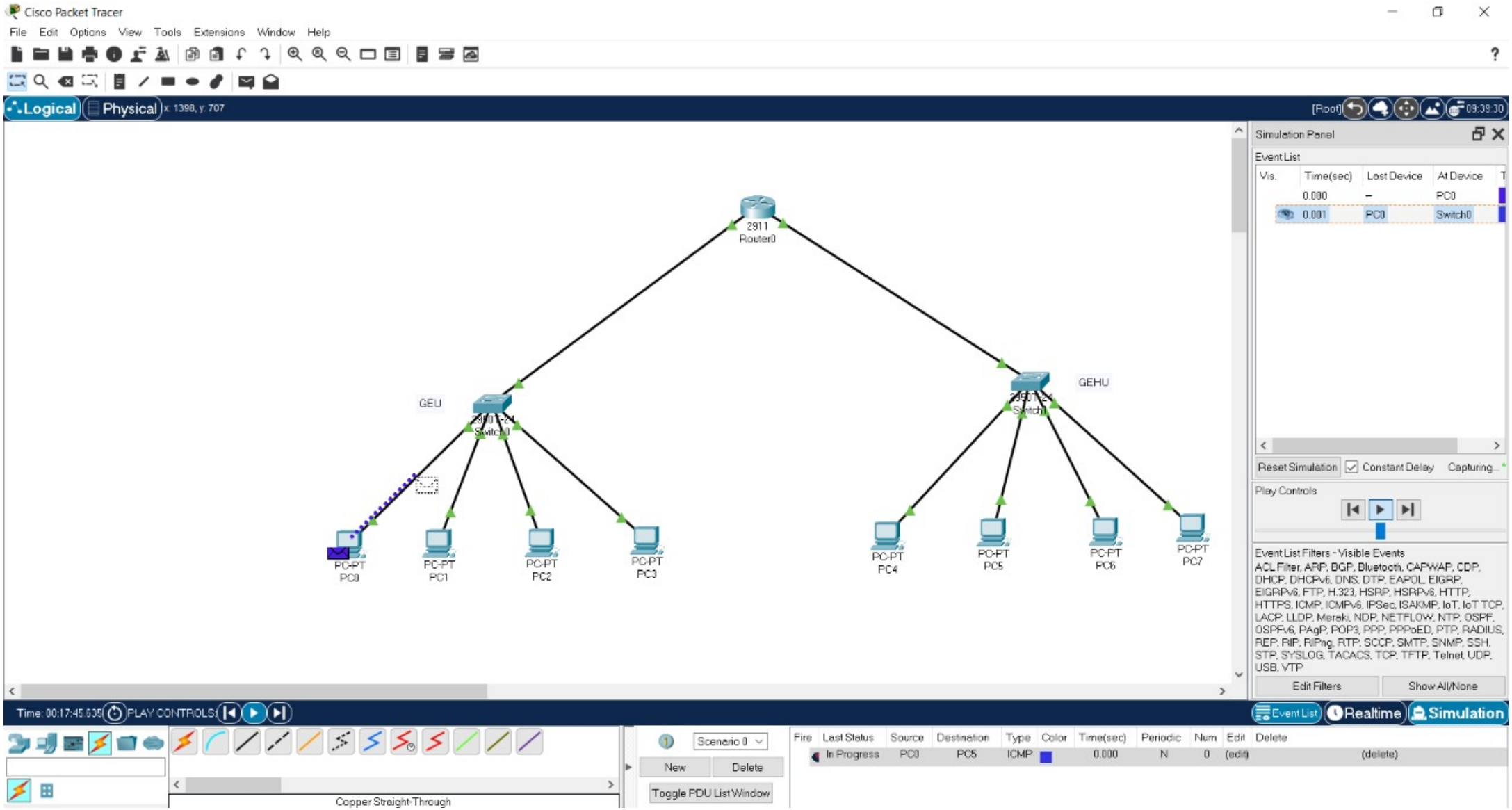

Cisco Packet Tracer
File Edit Options View Tools Extensions Window Help
Logical
Physical
x: 539, y: 494
[Root]
PC0
Physical Config Desktop Programming Attributes
IP Configuration
Interface FastEthernet0
IP Configuration
DHCP
Static
IPv4 Address 10.0.0.1
Subnet Mask 255.0.0.0
Default Gateway 10.0.0.5
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
GEHU
PC-PT PC0
PC-PT PC1
PC-PT PC6
PC-PT PC7
Time: 00:17:35.635
PLAY CONTROLS:
Event List
Realtime
Simulation
Copper Straight-Through
Scenario 0
New
Delete
Toggle PDU List Window
Fire Last Status Source Destination Type Color Time(sec) Periodic Num Edit Delete


Cisco Packet Tracer
File Edit Options View Tools Extensions Window Help
Logical
Physical
x: 1529, y: 378
[Root]
05:11:30
2911
Router0
PC-PT
PC0
PC-PT
PC1
PC-PT
PC2
PC-PT
PC3
PC-PT
PC4
PC-PT
PC5
PC-PT
PC6
PC-PT
PC7
Time: 00:10:08
Realtime
Simulation
Copper Straight-Through
Scenario 0
New
Delete
Toggle PDU List Window
Fire
Last Status
Source
Destination
Type
Color
Time(sec)
Periodic
Num
Edit
Delete


Cisco Packet Tracer
File Edit Options View Tools Extensions Window Help
Logical Physical x: 1549, y: 371
[Root] 10:09:30
2911
Router0
GEU
GEHU
PC-PT
PC0
PC1
PC2
PC3
PC4
PC5
PC6
PC7
Simulation Panel
Event List
Vis. Time(sec) Last Device At Device
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, 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: 00:17:46.016
PLAY CONTROLS:
Event List
Realtime
Simulation
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)
Copper Straight-Through


Cisco Packet Tracer
File Edit Options View Tools Extensions Window Help
Logical
Physical
x: 1560, y: 377
[Root]
09:21:30
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::202:16FF:FEA2:C3DB
Default Gateway
DNS Server
802.1X
Use 802.1X Security
Authentication MD5
Username
Password
Top
GEU
GEHU
PC-PT PC0
PC-PT PC1
PC-PT PC6
PC-PT PC7
Time: 00:17:45.635
PLAY CONTROLS:
Event List
Realtime
Simulation
Copper Straight-Through
Scenario 0
New
Delete
Toggle PDU List Window
Fire Last Status Source Destination Type Color Time(sec) Periodic Num Edit Delete


Cisco Packet Tracer
File Edit Options View Tools Extensions Window Help
Logical Physical x: 1553, y: 600
[Root] 10:23:00
2911
Router0
GEU
GEHU
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) 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, 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: 00:17:46.016
PLAY CONTROLS
Event List
Realtime
Simulation
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)
Copper Straight-Through


Cisco Packet Tracer
File Edit Options View Tools Extensions Window Help
Logical
Physical
x: 1398, y: 707
[Root]
09:39:30
2911
Router0
GEU
GEHU
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)
Last 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, Meraki, 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: 00:17:45.635
PLAY CONTROLS:
Event List
Realtime
Simulation
Copper Straight-Through
Scenario 0
New
Delete
Toggle PDU List Window
Fire
Last Status
Source
Destination
Type
Color
Time(sec)
Periodic
Num
Edit
Delete
In Progress
PC0
PC5
ICMP
0.000
N
0
(edit)
(delete)