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Course - MCA-(II)-C
Paper - Computer networks Practical

Problem 2:- There are two organizations in a city named GEU and GEHU, design a network between the SOC department of GEU and GEHU. Also, show the communication between user number 1 of GEU and number 2 of GEHU.

OBJECTIVE :→ To establish a network the the two respective user of an organization in GEU and GEHU city.

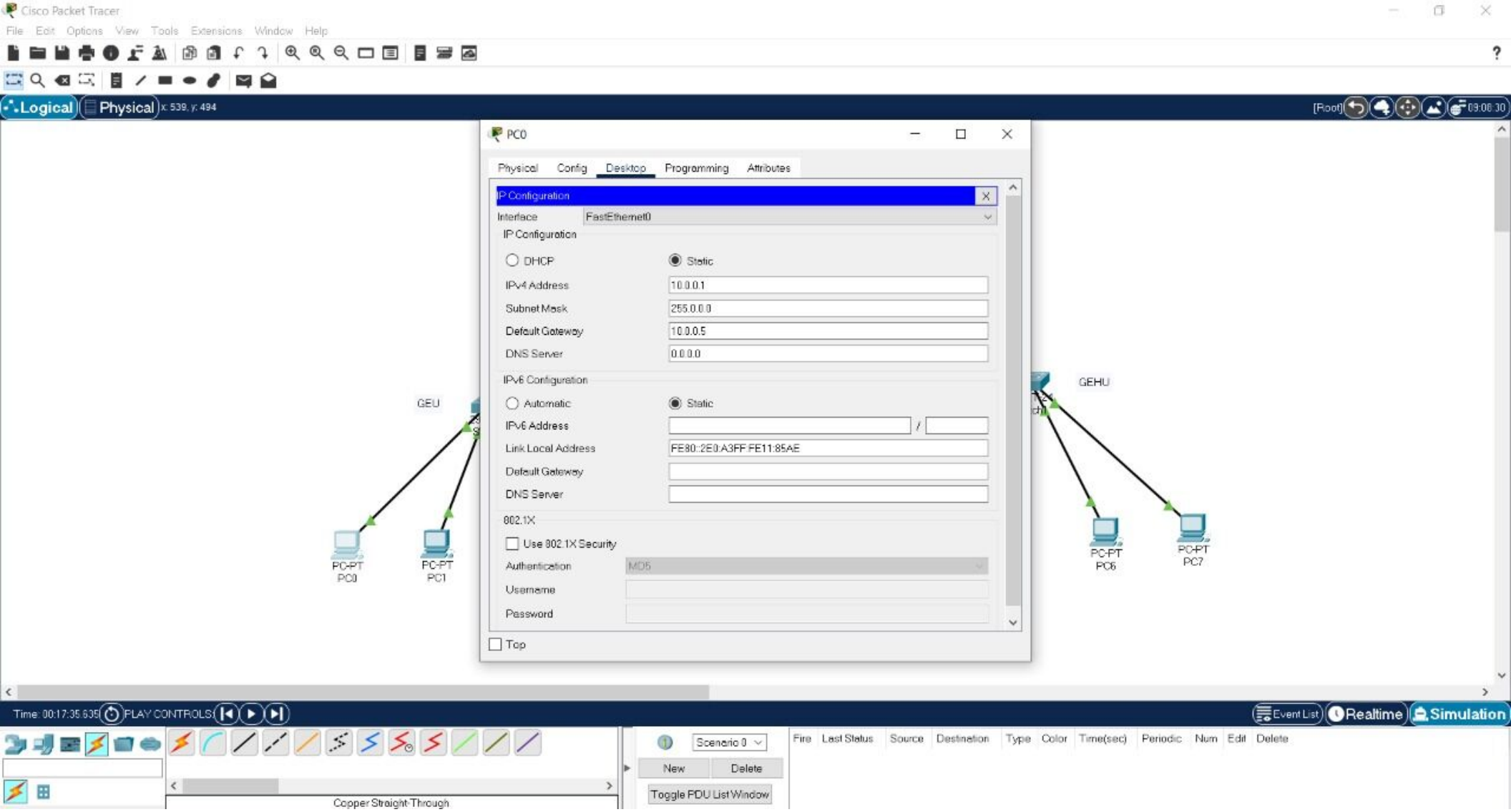
STEPS for Network Establishment

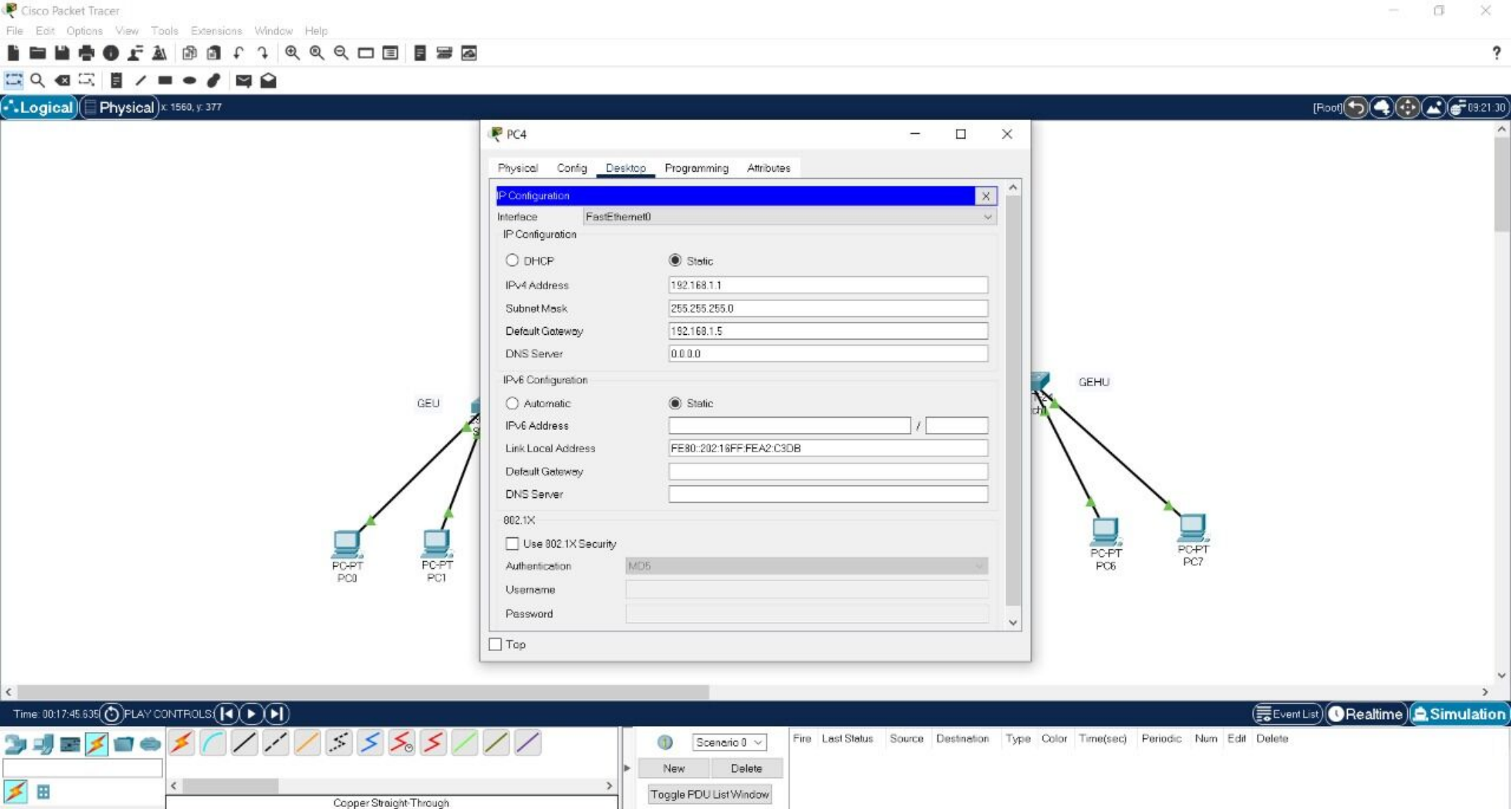
Step-1:→ Create LAN-1 with 4 PCs and Create LAN-2 with 4 PCs

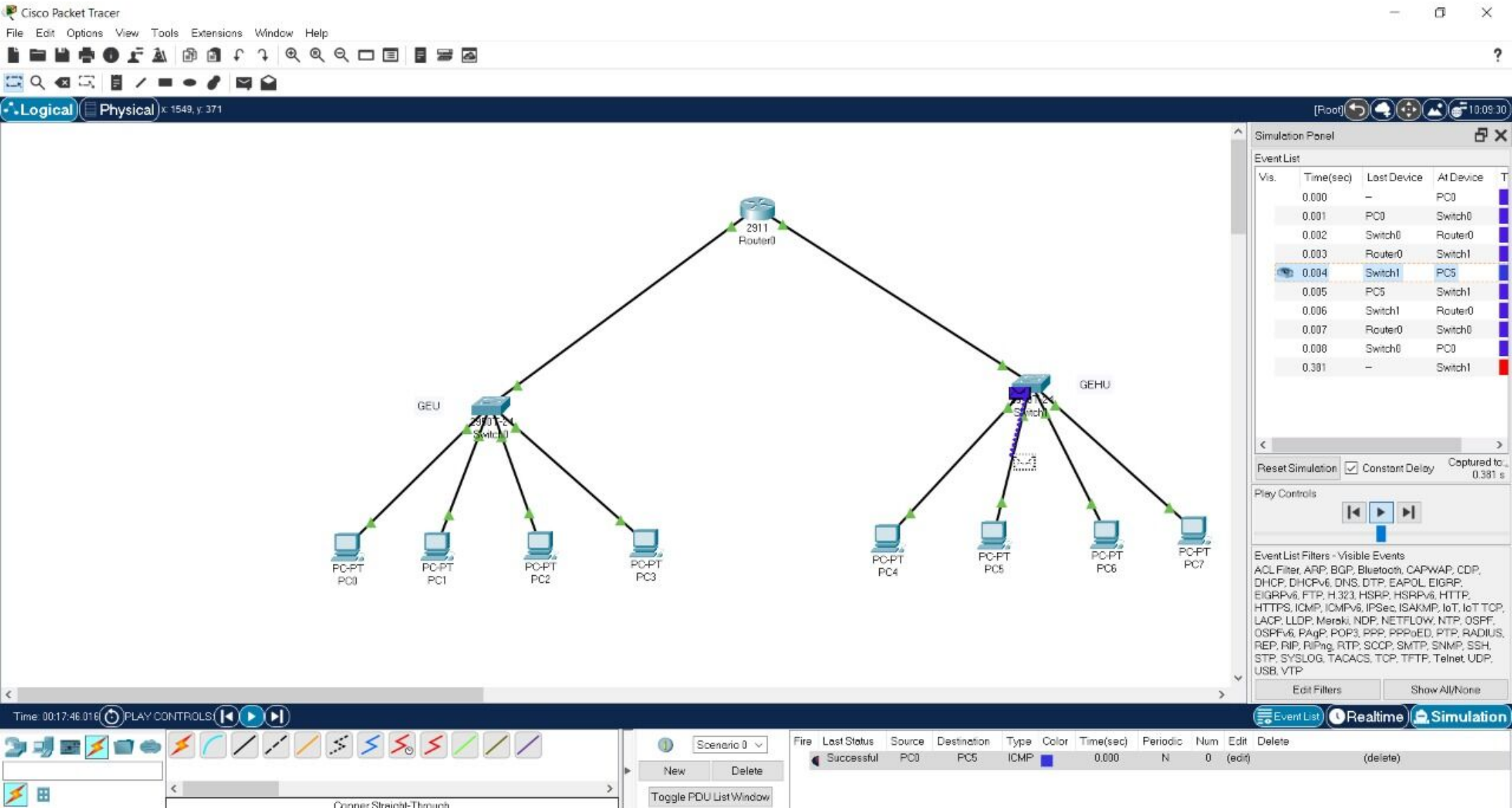
Step-2:→ Connect both LAN with router and configure the router.

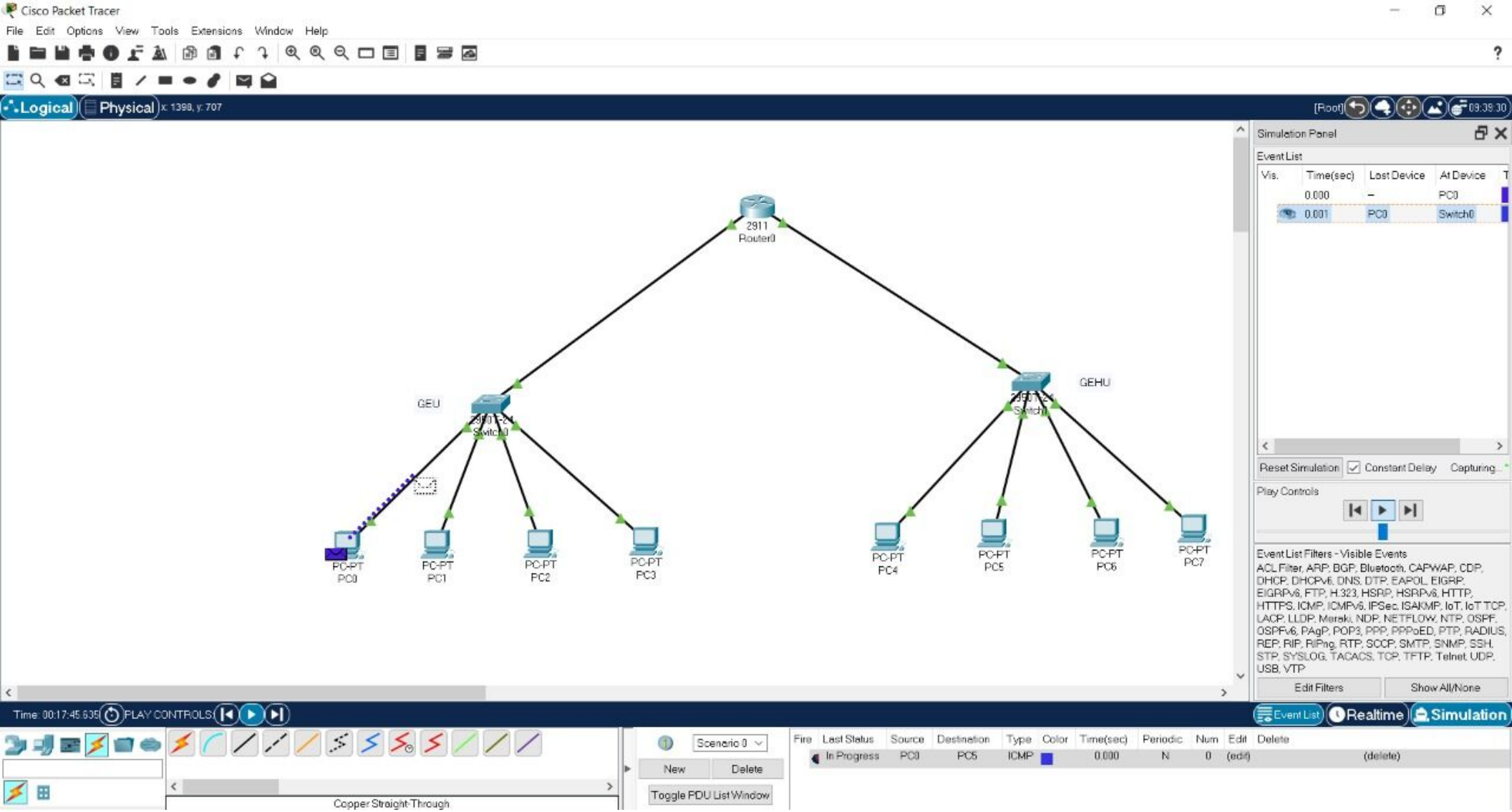
Step-3:- Default Gateway for LAN-1 is 10.0.0.5
Default Gateway for LAN - 2 is 192.168.1.5

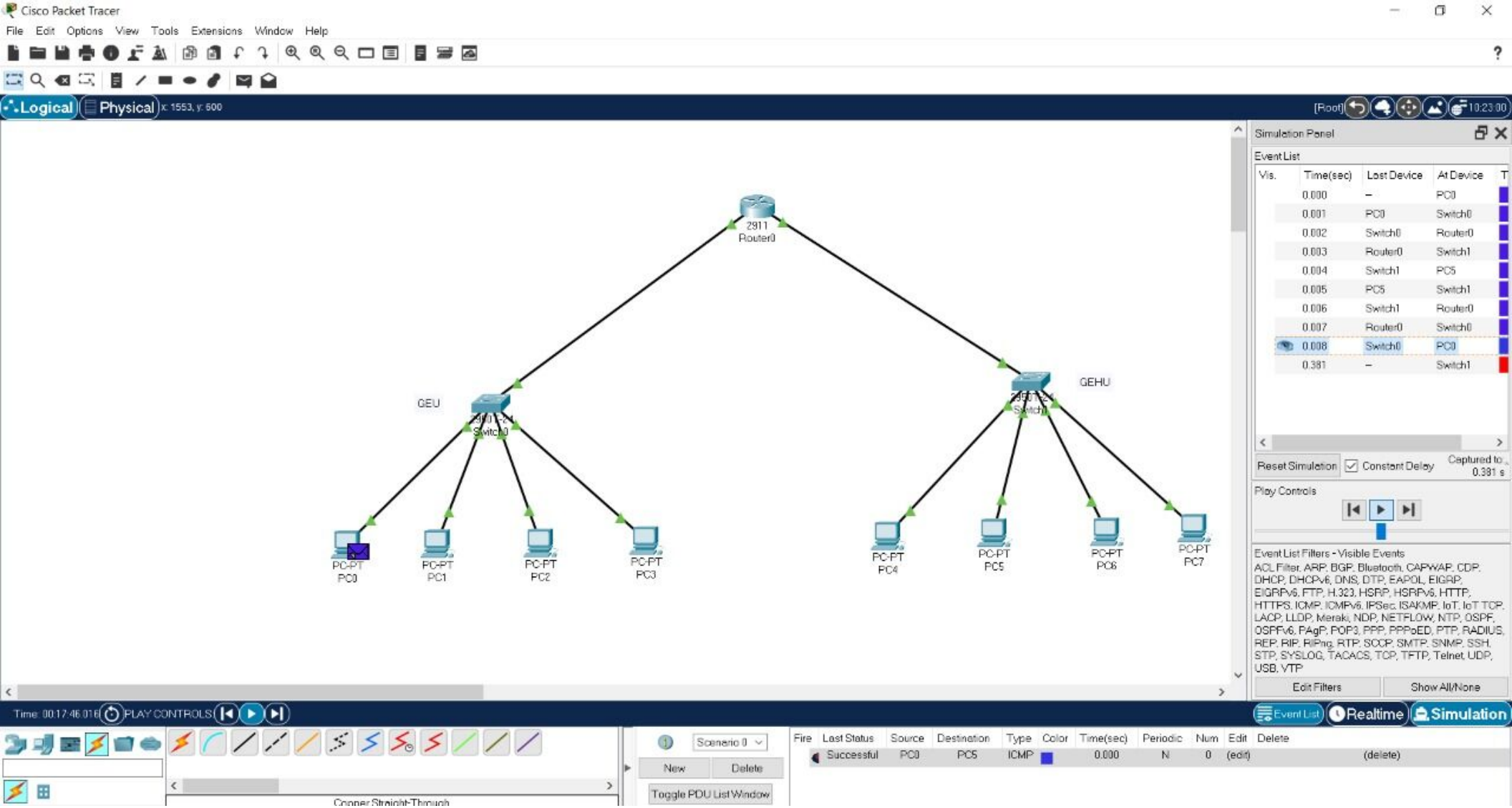
Step-4:→ Send PDV to see if connection is established or not.

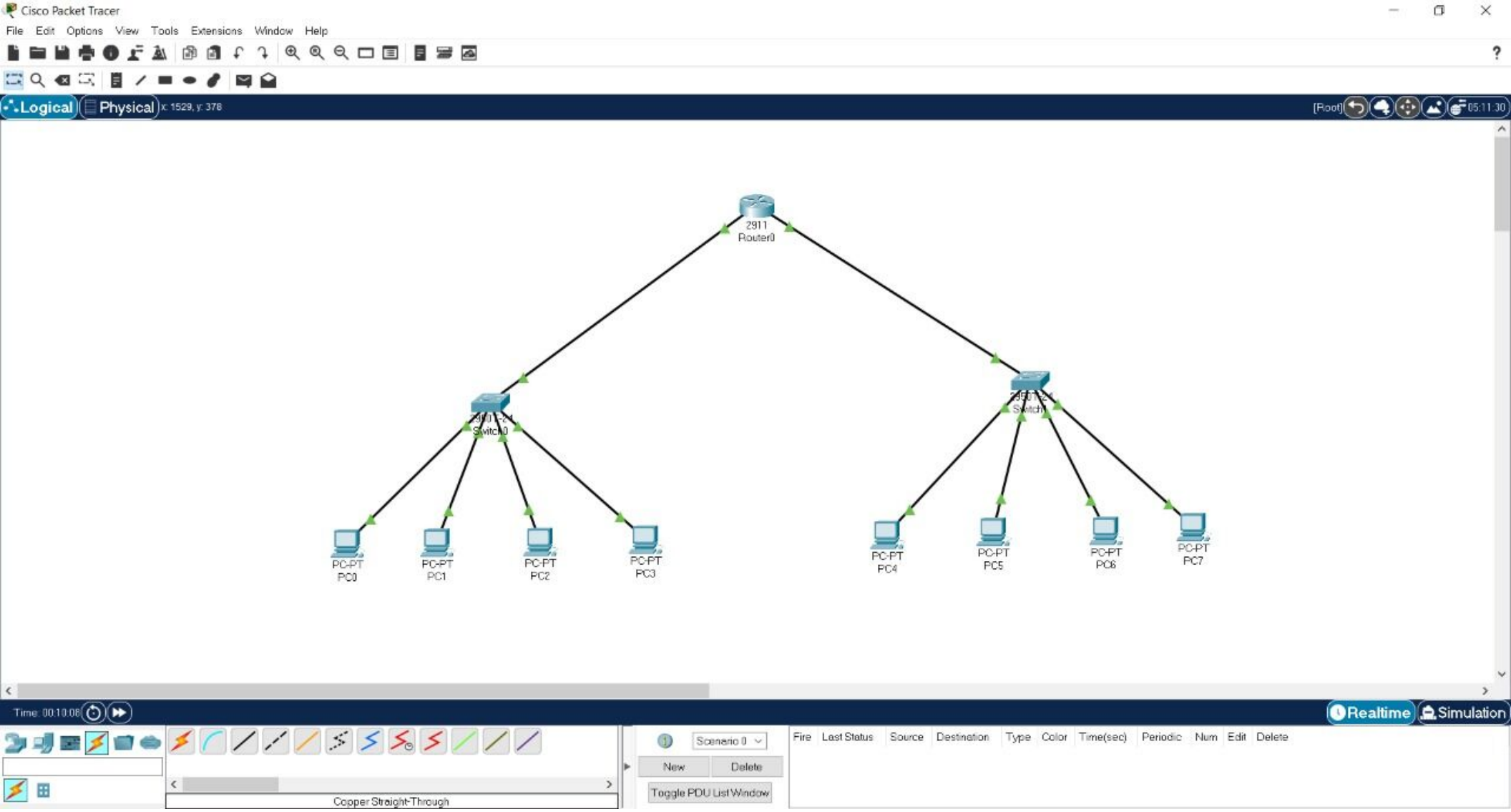

Cisco Packet Tracer
File Edit Options View Tools Extensions Window Help
Logical
Physical
x: 539, y: 494
[Root]
09:06:30
PC0
Physical
Config
Desktop
Programming
Attributes
IP Configuration
Interface
FastEthernet0
IP Configuration
DHCP
Static
IPv4 Address
10.0.0.1
Subnet Mask
255.0.0.0
Default Gateway
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
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: 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
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: 1549, y: 371
[Root] 10:09:30
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 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: 1399, 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)


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
Copper Straight-Through
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)


Cisco Packet Tracer
File Edit Options View Tools Extensions Window Help
Logical Physical x: 1529, y: 378
[Root] 05:11:30
2911
Router0
Switch0
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
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