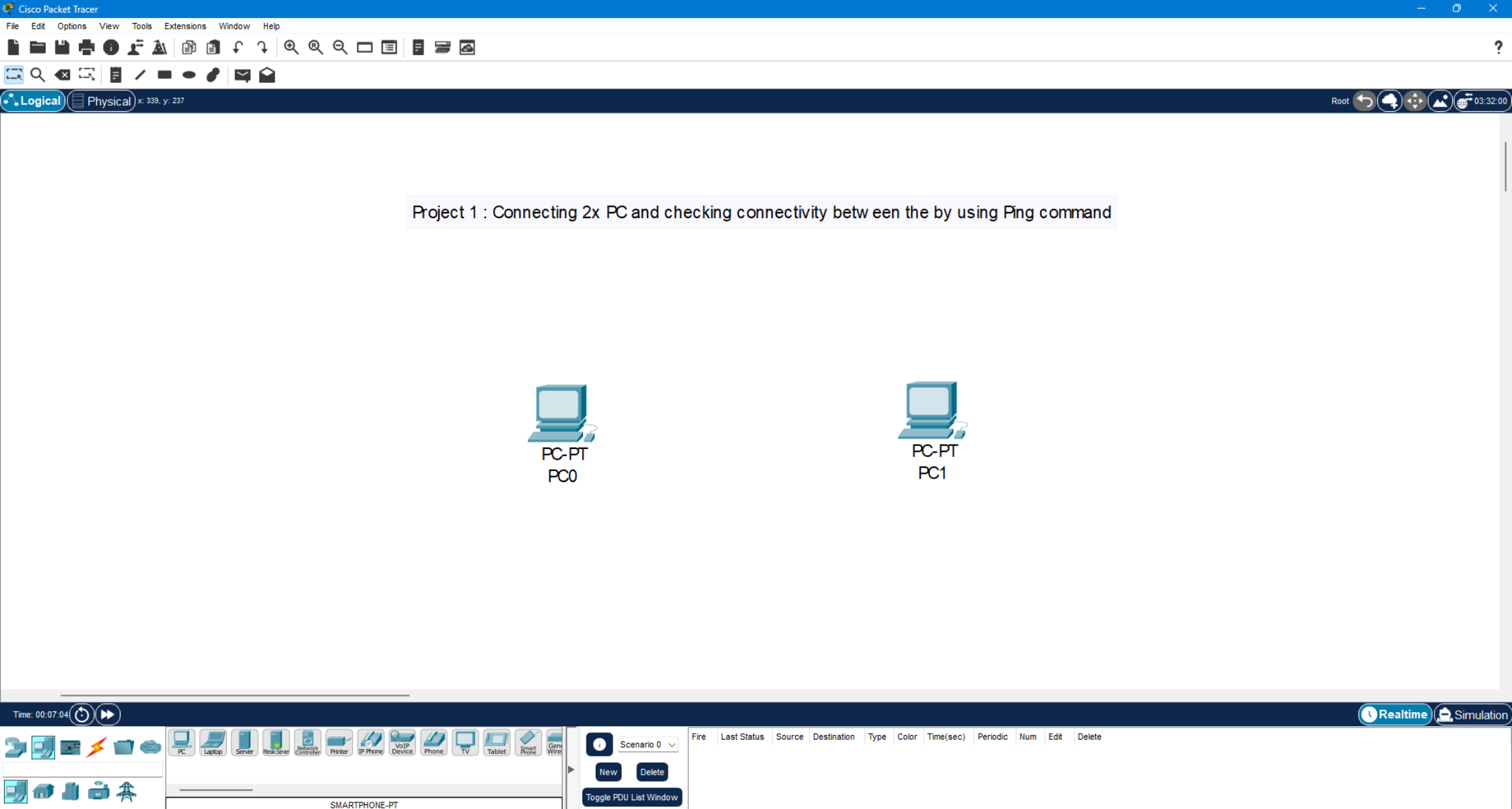
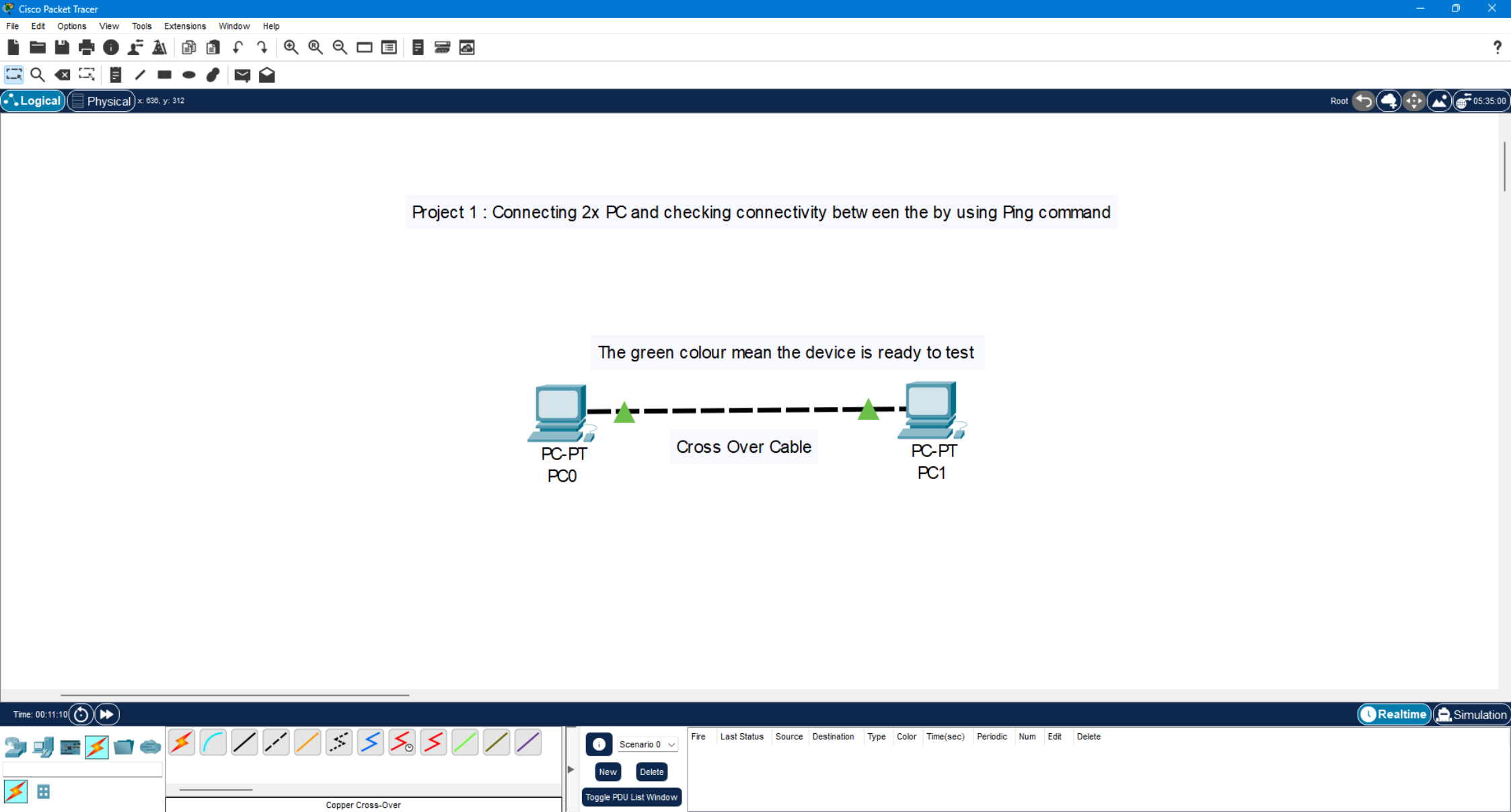
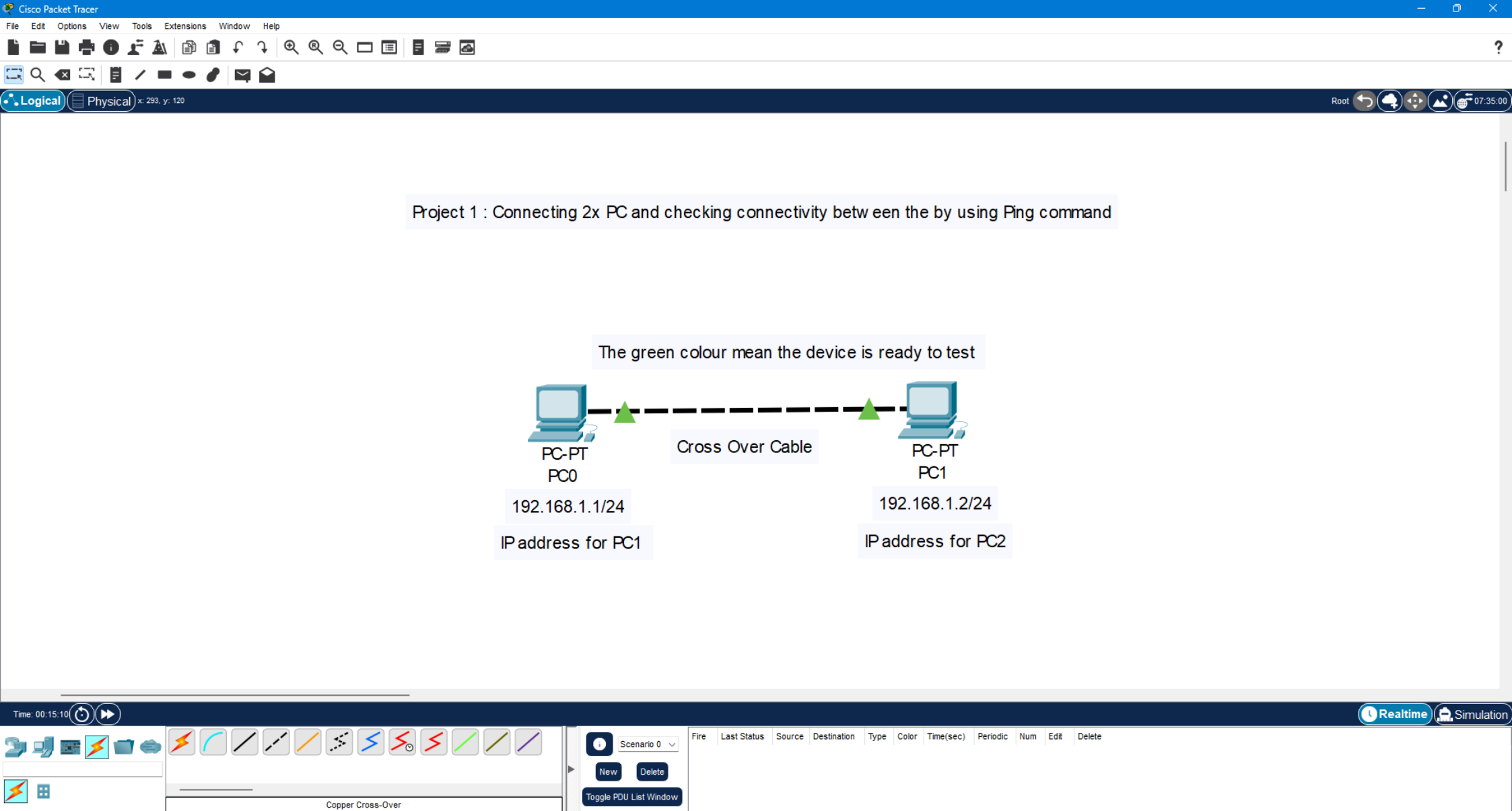
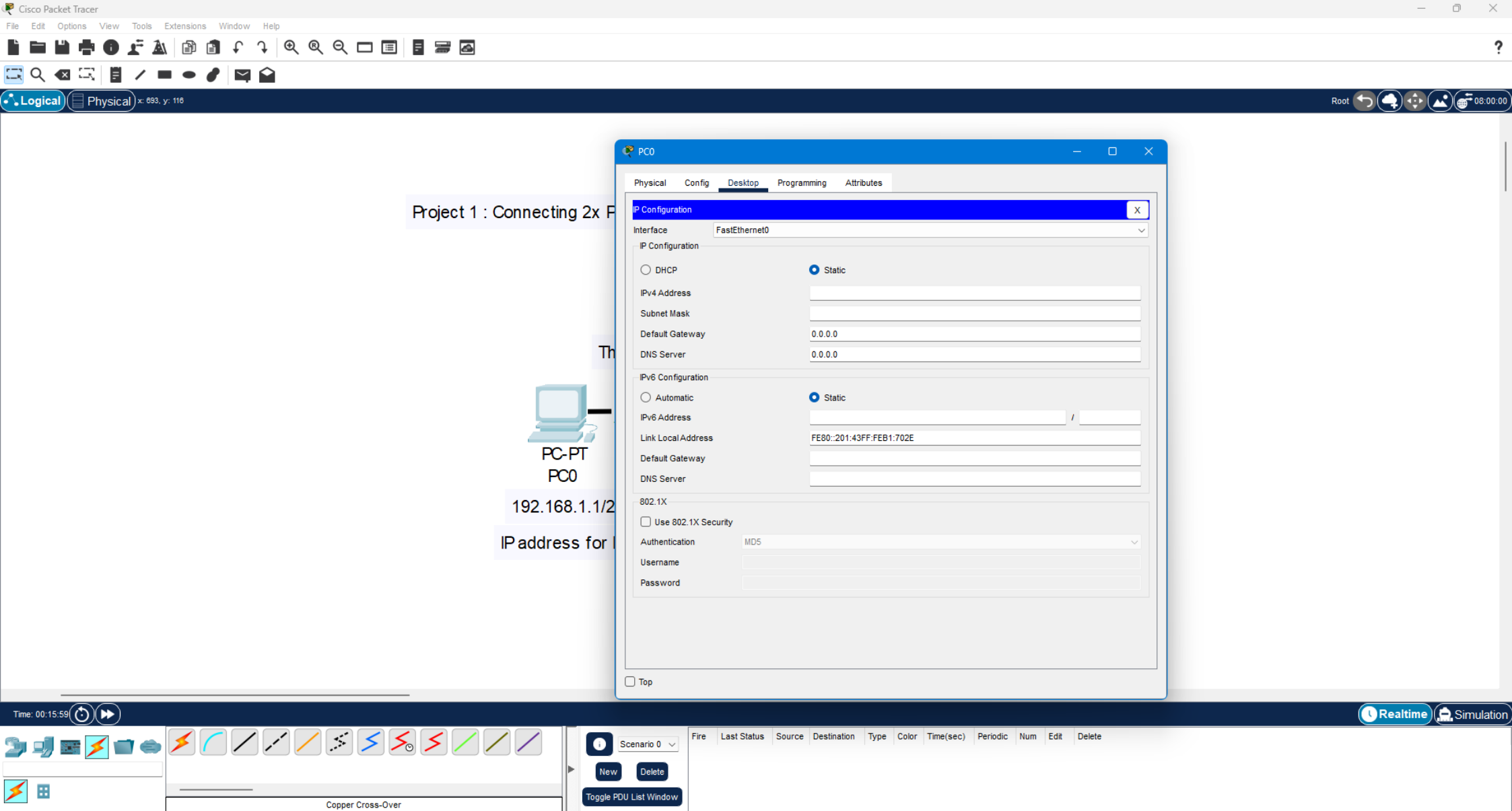

Cyber Security Project

Set up a small network using at least two devices and ping each other









Project 1 : Connecting 2x F

PC-PT
PC0

192.168.1.1/24

IP address for

PC0

Physical Config Desktop Programming Attributes

IP Configuration

Interface FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address

Subnet Mask

Default Gateway 0.0.0.0

DNS Server 0.0.0.0

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address

Link Local Address FE80::201:43FF:FEB1:702E

Default Gateway

DNS Server

802.1X

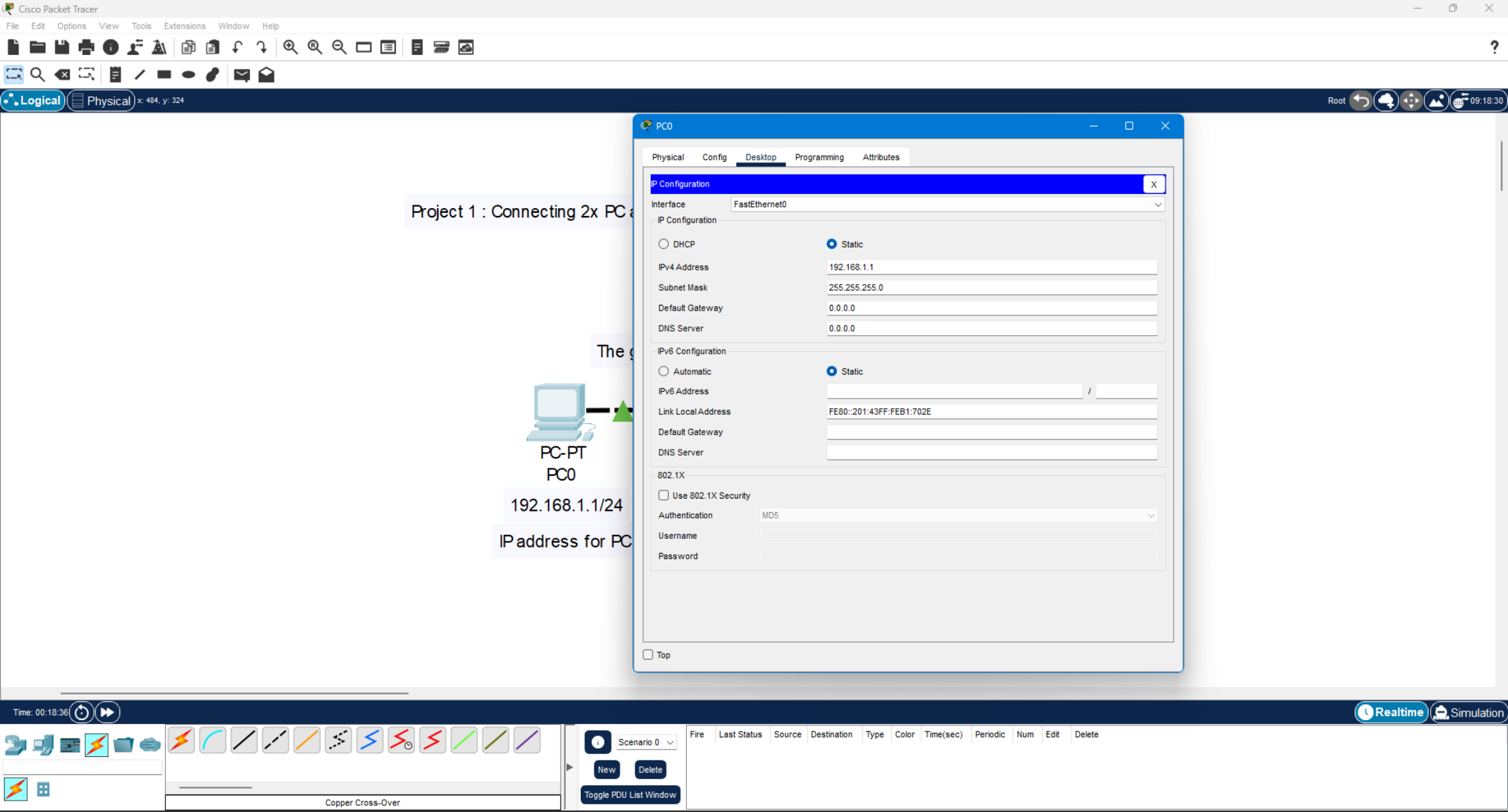
☐ Use 802.1X Security

Authentication MD5

Username

Password

☐ Top



Project 1 : Connecting 2x PC



PC-PT
PC0

192.168.1.1/24
IP address for PC

PC0

Physical Config Desktop Programming Attributes

IP Configuration [X]

Interface: FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address: 192.168.1.1

Subnet Mask: 255.255.255.0

Default Gateway: 0.0.0.0

DNS Server: 0.0.0.0

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address: /

Link Local Address: FE80::201:43FF:FEB1:702E

Default Gateway:

DNS Server:

802.1X

☐ Use 802.1X Security

Authentication: MD5

Username:

Password:

☐ Top



Logical Physical x: 291, y: 176

Root 09:30:30

PC1

Physical Config Desktop Programming Attributes

IP Configuration

Interface FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 192.168.1.2

Subnet Mask 255.255.255.0

Default Gateway 0.0.0.0

DNS Server 0.0.0.0

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address /

Link Local Address FE80::250:FFF:FE4C:7C16

Default Gateway

DNS Server

802.1X

☐ Use 802.1X Security

Authentication MD5

Username

Password

☐ Top

between the by using Ping command

is ready to test

PC-PT
PC1

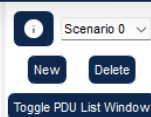
192.168.1.2/24

IP address for PC2

Time: 00:19:00



Copper Cross-Over



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

Realtime Simulation



Logical Physical x: 474, y: 310

Root 10:36:00

Project 1 : Connecting 2x PC and

The gr

PC-PT
PC0

192.168.1.1/24

IP address for PC1

PC0

Physical Config Desktop Programming Attributes

Command Prompt

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.1.2

Pinging 192.168.1.2 with 32 bytes of data:

Reply from 192.168.1.2: bytes=32 time<1ms TTL=128
Reply from 192.168.1.2: bytes=32 time<1ms TTL=128
Reply from 192.168.1.2: bytes=32 time<1ms TTL=128
Reply from 192.168.1.2: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.1.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\>
```

☐ Top

Time: 00:21:10



Cooper Cross-Over

Scenario 0

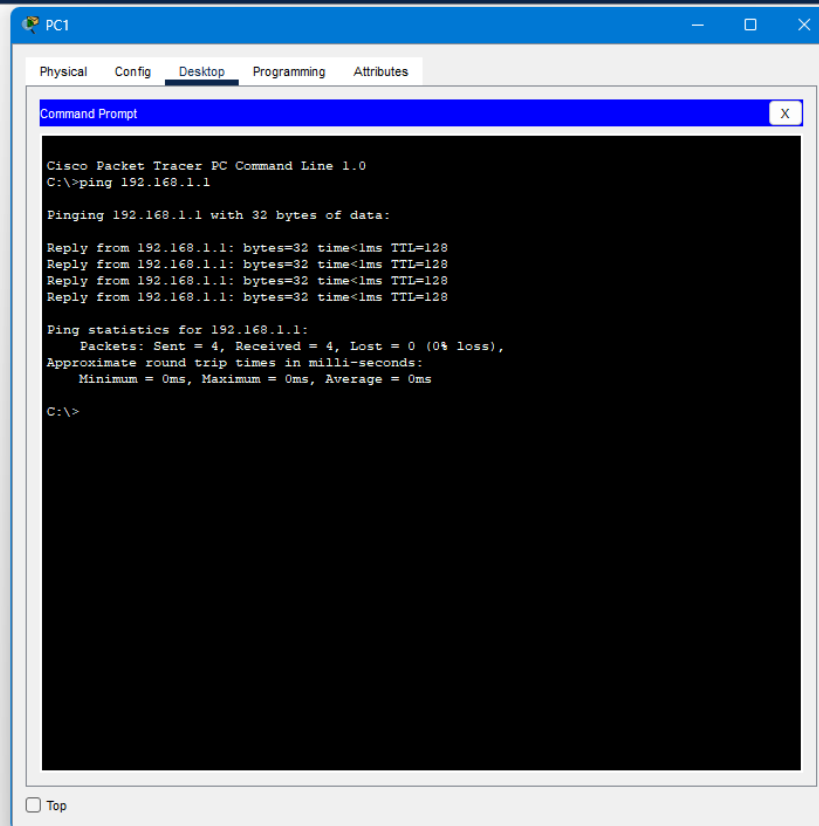
New

Delete

Toggle PDU List Window

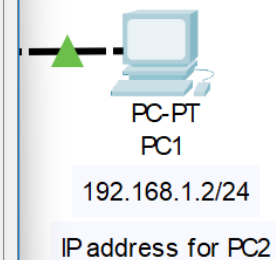
Fire Last Status Source Destination Type Color Time(sec) Periodic Num Edit Delete

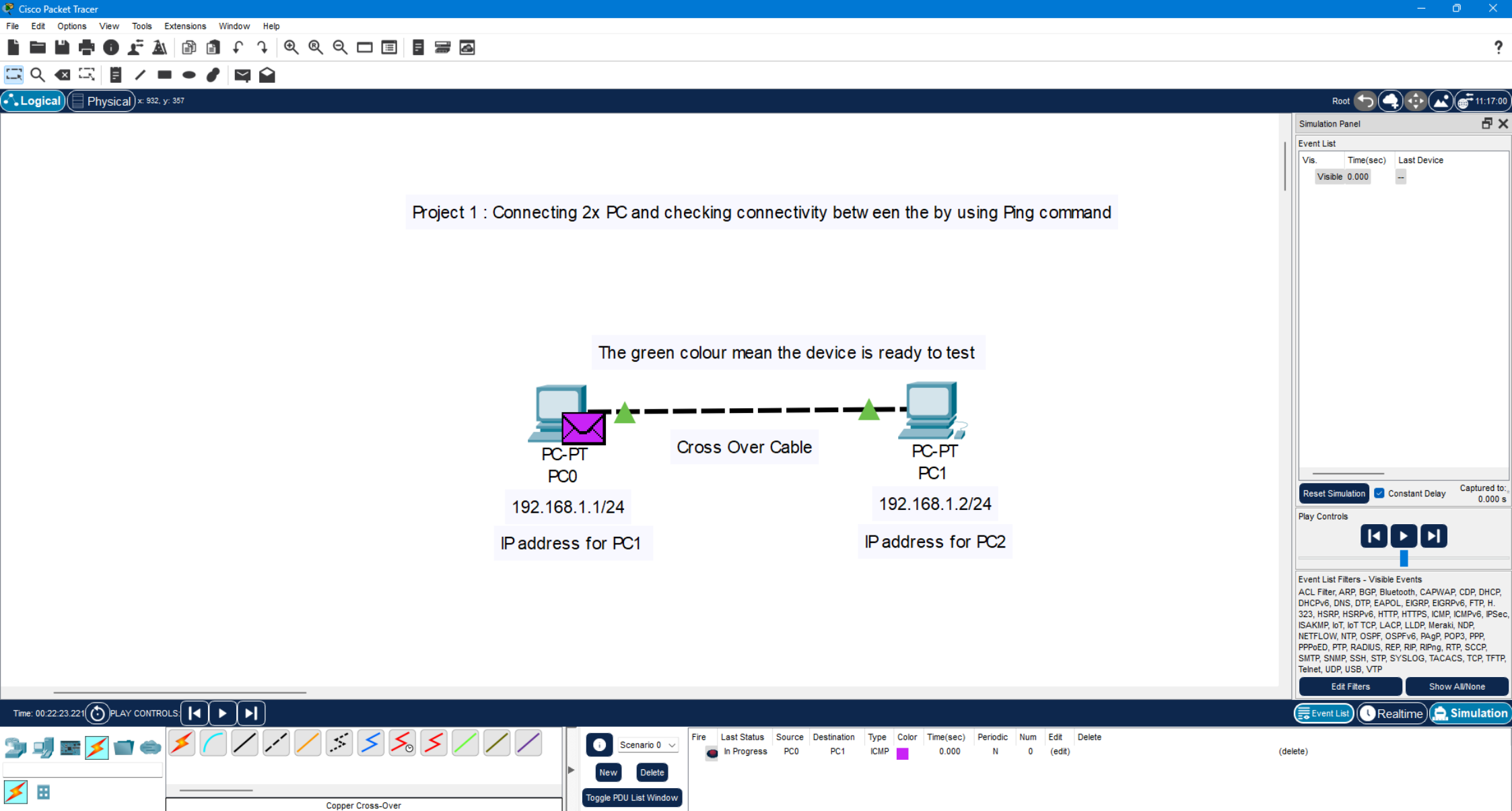
Realtime Simulation



between the by using Ping command

ce is ready to test



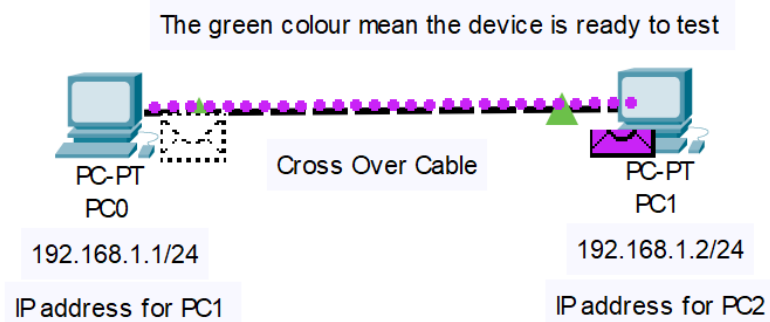




Logical Physical x: 913, y: 282

Root 11:47:30

Project 1 : Connecting 2x PC and checking connectivity between them by using Ping command



Simulation Panel

Event List

Vis.	Time(sec)	Last Device
	0.000	--
	0.001	PC0
Visible	0.002	PC1

Reset Simulation

☒ Constant DelayCaptured to:
145.270 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, 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: 00:24:48.491

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

PC1

Type

ICMP

Color

0.000

Periodic

N

Num

0

Edit

(edit)

Delete

(delete)



Copper Cross-Over

Event List Realtime Simulation



Logical Physical x: 483, y: 397

Root 12:35:30

Project 1 : Connect

Sending Ping command

192

IP ad

24

PC2

PDU Information at Device: PC0

OSI Model Inbound PDU Details

At Device: PC0
Source: PC0
Destination: PC1

In Layers

- Layer7
- Layer6
- Layer5
- Layer4
- Layer3: IP Header Src. IP: 192.168.1.2, Dest. IP: 192.168.1.1 ICMP Message Type: 0
- Layer 2: Ethernet II Header 0050.0F4C.7C16 >> 0001.43B1.702E
- Layer 1: Port FastEthernet0

Out Layers

- Layer7
- Layer6
- Layer5
- Layer4
- Layer3
- Layer2
- Layer1

1. FastEthernet0 receives the frame.

Challenge Me << Previous Layer Next Layer >>

Simulation Panel

Event List

Vis.	Time(sec)	Last Device
	0.000	--
	0.001	PC0
Visible	0.002	PC1

Reset Simulation Constant Delay Captured to: 856.604 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, RAGP, 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

Event List Realtime Simulation

Time: 01:07:50.625 PLAY CONTROLS



Copper Cross-Over

Scenario 0

New

Delete

Toggle PDU List Window

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	Successful	PC0	PC1	ICMP		0.000	N	0	(edit)	

(delete)

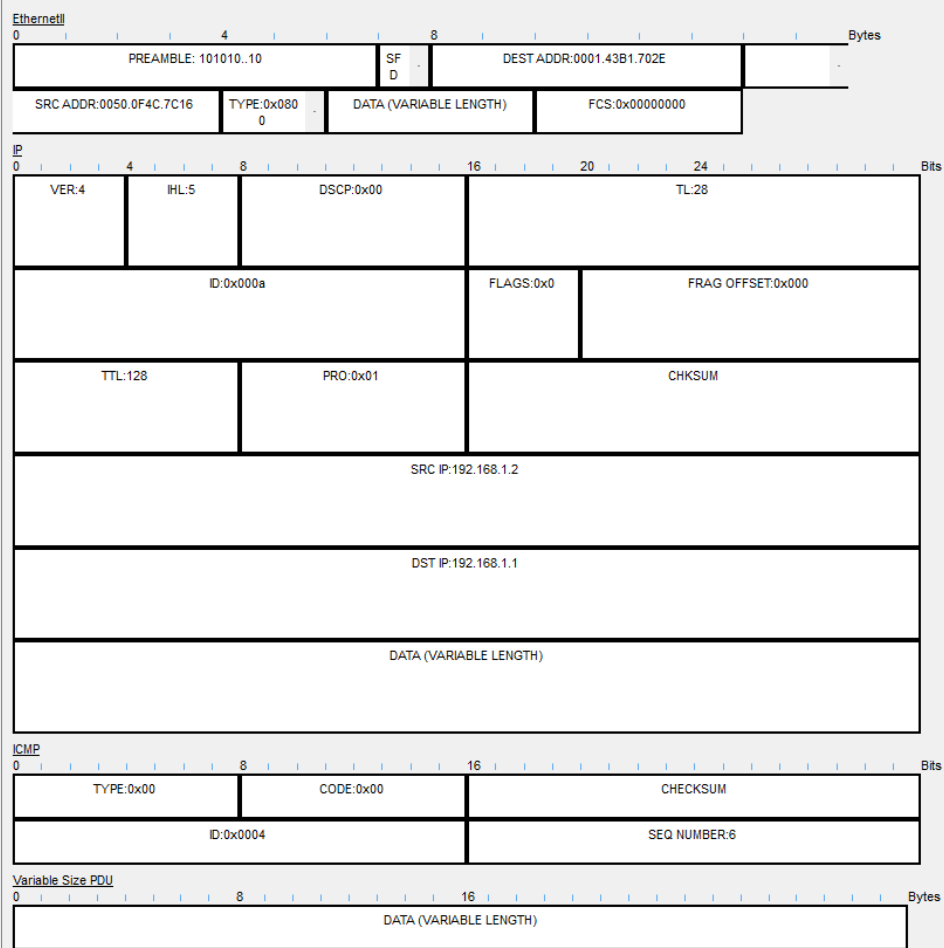
Logical Physical x: 448, y: 145

Time: 01:19:51.084 PLAY CONTROLS

PDU Information at Device: PC0

OSI Model Inbound PDU Details

PDU Formats



using Ping command

est

.2/24

for PC2

Simulation Panel

Event List

Vis.	Time(sec)	Last Device
	0.000	--
	0.001	PC0
Visible	0.002	PC1

Reset Simulation ☒ Constant Delay Captured to: 1577.063 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, PPPoE, PTP, RADIUS, REP, RIP, RIPv6, RTP, SCCP, SMTP, SNMP, SSH, STP, SYSLOG, TACACS, TCP, TFTP, Telnet, UDP, USB, VTP

Edit Filters

Show All/None

Event List

Realtime

Simulation

(ec) Periodic Num Edit Delete
00 N 0 (edit)

(delete)

FileEditOptionsViewToolsExtensionsWindowHelp

LogicalPhysicalx: 885, y: 432

PDU Information at Device: PC0

OSI Model

Outbound PDU Details

PDU Formats

EthernetII

048Bytes

PREAMBLE: 101010..10

SFD

DEST ADDR: 0050.0F4C.7C16

SRC ADDR: 0001.43B1.702E

TYPE: 0x0800

DATA (VARIABLE LENGTH)

FCS: 0x00000000

IP

048162024Bits

VER: 4

IHL: 5

DSCP: 0x00

TL: 28

ID: 0x000b

FLAGS: 0x0

FRAG OFFSET: 0x000

TTL: 255

PRO: 0x01

CHKSUM

SRC IP: 192.168.1.1

DST IP: 192.168.1.2

DATA (VARIABLE LENGTH)

ICMP

0816Bits

TYPE: 0x08

CODE: 0x00

CHECKSUM

ID: 0x0005

SEQ NUMBER: 7

Variable Size PDU

0816Bytes

DATA (VARIABLE LENGTH)

Simulation Panel

Event List

Vis.	Time(sec)	Last Device
Visible	0.000	--

Reset Simulation

☒ Constant Delay

Captured to: 0.000 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, 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: 01:39:03.527

PLAY CONTROLS

Copper Cross-Over

Toggle PDU List Window

(delete)



Logical Physical x: 731, y: 308

Root 13:54:00

Project 1 : Config

using Ping command

PDU Information at Device: PC1

OST Model Inbound PDU Details Outbound PDU Details

At Device: PC1
Source: PC0
Destination: PC1

In Layers

- Layer7
- Layer6
- Layer5
- Layer4
- Layer 3: IP Header Src. IP: 192.168.1.1, Dest. IP: 192.168.1.2 ICMP Message Type: 8
- Layer 2: Ethernet II Header 0001.43B1.702E >> 0050.0F4C.7C16
- Layer 1: Port FastEthernet0

Out Layers

- Layer7
- Layer6
- Layer5
- Layer4
- Layer 3: IP Header Src. IP: 192.168.1.2, Dest. IP: 192.168.1.1 ICMP Message Type: 0
- Layer 2: Ethernet II Header 0050.0F4C.7C16 >> 0001.43B1.702E
- Layer 1: Port(s): FastEthernet0

1. FastEthernet0 receives the frame.

Challenge Me << Previous Layer Next Layer >>

Simulation Panel

Event List

Vis.	Time(sec)	Last Device
Visible	0.001	PC0

Reset Simulation

☒ Constant DelayCaptured to:
0.001 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, PPPoE, PTP, RADIUS, REP, RIP, RIPng, RTR, SCCP, SMTP, SNMP, SSH, STP, SYSLOG, TACACS, TCP, TFTP, Telnet, UDP, USB, VTP

Edit Filters

Show All/None

Time: 01:39:03.528 PLAY CONTROLS



Scenario 0

New

Delete

Toggle PDU List Window

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	In Progress	PC0	PC1	ICMP		0.000	N	0	(edit)	

(delete)

Event List

Realtime

Simulation

