

Computer Networks

LAB#02



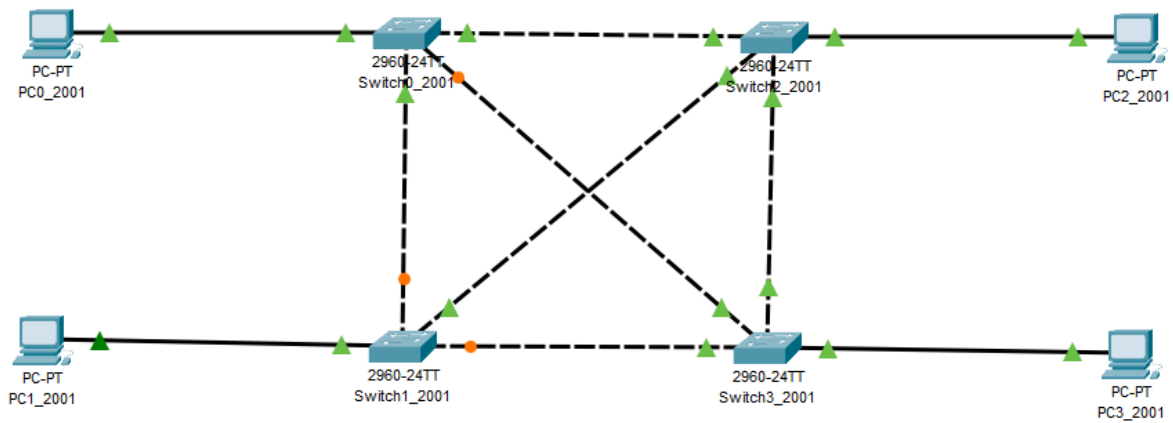
23K-2001

BCS-5J

Q1:

Real-Time

Q1



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_...	PC2_2001	ICMP		0.000	N	0	(edit)	

Simulation Mode:

Q1

PC-PT
PC0_2001

2960-24TT
Switch0_2001

2960-24TT
Switch2_2001

PC-PT
PC2_2001

PC-PT
PC1_2001

2960-24TT
Switch1_2001

2960-24TT
Switch3_2001

PC-PT
PC3_2001

Simulation Panel

Event List

Vis.	Time(sec)	Last Device
	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

Scenario 0

New Delete

Toggle PDU List Window

Fire

Last Status In Progress

Source PC0_2001

Destination PC2_2001

Type ICMP

Color

Time(sec) 0.000

Periodic N

Num 0

Edit (edit)

Delete

Q1

PC-PT
PC0_2001

2960-24TT
Switch0_2001

2960-24TT
Switch2_2001

PC-PT
PC2_2001

PC-PT
PC1_2001

2960-24TT
Switch1_2001

2960-24TT
Switch3_2001

PC-PT
PC3_2001

Simulation Panel

Event List

Vis.	Time(sec)	Last Device
	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

Scenario 0

New Delete

Toggle PDU List Window

Fire

Last Status In Progress

Source PC0_2001

Destination PC2_2001

Type ICMP

Color

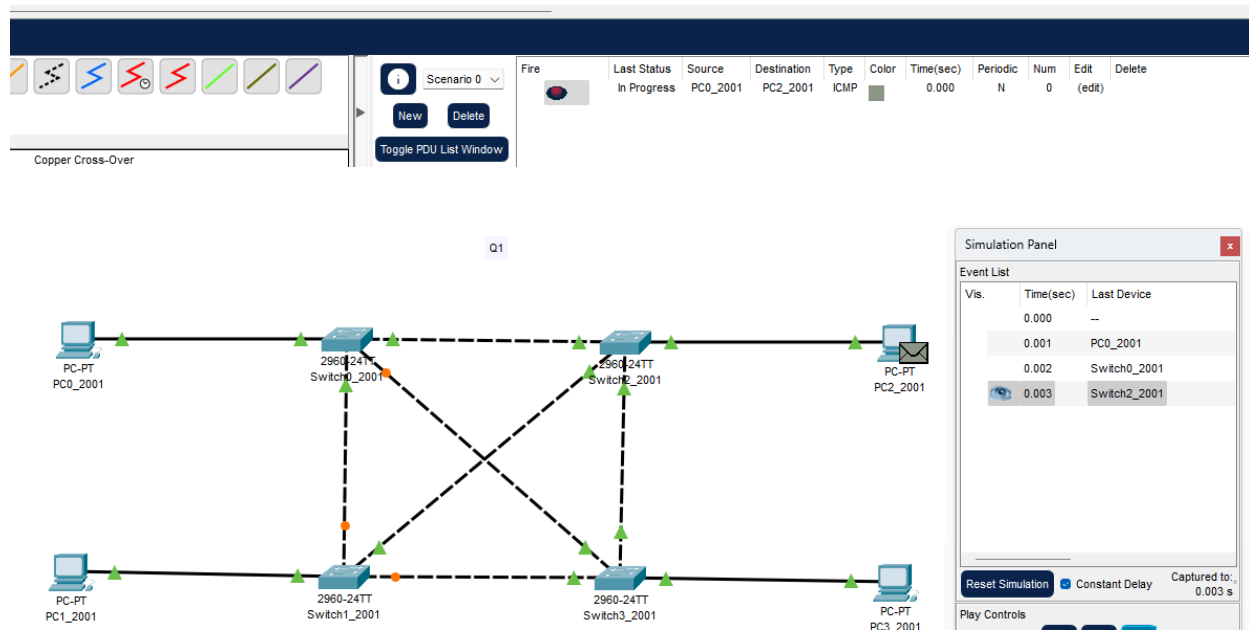
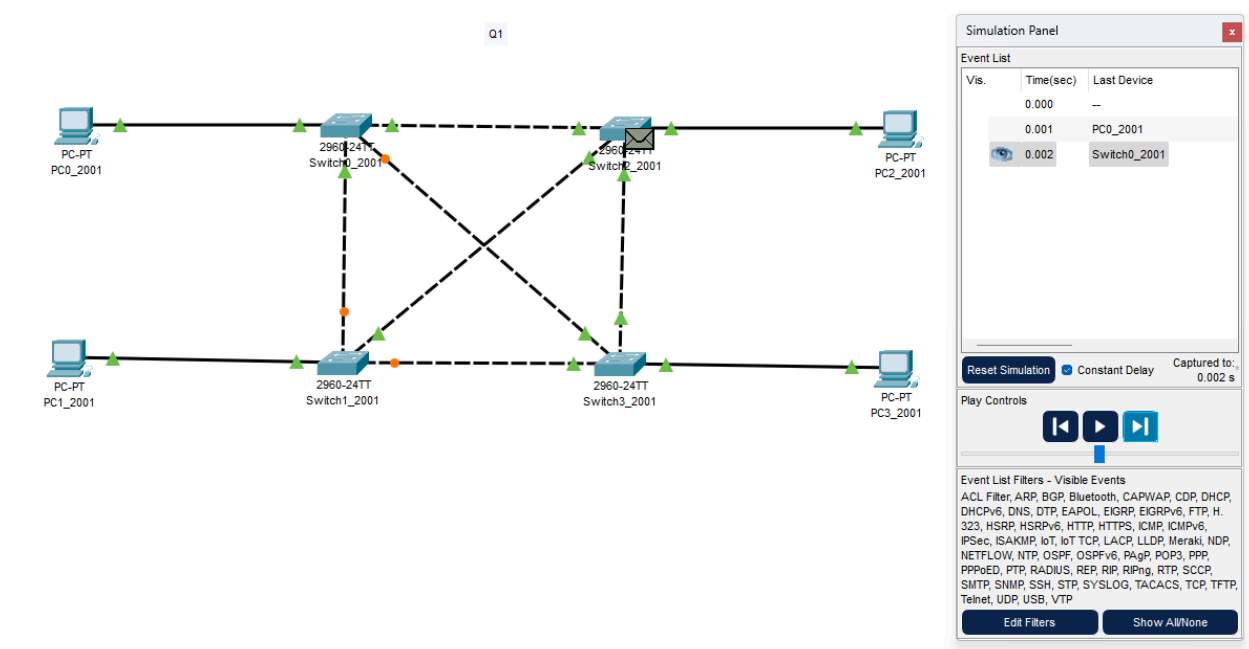
Time(sec) 0.000

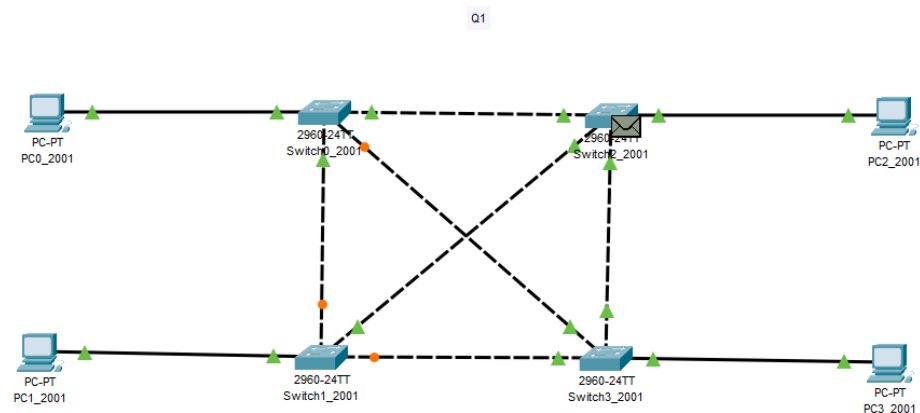
Periodic N

Num 0

Edit (edit)

Delete





Simulation Panel

Event List

Vis.	Time(sec)	Last Device
	0.000	--
	0.001	PC0_2001
	0.002	Switch0_2001
	0.003	Switch2_2001
<input checked="" type="checkbox"/>	0.004	PC2_2001

Reset Simulation ☒ Constant Delay Captured to: 0.004 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, RIPv2, RTP, SCCP, SMTP, SNMP, SSH, STP, SYSLOG, TACACS, TCP, TFTP, Telnet, UDP, USB, VTP

Edit Filters Show All/None

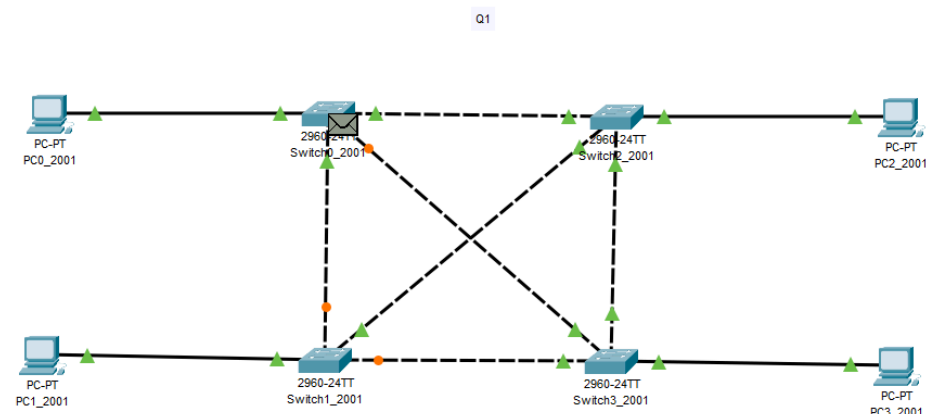
Scenario 0

New Delete

Toggle PDU List Window

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
<input checked="" type="checkbox"/>	In Progress	PC0_2001	PC2_2001	ICMP		0.000	N	0	(edit)	

Copper Cross-Over



Simulation Panel

Event List

Vis.	Time(sec)	Last Device
	0.000	--
	0.001	PC0_2001
	0.002	Switch0_2001
	0.003	Switch2_2001
	0.004	PC2_2001
<input checked="" type="checkbox"/>	0.005	Switch2_2001

Reset Simulation ☒ Constant Delay Captured to: 0.005 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, RIPv2, RTP, SCCP, SMTP, SNMP, SSH, STP, SYSLOG, TACACS, TCP, TFTP, Telnet, UDP, USB, VTP

Edit Filters Show All/None

Scenario 0

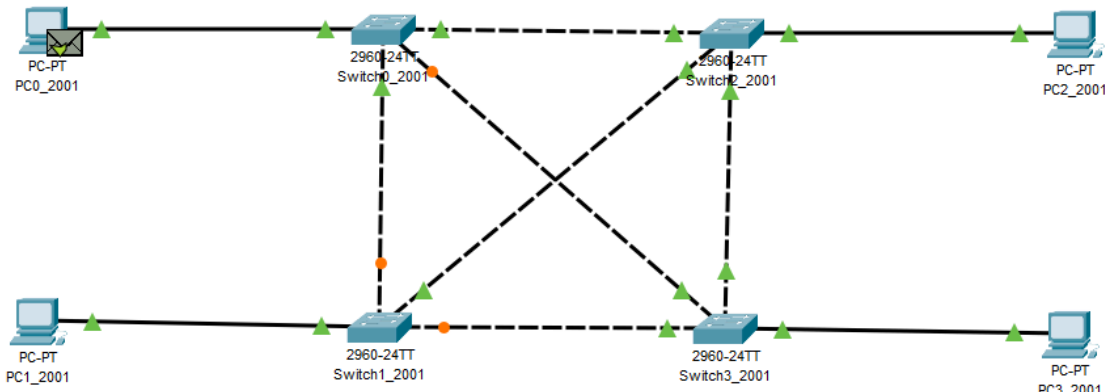
New Delete

Toggle PDU List Window

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
<input checked="" type="checkbox"/>	In Progress	PC0_2001	PC2_2001	ICMP		0.000	N	0	(edit)	

Copper Cross-Over

Q1



Simulation Panel

Event List

Vis.	Time(sec)	Last Device
	0.000	--
	0.001	PC0_2001
	0.002	Switch0_2001
	0.003	Switch2_2001
	0.004	PC2_2001
	0.005	Switch2_2001
	0.006	Switch0_2001

Reset Simulation ☒ Constant Delay Captured to: 0.006 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**

Scenario 0

New **Delete**

Toggle PDU List Window

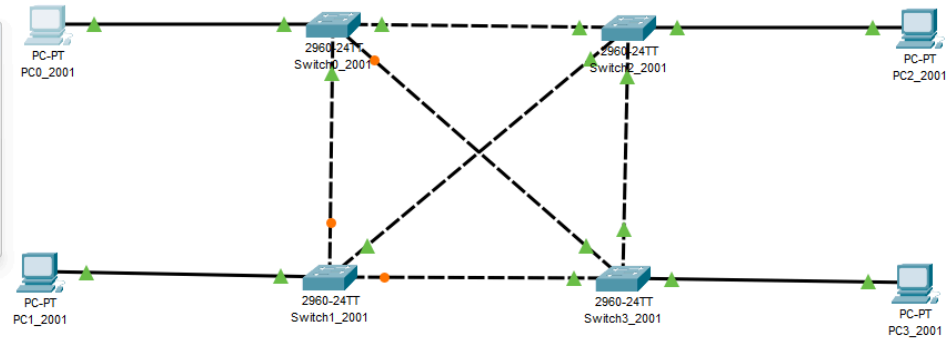
Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	Successful	PC0_2001	PC2_2001	ICMP		0.000	N	0	(edit)	

ARP Table:

Q1

ARP Table for PC0_2001

IP Address	Hardware Address	Interface
192.168.1.3	0001.C71D.1CBE	FastEthernet0



Scenario 0

New Delete

Toggle PDU List Window

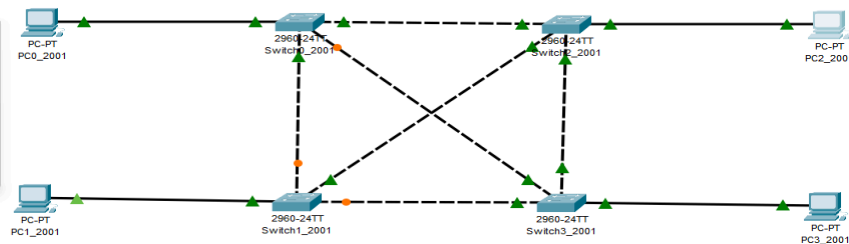
Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	Successful	PC0_2001	PC2_2001	ICMP		0.000	N	0	(edit)	

Copper Cross-Over

Q1

ARP Table for PC0_2001

IP Address	Hardware Address	Interface
192.168.1.3	0001.C71D.1CBE	FastEthernet0



ARP Table for PC2_2001

IP Address	Hardware Address	Interface
192.168.1.1	0060.3E6E.D4B3	FastEthernet0

Scenario 0

New Delete

Toggle PDU List Window

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	Successful	PC0_2001	PC2_2001	ICMP		0.000	N	0	(edit)	

Copper Cross-Over

Q2. HUB

Q3. Switch

Q4. Simulation Mode

Q5. Types of UTP Cables:

1-2: Straight Cables

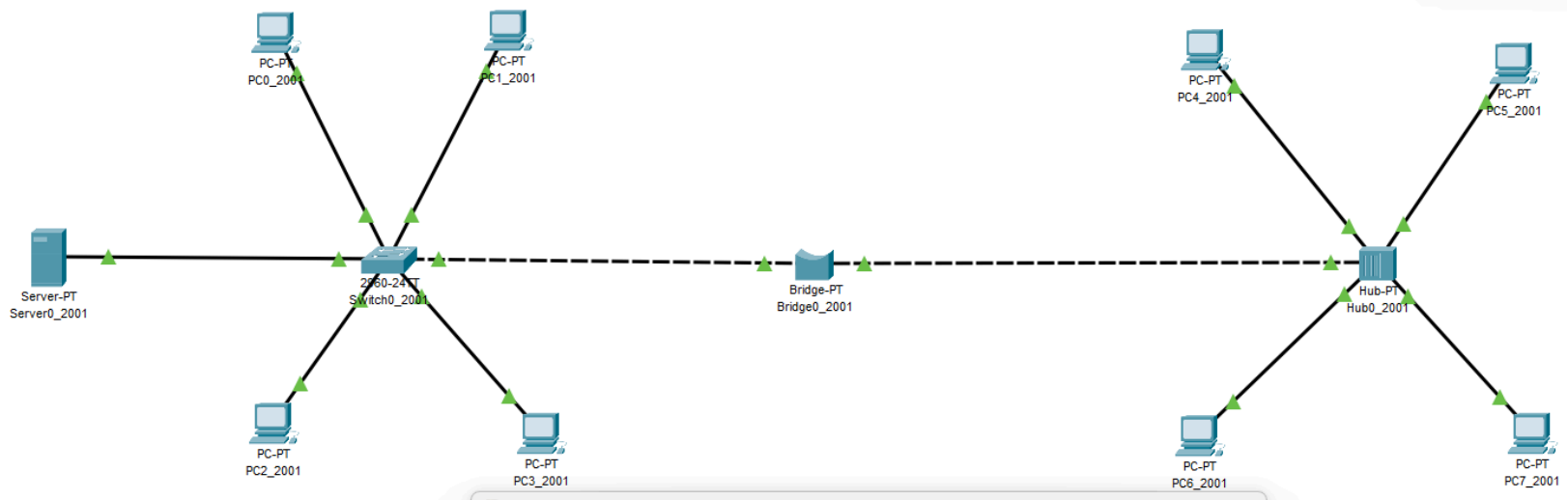
2-3: Cross Over Cable

3-4: Cross over cable

4-5: Cross Over Cable

Q6:

Q6



Server0_2001

Physical Config **SERVICES** Desktop Programming Attributes

SERVICES

- HTTP
- DHCP**
- DHCPv6
- TFTP
- DNS
- SYSLOG
- AAA
- NTP
- EMAIL
- FTP
- IoT
- VM Management
- Radius EAP

DHCP

Interface: FastEthernet0 Service: ☒ On ☐ Off

Pool Name: serverPool

Default Gateway: 0.0.0.0

DNS Server: 0.0.0.0

Start IP Address: 192 168 1 0

Subnet Mask: 255 255 255 0

Maximum Number of Users: 512

TFTP Server: 0.0.0.0

Copper Straight-Through

PC0_2001

Physical Config **Desktop** Programming Attributes

IP Configuration

Interface: FastEthernet0

IP Configuration

- ☒ DHCP
- ☐ Static

IPv4 Address: 192.168.1.9

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::20D:BDF:FE43:2C2D

Default Gateway:

DNS Server:

802.1X

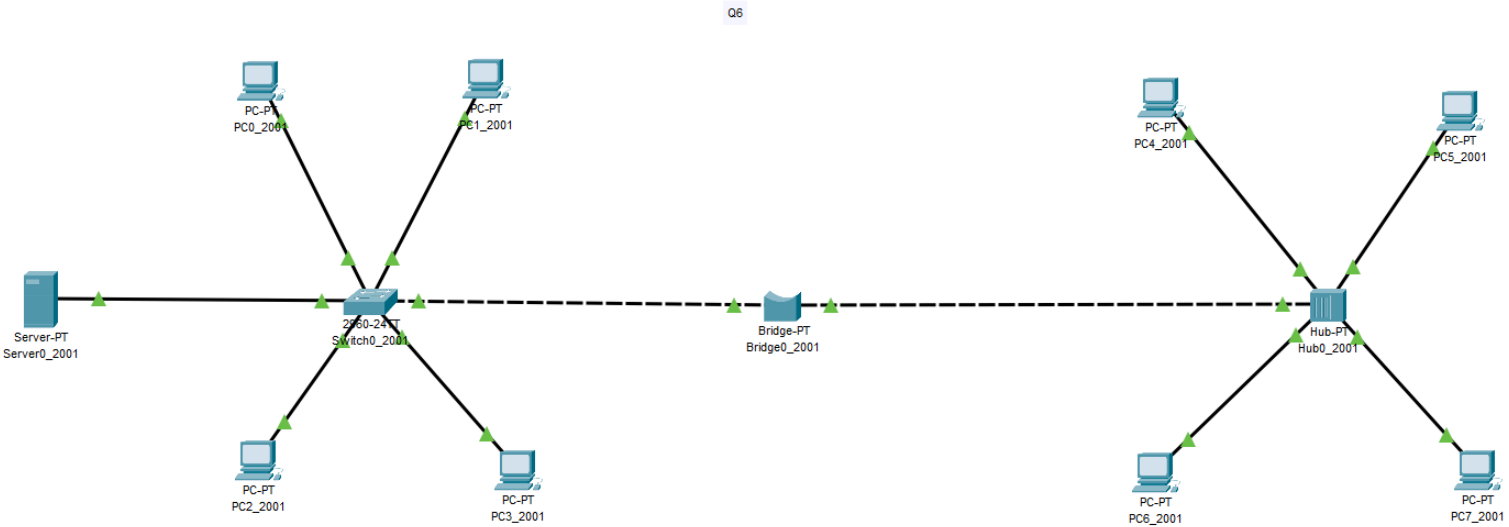
☐ Use 802.1X Security

Authentication: MD5

Username:

Password:

Real-Time Mode:



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	PC7	ICMP		0.000	N	0	(edit)	(delete)

Simulation Mode:

