Name: VENNELA G

Register No: 20BDS0146

Lab Course Name: NETWORK&COMMUNICATION

Lab Slot: L20+L21

Assesment Title : PACKET TRACER

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PACKET TRACER

Cisco Packet tracer helps us get a real world experience with powerful network simulation tool built by Cisco. It also helps us practice building simple and complex networks across a variety of devices and extend beyond routers and switches. We can also create interconnected solutions for smart cities, homes, and enterprises.

Cisco packet tracer is useful to

- Create virtual networks
- Experiment while building, managing & securing infrastructures
- Visualize internal processes in real-time
- Apply skills with labs & interactive activities

HOW TO INSTALL CISCO PACKET TRACER?

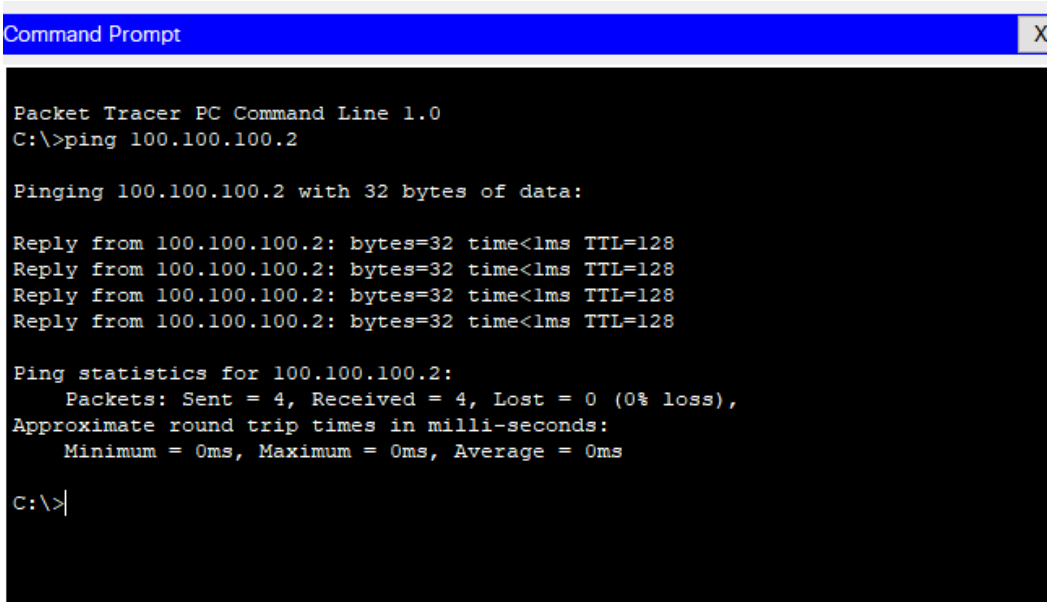
1. Open any search engine and type netacad.com in search box and press Enter.
2. A new window appears, Click on Packet tracer.
3. A window opens, click on “Learn More” option under ‘Intro to Packet tracer’.
4. Then a window opens, click on “Sign up today!”.
5. Provide your details and click on “Next account details “option.
6. Provide your personal information and click on create account.
7. Download Cisco packet tracer for android or mac based on your system.
8. After downloading, open cisco packet tracer and a new dialogue box appears.
9. Click Next after customizing options based on your requirement and click “Install” option.

EXERCISE 1

Aim: To create a peer to peer network using Cisco Packet tracer

Network:

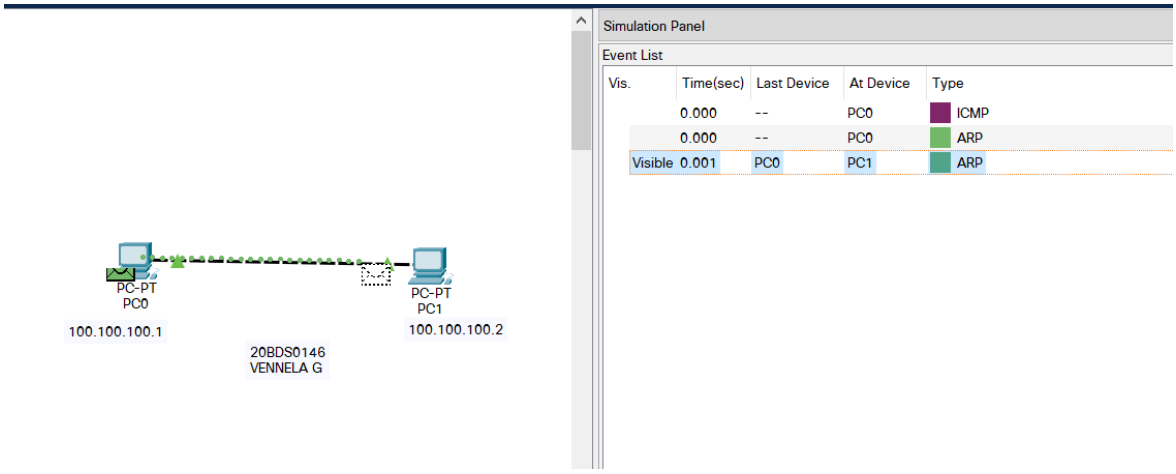
Checking connection between devices:

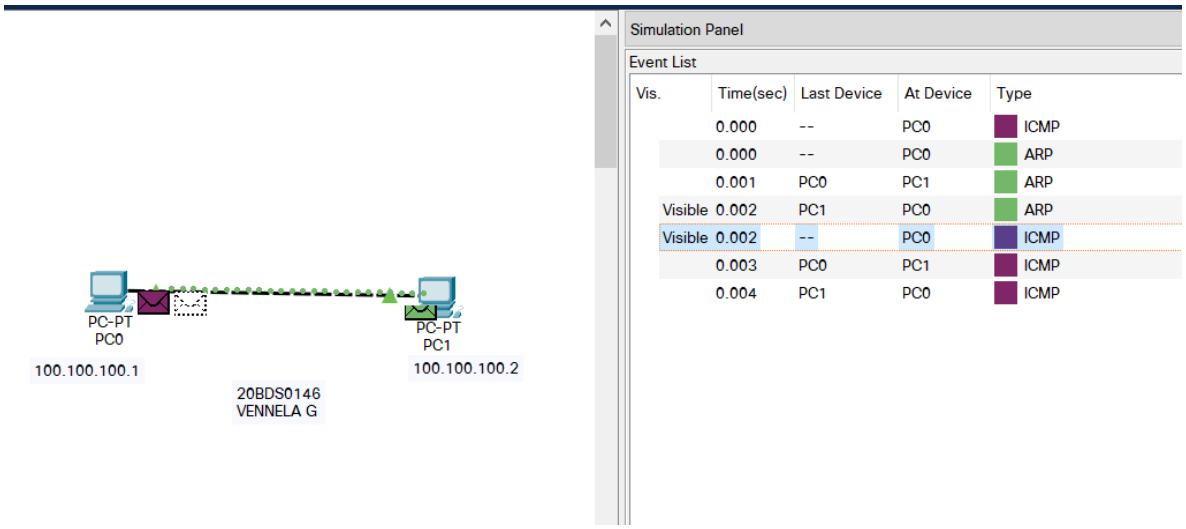


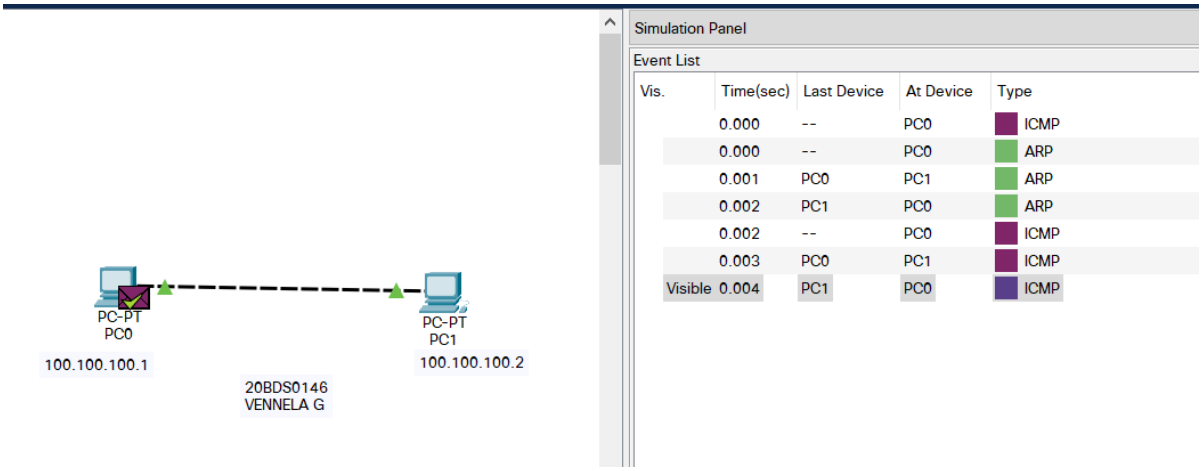
Command Prompt

```
Packet Tracer PC Command Line 1.0
C:\>ping 100.100.100.1

Pinging 100.100.100.1 with 32 bytes of data:

Reply from 100.100.100.1: bytes=32 time<1ms TTL=128
Reply from 100.100.100.1: bytes=32 time<1ms TTL=128
Reply from 100.100.100.1: bytes=32 time<1ms TTL=128
Reply from 100.100.100.1: bytes=32 time<1ms TTL=128

Ping statistics for 100.100.100.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>
```

Simulation Model:



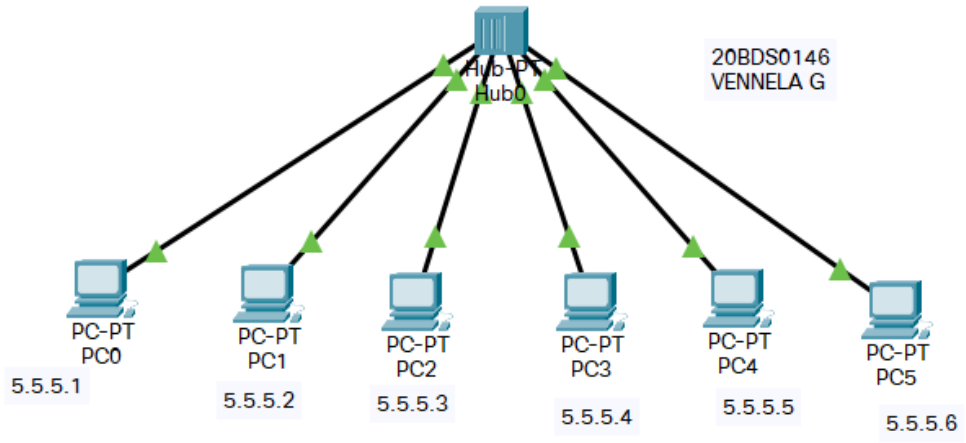




EXERCISE 2

Aim: To create a LAN network using Hub

Network:



Checking connection between any two devices in LAN :

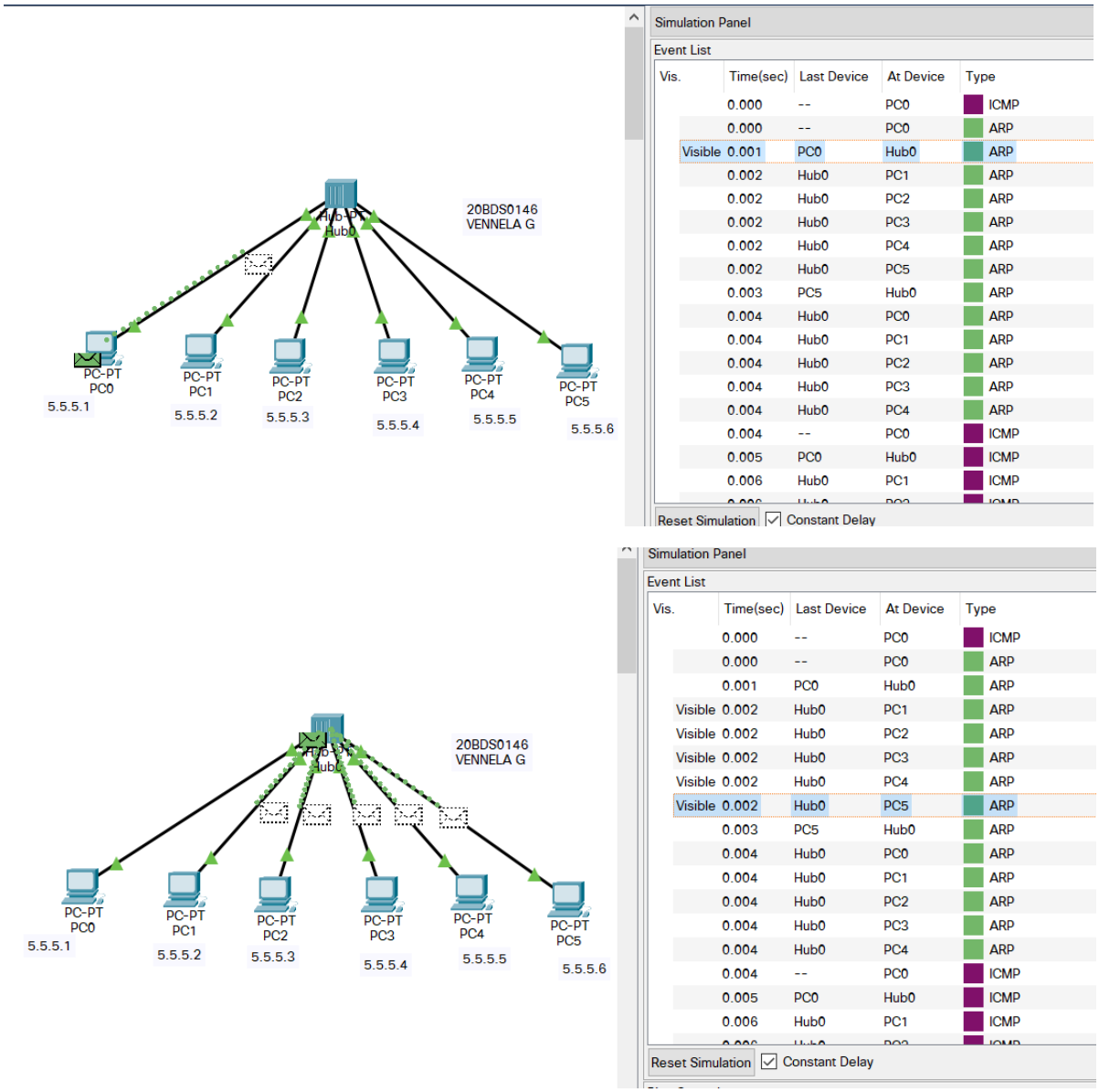
Command Prompt

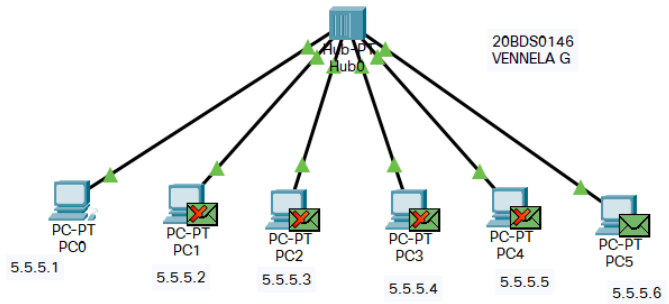
```
Packet Tracer PC Command Line 1.0
C:\>ping 5.5.5.6

Pinging 5.5.5.6 with 32 bytes of data:

Reply from 5.5.5.6: bytes=32 time<1ms TTL=128
Reply from 5.5.5.6: bytes=32 time<1ms TTL=128
Reply from 5.5.5.6: bytes=32 time<1ms TTL=128
Reply from 5.5.5.6: bytes=32 time<1ms TTL=128

Ping statistics for 5.5.5.6:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>
```

Command Prompt

```
Packet Tracer PC Command Line 1.0
C:\>ping 5.5.5.3

Pinging 5.5.5.3 with 32 bytes of data:

Reply from 5.5.5.3: bytes=32 time<1ms TTL=128
Reply from 5.5.5.3: bytes=32 time<1ms TTL=128
Reply from 5.5.5.3: bytes=32 time<1ms TTL=128
Reply from 5.5.5.3: bytes=32 time<1ms TTL=128

Ping statistics for 5.5.5.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>
```

Simulation Model: (Data transfer between PC0 and PC5)



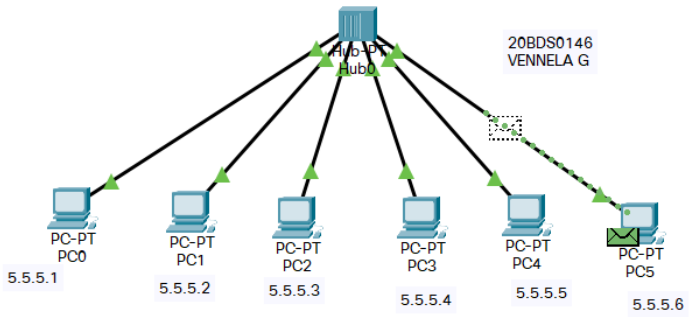


Simulation Panel

Event List

Vis.	Time(sec)	Last Device	At Device	Type
	0.000	--	PC0	ICMP
	0.000	--	PC0	ARP
	0.001	PC0	Hub0	ARP
Visible	0.002	Hub0	PC1	ARP
Visible	0.002	Hub0	PC2	ARP
Visible	0.002	Hub0	PC3	ARP
Visible	0.002	Hub0	PC4	ARP
Visible	0.002	Hub0	PC5	ARP
	0.003	PC5	Hub0	ARP
	0.004	Hub0	PC0	ARP
	0.004	Hub0	PC1	ARP
	0.004	Hub0	PC2	ARP
	0.004	Hub0	PC3	ARP
	0.004	Hub0	PC4	ARP
	0.004	--	PC0	ICMP
	0.005	PC0	Hub0	ICMP
	0.006	Hub0	PC1	ICMP

Reset Simulation Constant Delay

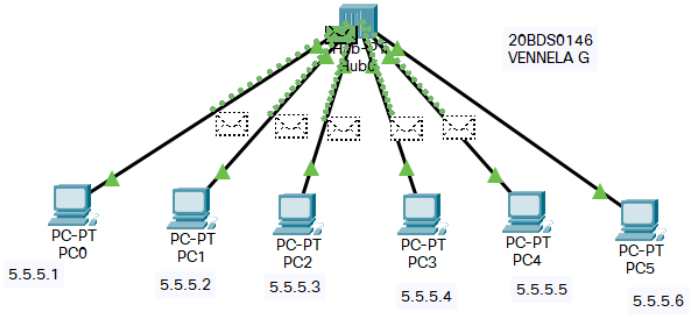


Simulation Panel

Event List

Vis.	Time(sec)	Last Device	At Device	Type
	0.000	--	PC0	ICMP
	0.000	--	PC0	ARP
	0.001	PC0	Hub0	ARP
	0.002	Hub0	PC1	ARP
	0.002	Hub0	PC2	ARP
	0.002	Hub0	PC3	ARP
	0.002	Hub0	PC4	ARP
	0.002	Hub0	PC5	ARP
Visible	0.003	PC5	Hub0	ARP
	0.004	Hub0	PC0	ARP
	0.004	Hub0	PC1	ARP
	0.004	Hub0	PC2	ARP
	0.004	Hub0	PC3	ARP
	0.004	Hub0	PC4	ARP
	0.004	--	PC0	ICMP
	0.005	PC0	Hub0	ICMP
	0.006	Hub0	PC1	ICMP

Reset Simulation Constant Delay

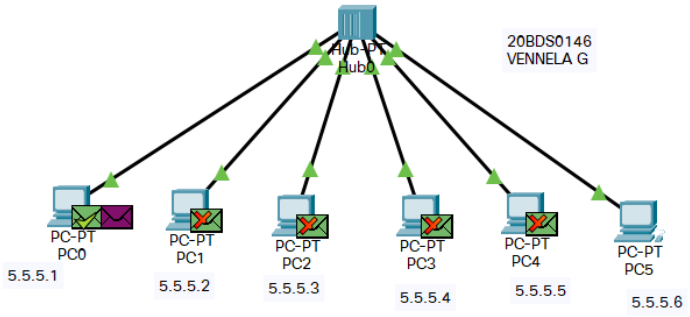


Simulation Panel

Event List

Vis.	Time(sec)	Last Device	At Device	Type
	0.000	--	PC0	ICMP
	0.000	--	PC0	ARP
	0.001	PC0	Hub0	ARP
	0.002	Hub0	PC1	ARP
	0.002	Hub0	PC2	ARP
	0.002	Hub0	PC3	ARP
	0.002	Hub0	PC4	ARP
	0.002	Hub0	PC5	ARP
	0.003	PC5	Hub0	ARP
Visible	0.004	Hub0	PC0	ARP
Visible	0.004	Hub0	PC1	ARP
Visible	0.004	Hub0	PC2	ARP
Visible	0.004	Hub0	PC3	ARP
Visible	0.004	Hub0	PC4	ARP
Visible	0.004	--	PC0	ICMP
	0.005	PC0	Hub0	ICMP
	0.006	Hub0	PC1	ICMP

Reset Simulation Constant Delay



Simulation Panel

Event List

Vis.	Time(sec)	Last Device	At Device	Type
	0.000	--	PC0	ICMP
	0.000	--	PC0	ARP
	0.001	PC0	Hub0	ARP
	0.002	Hub0	PC1	ARP
	0.002	Hub0	PC2	ARP
	0.002	Hub0	PC3	ARP
	0.002	Hub0	PC4	ARP
	0.002	Hub0	PC5	ARP
	0.003	PC5	Hub0	ARP
Visible	0.004	Hub0	PC0	ARP
Visible	0.004	Hub0	PC1	ARP
Visible	0.004	Hub0	PC2	ARP
Visible	0.004	Hub0	PC3	ARP
Visible	0.004	Hub0	PC4	ARP
Visible	0.004	--	PC0	ICMP
	0.005	PC0	Hub0	ICMP
	0.006	Hub0	PC1	ICMP

Reset Simulation Constant Delay

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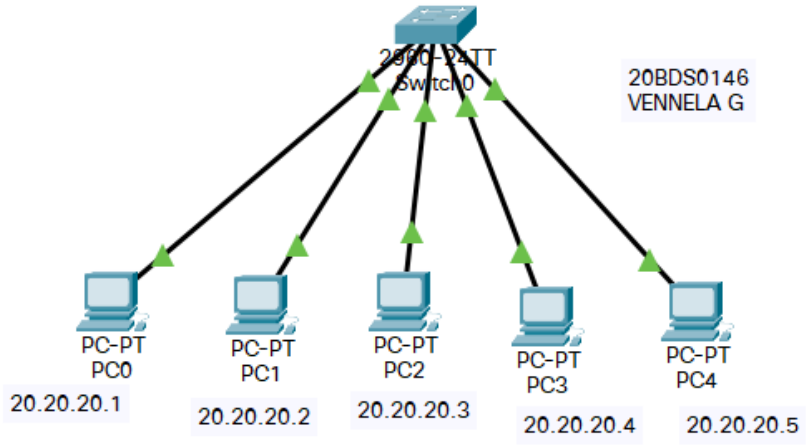
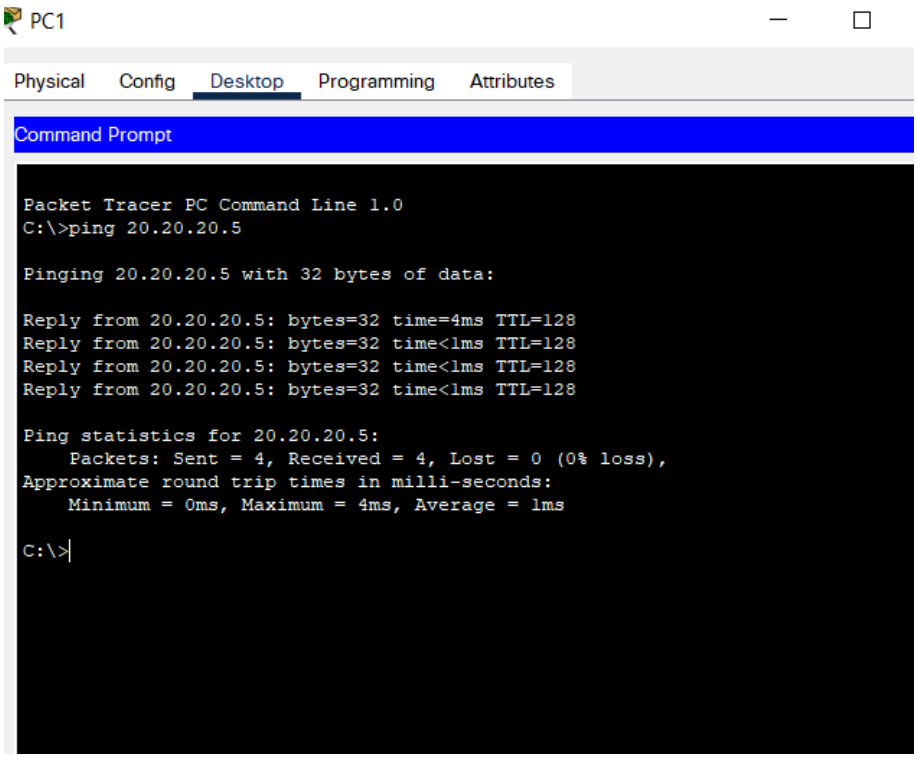
EXERCISE 3

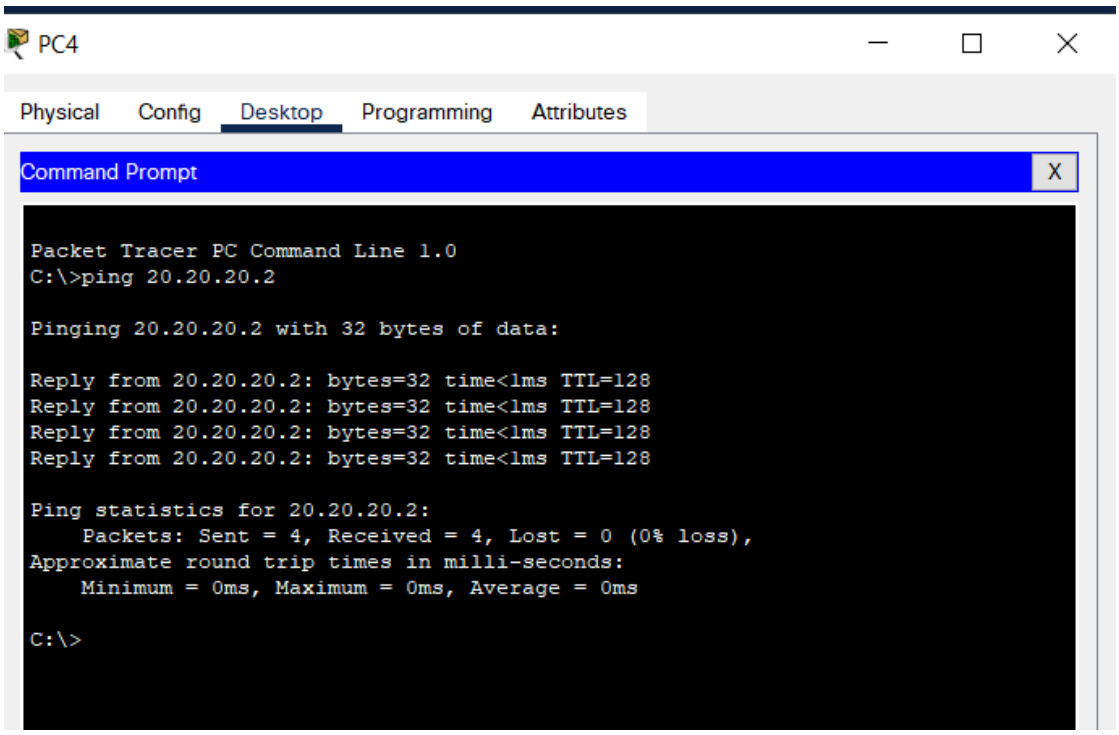
Aim: To create a LAN network using Switch

Network:

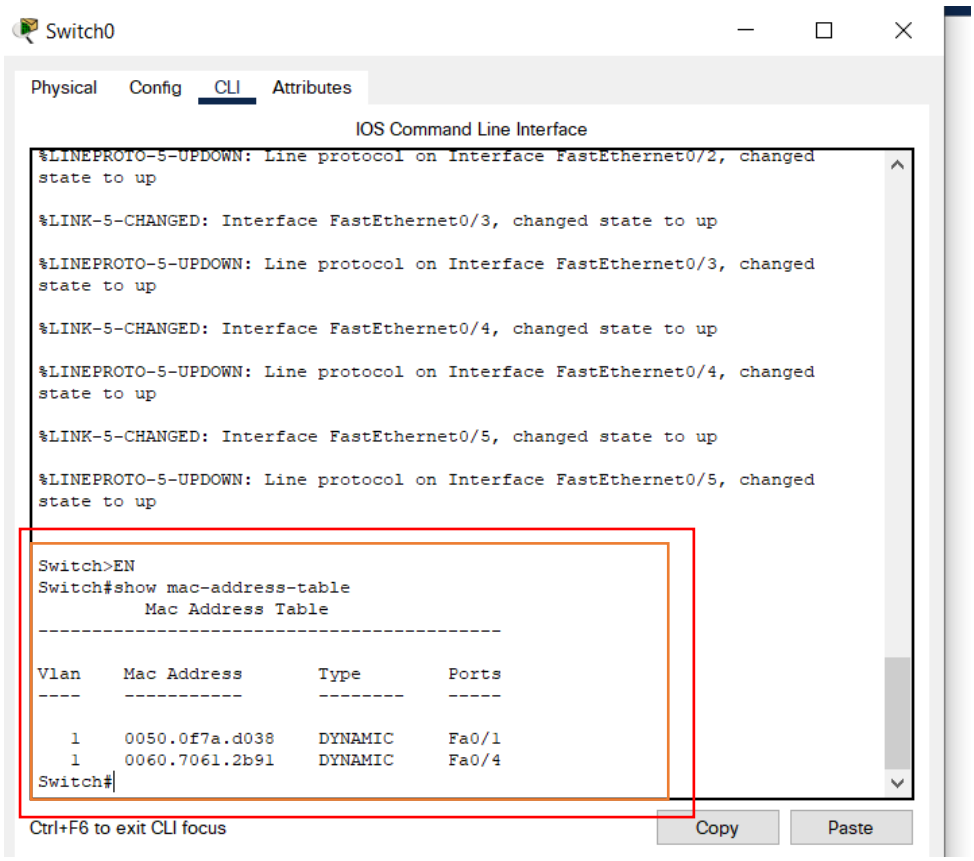


Checking connection between any two devices in LAN :

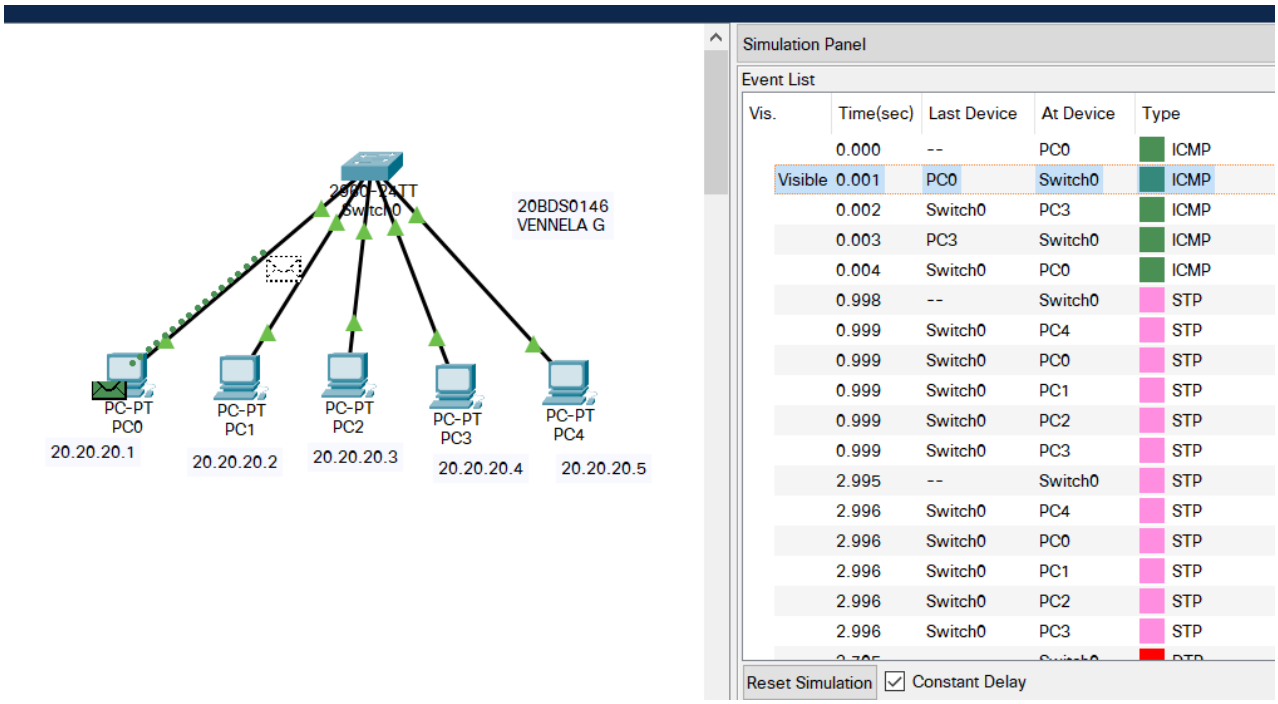


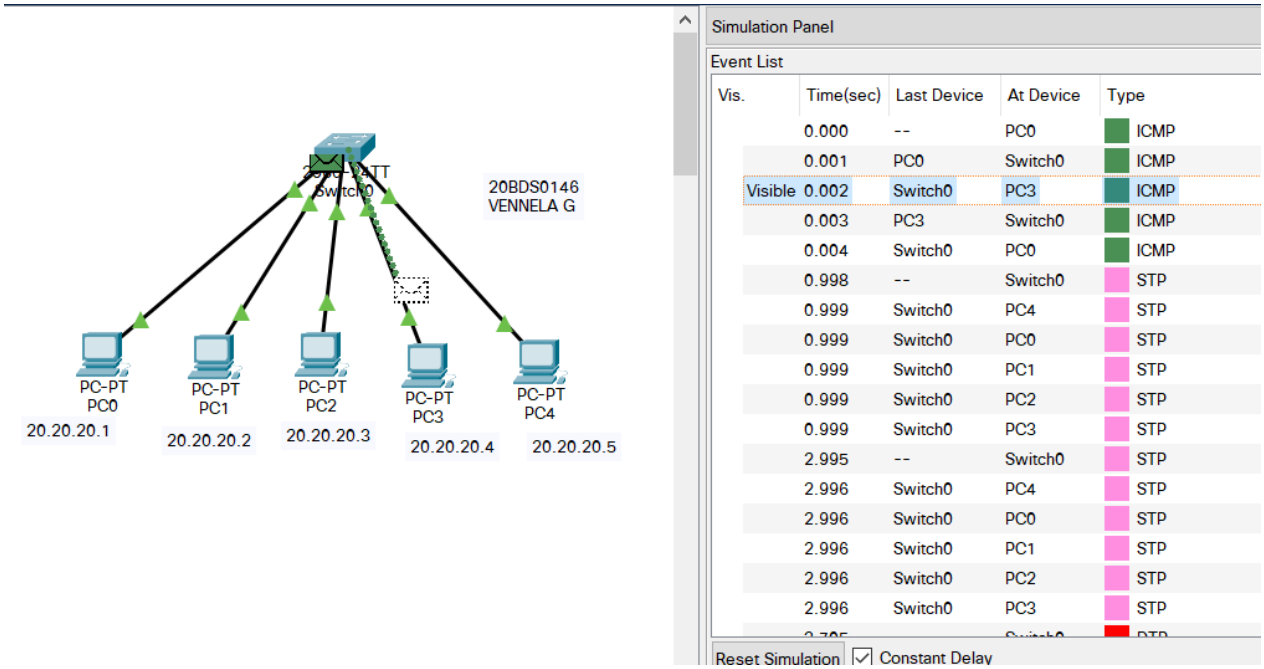


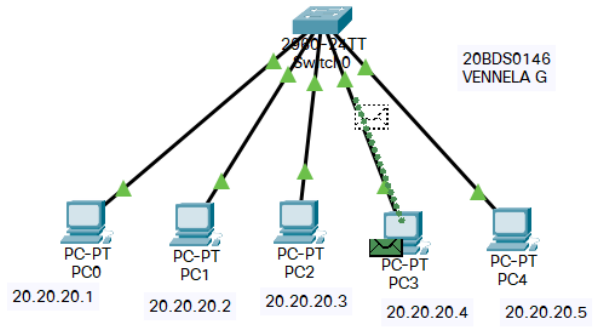
Mac address table:



Simulation Model: (Data transfer between PC0 and PC3)



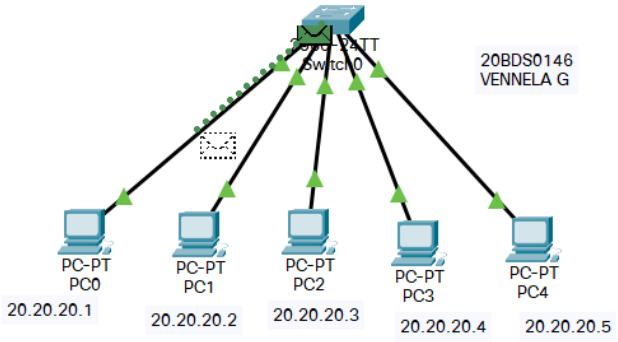




Simulation Panel

Event List

Vis.	Time(sec)	Last Device	At Device	Type
	0.000	--	PC0	ICMP
	0.001	PC0	Switch0	ICMP
	0.002	Switch0	PC3	ICMP
Visible	0.003	PC3	Switch0	ICMP
	0.004	Switch0	PC0	ICMP
	0.998	--	Switch0	STP
	0.999	Switch0	PC4	STP
	0.999	Switch0	PC0	STP
	0.999	Switch0	PC1	STP
	0.999	Switch0	PC2	STP
	0.999	Switch0	PC3	STP
	2.995	--	Switch0	STP
	2.996	Switch0	PC4	STP
	2.996	Switch0	PC0	STP
	2.996	Switch0	PC1	STP
	2.996	Switch0	PC2	STP
	2.996	Switch0	PC3	STP

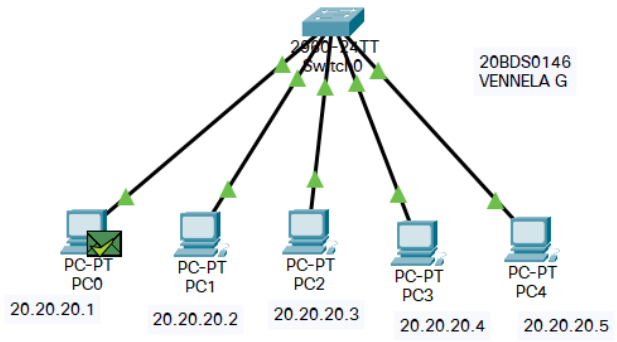


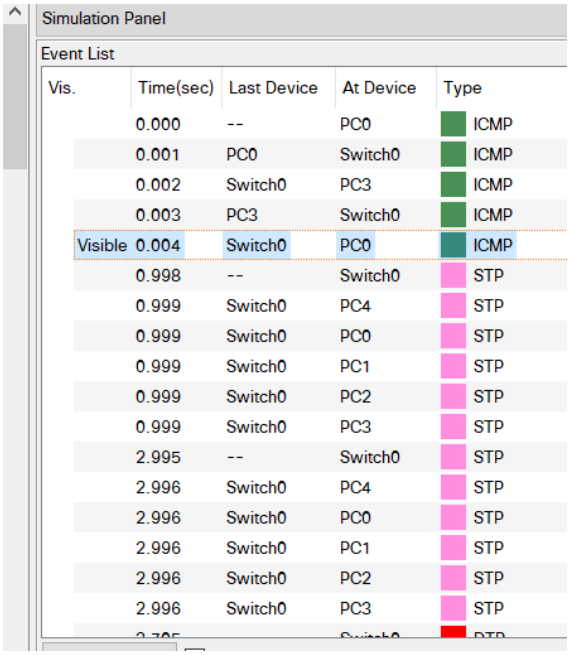
Simulation Panel

Event List

Vis.	Time(sec)	Last Device	At Device	Type
	0.000	--	PC0	ICMP
	0.001	PC0	Switch0	ICMP
	0.002	Switch0	PC3	ICMP
	0.003	PC3	Switch0	ICMP
Visible	0.004	Switch0	PC0	ICMP
	0.998	--	Switch0	STP
	0.999	Switch0	PC4	STP
	0.999	Switch0	PC0	STP
	0.999	Switch0	PC1	STP
	0.999	Switch0	PC2	STP
	0.999	Switch0	PC3	STP
	2.995	--	Switch0	STP
	2.996	Switch0	PC4	STP
	2.996	Switch0	PC0	STP
	2.996	Switch0	PC1	STP
	2.996	Switch0	PC2	STP
	2.996	Switch0	PC3	STP

Reset Simulation Constant Delay

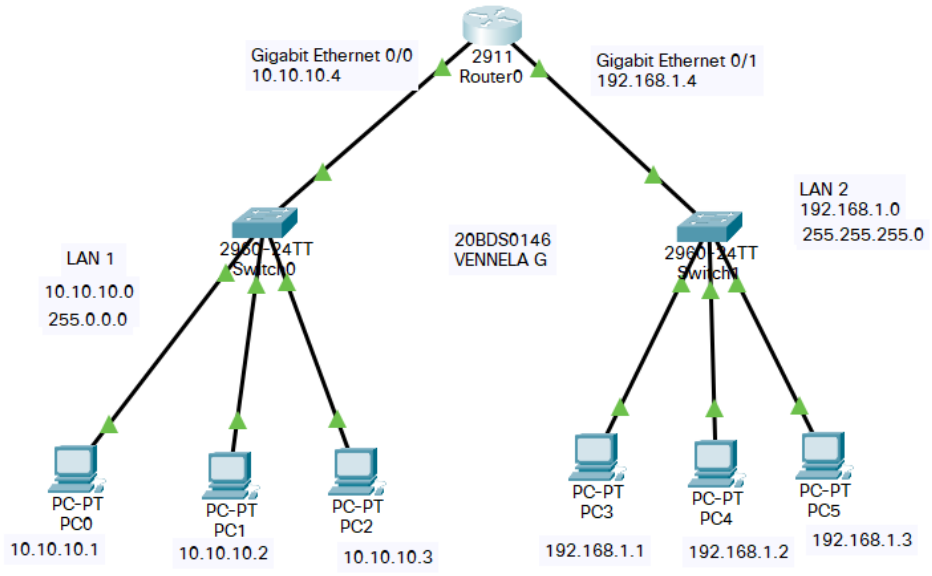




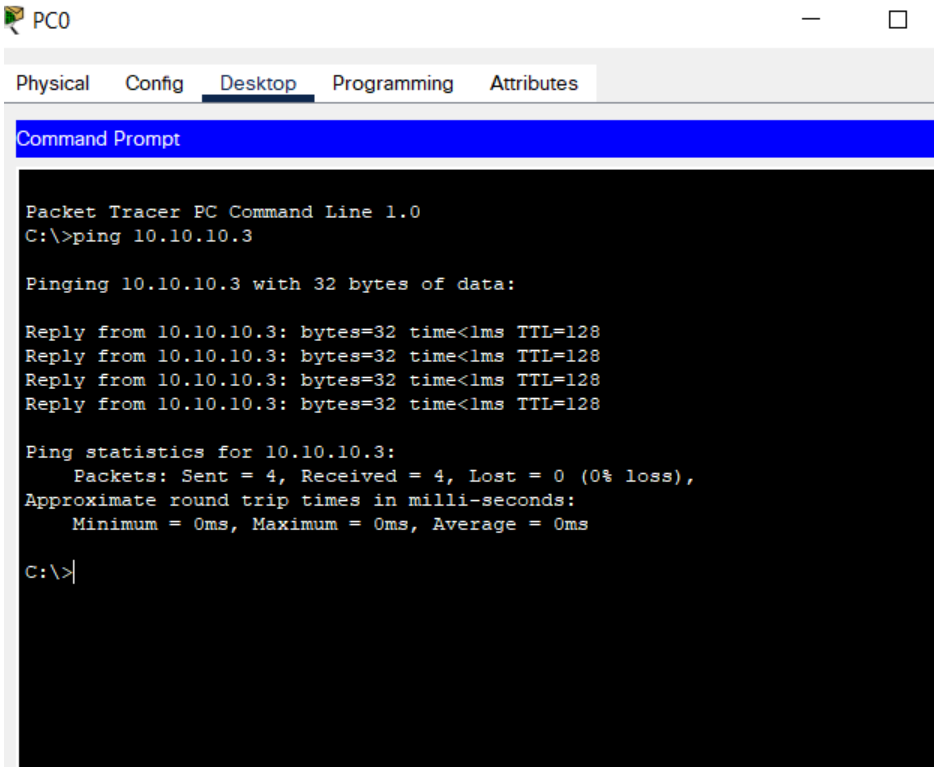
EXERCISE 4

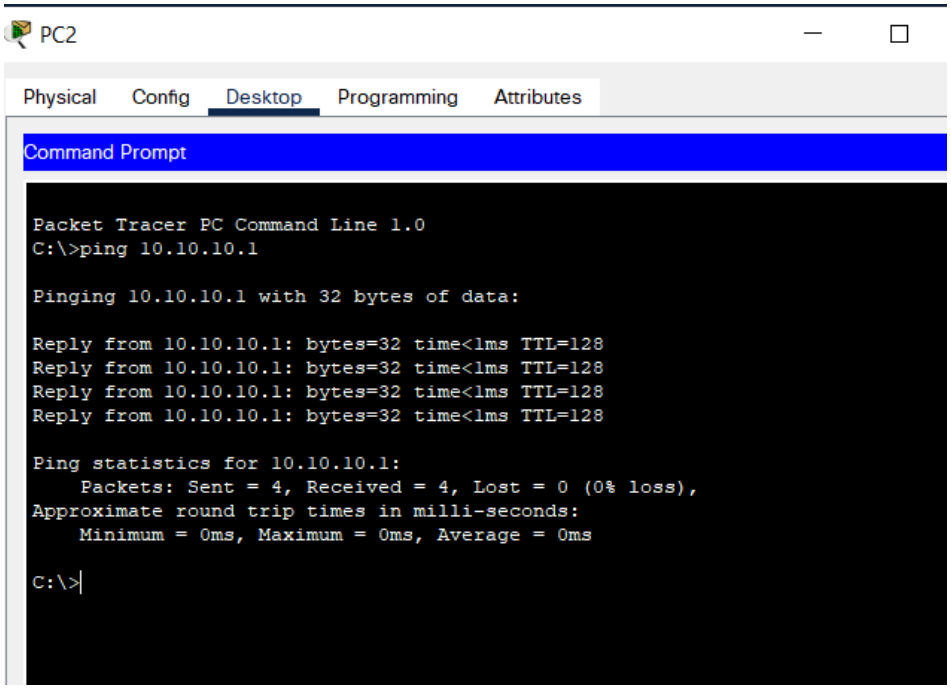
Aim: Create Internetwork i.e. Connect 2 LANs using Routers.

Network:

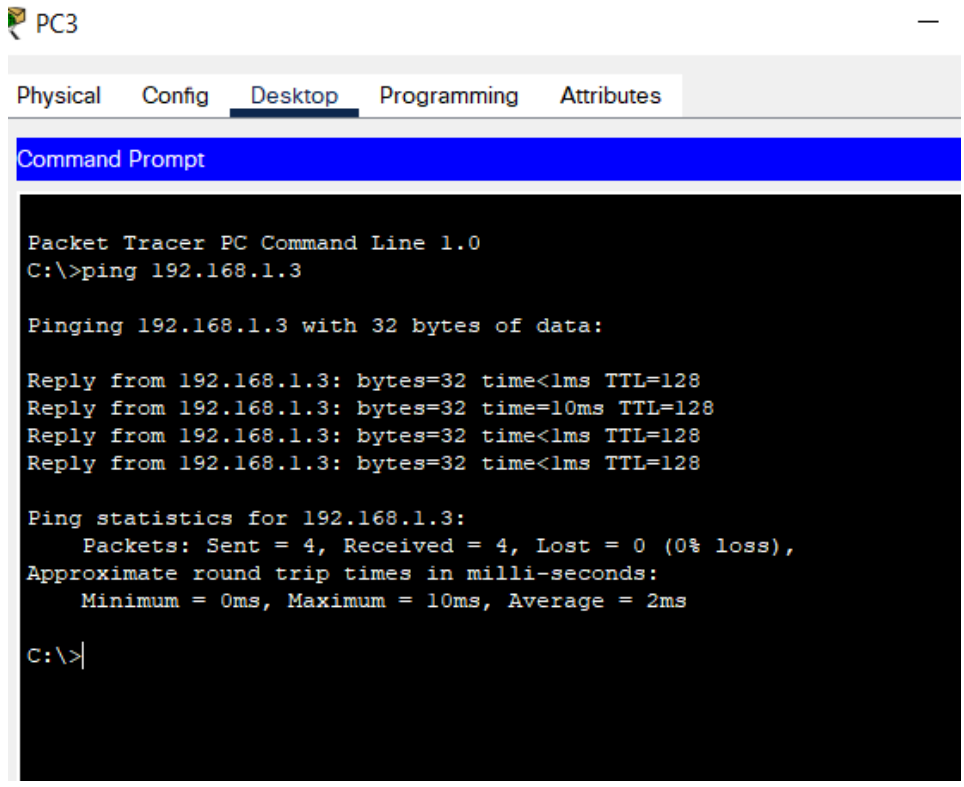


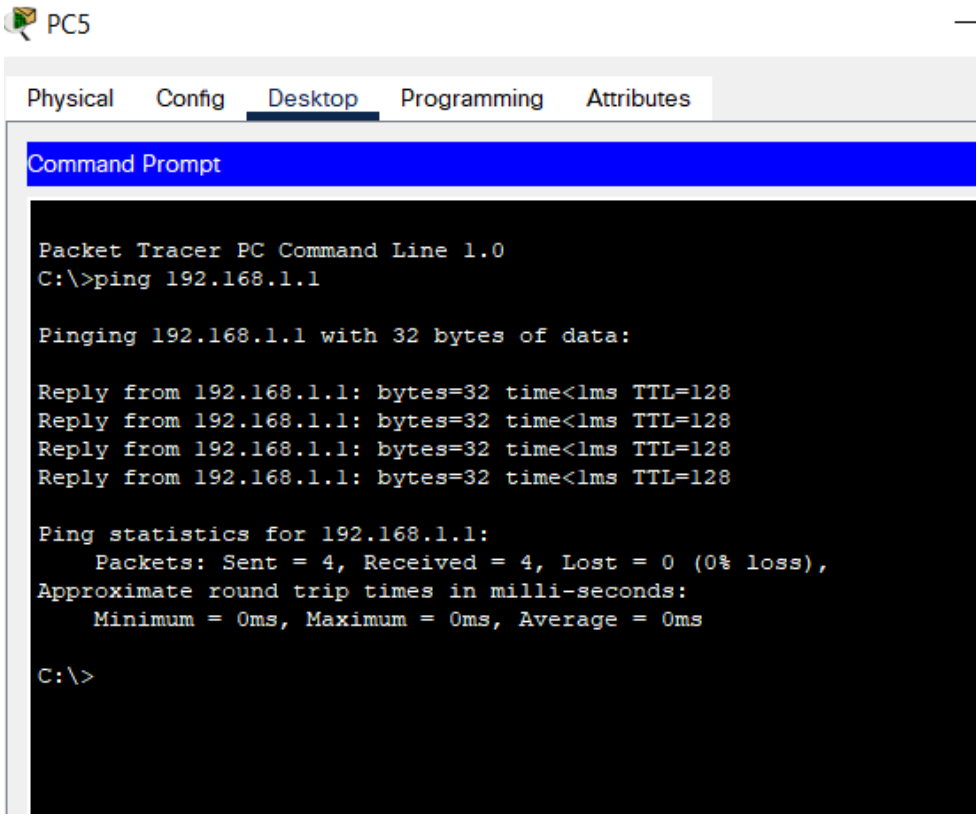
Checking connection between any two devices in LAN1 :



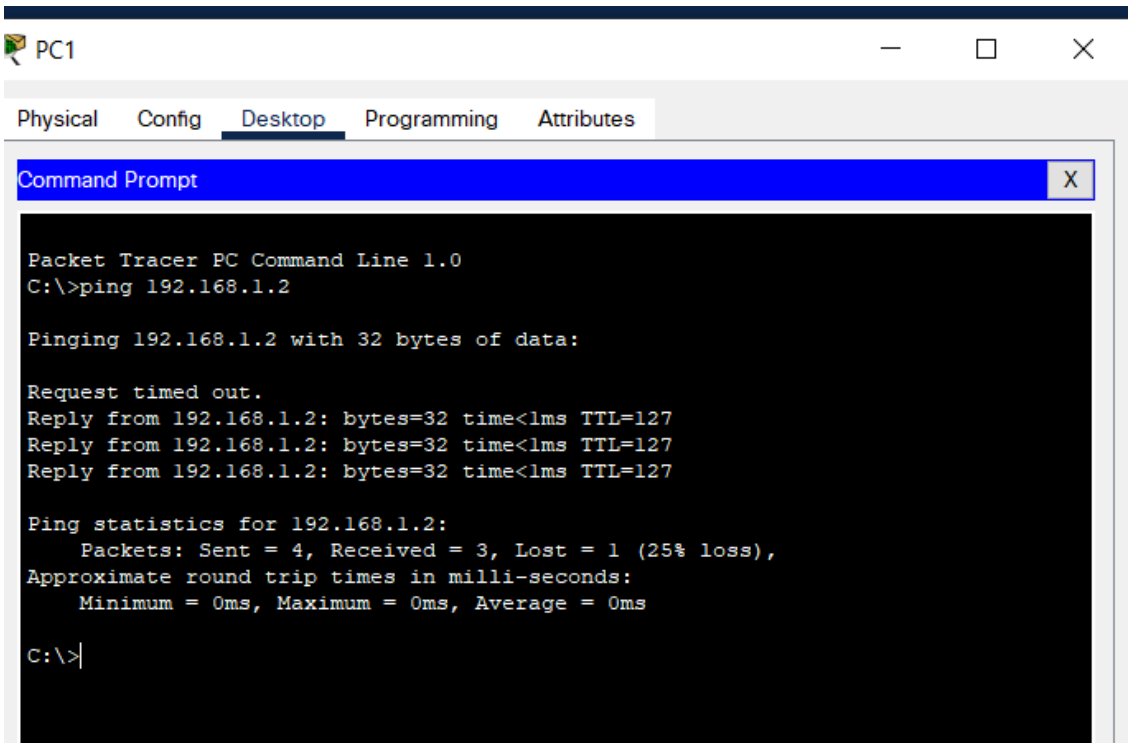


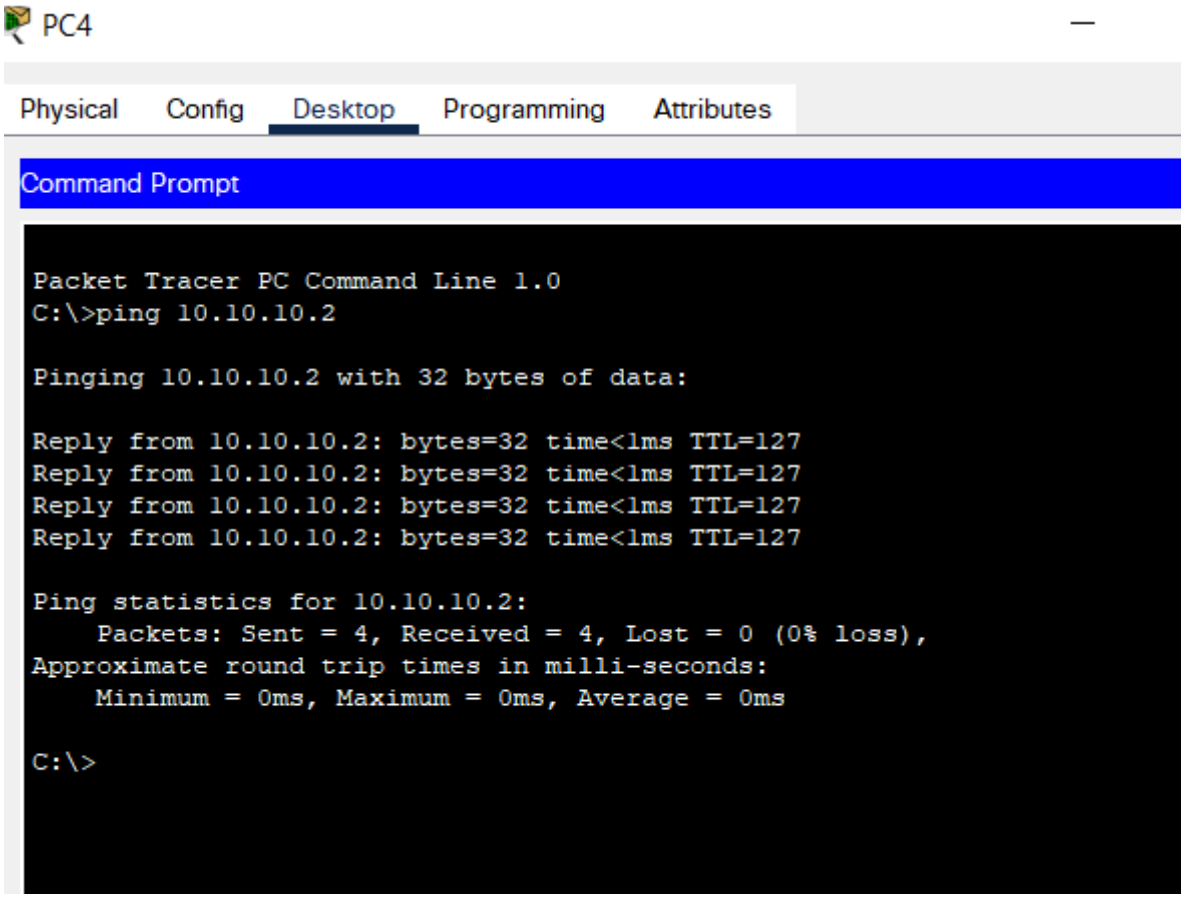
Checking connection between any two devices in LAN2 :





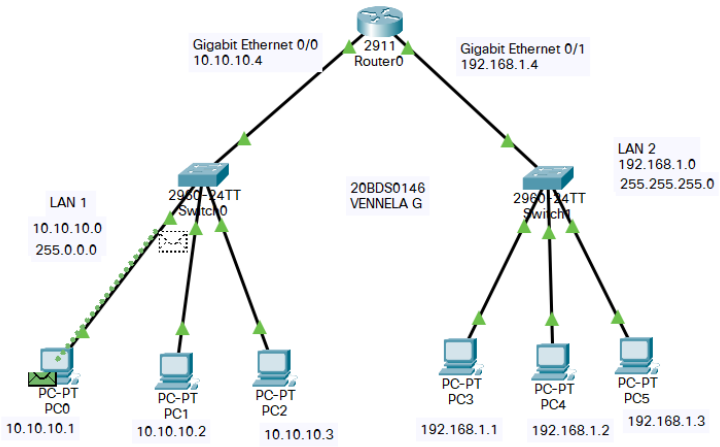
Checking connection between any two devices in LAN1 and LAN2:

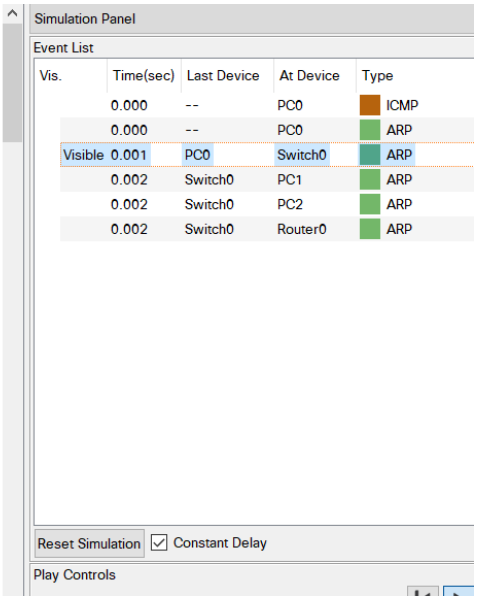


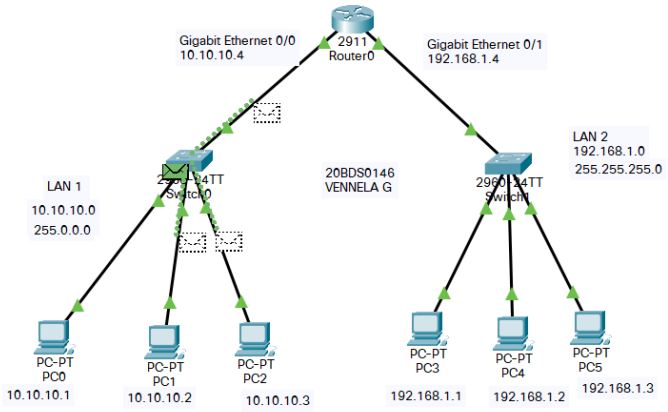


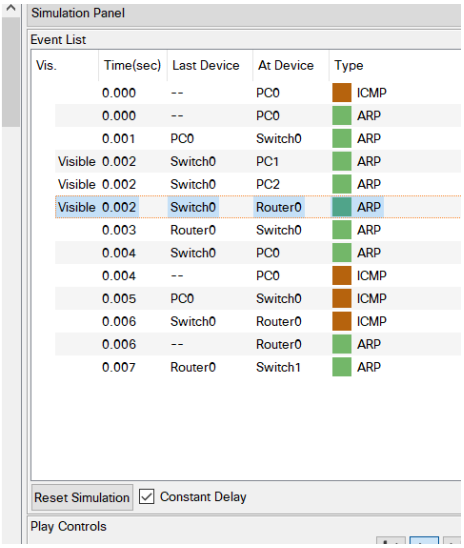
Simulation Model: (Data transfer between PC0 and PC3)

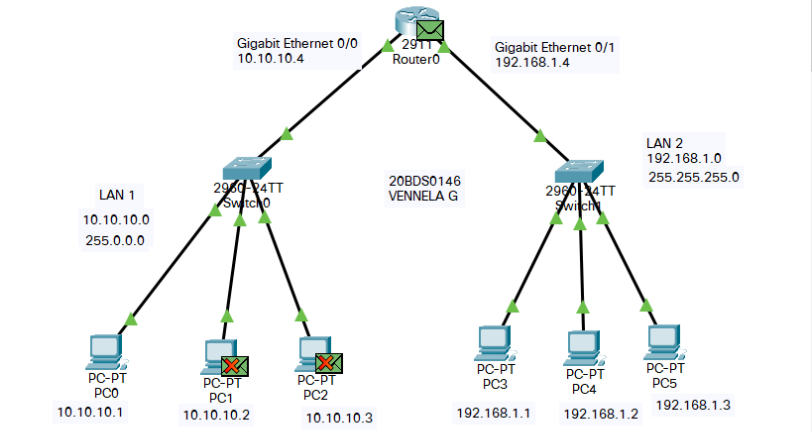
When transferring packet for first time: (it broadcasts)









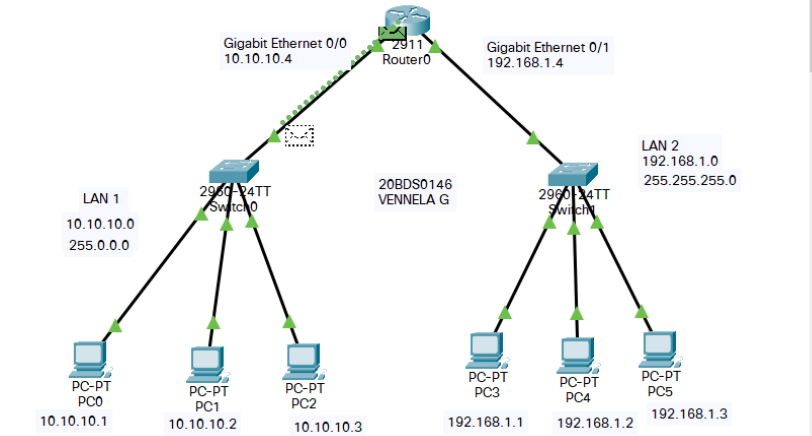


Simulation Panel

Event List

Vis.	Time(sec)	Last Device	At Device	Type
	0.000	--	PC0	ICMP
	0.000	--	PC0	ARP
	0.001	PC0	Switch0	ARP
Visible	0.002	Switch0	PC1	ARP
Visible	0.002	Switch0	PC2	ARP
Visible	0.002	Switch0	Router0	ARP
	0.003	Router0	Switch0	ARP
	0.004	Switch0	PC0	ARP
	0.004	--	PC0	ICMP
	0.005	PC0	Switch0	ICMP
	0.006	Switch0	Router0	ICMP
	0.006	--	Router0	ARP
	0.007	Router0	Switch1	ARP

Reset Simulation | Constant Delay



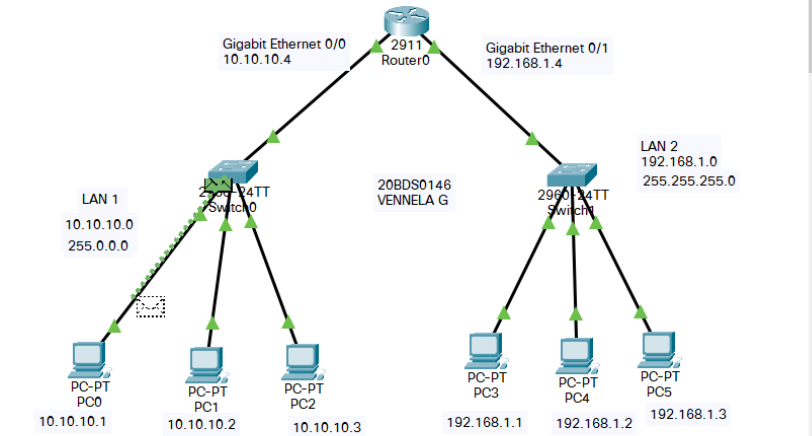
Simulation Panel

Event List

Vis.	Time(sec)	Last Device	At Device	Type
	0.000	--	PC0	ICMP
	0.000	--	PC0	ARP
	0.001	PC0	Switch0	ARP
	0.002	Switch0	PC1	ARP
	0.002	Switch0	PC2	ARP
	0.002	Switch0	Router0	ARP
Visible	0.003	Router0	Switch0	ARP
	0.004	Switch0	PC0	ARP
	0.004	--	PC0	ICMP
	0.005	PC0	Switch0	ICMP
	0.006	Switch0	Router0	ICMP
	0.006	--	Router0	ARP
	0.007	Router0	Switch1	ARP

Reset Simulation | Constant Delay

Play Controls

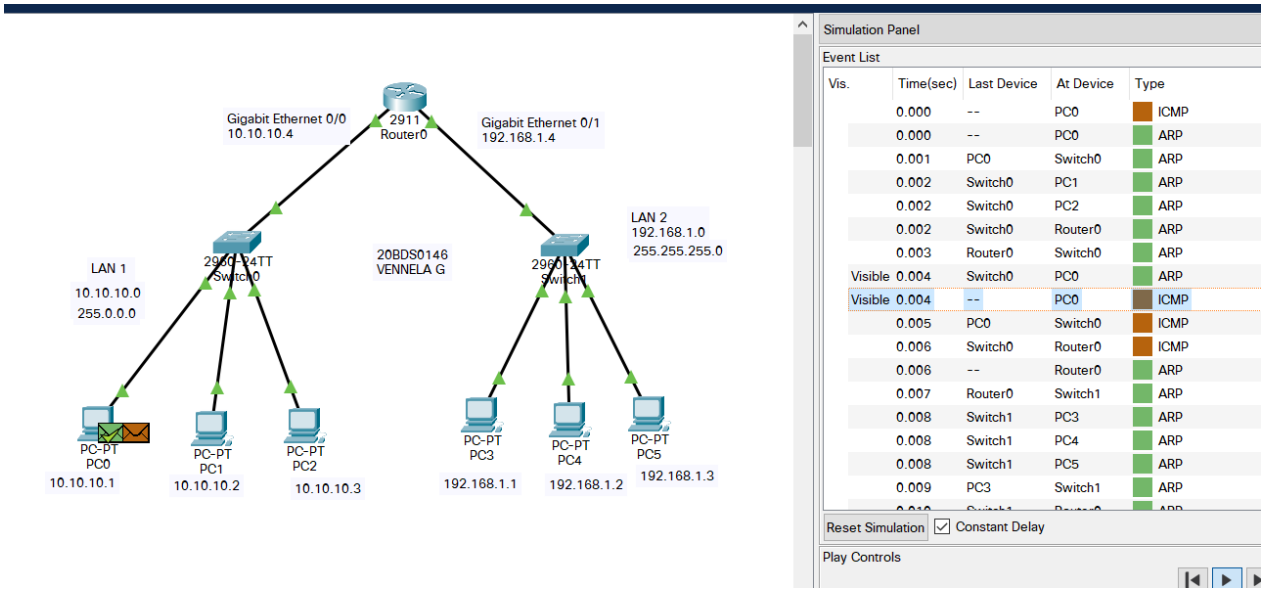


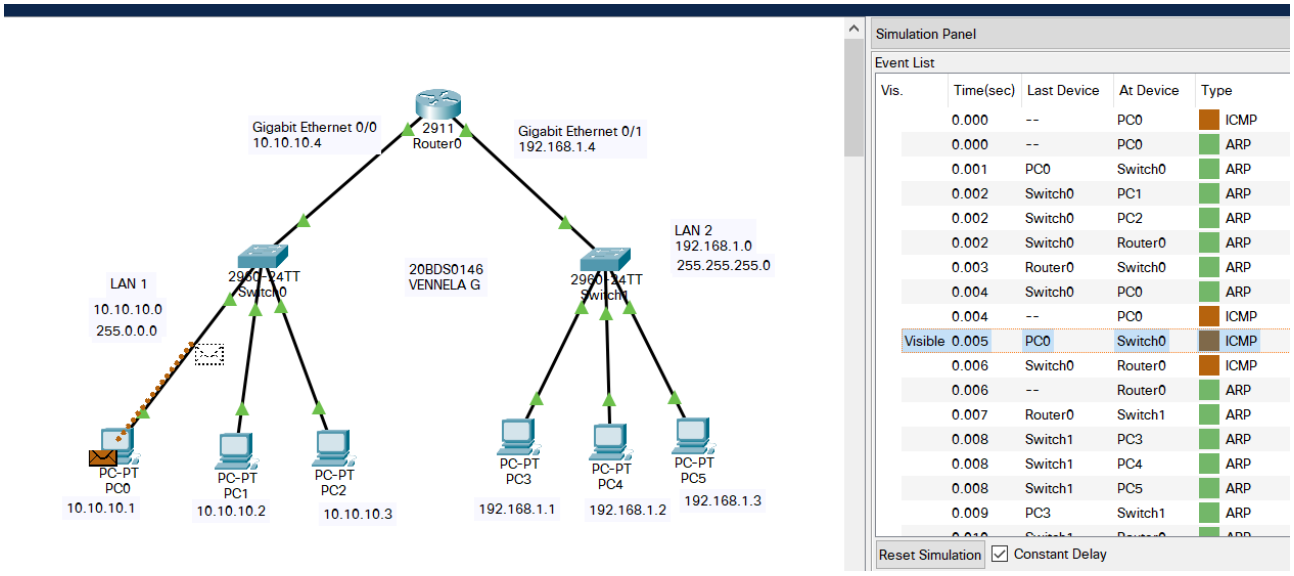
Simulation Panel

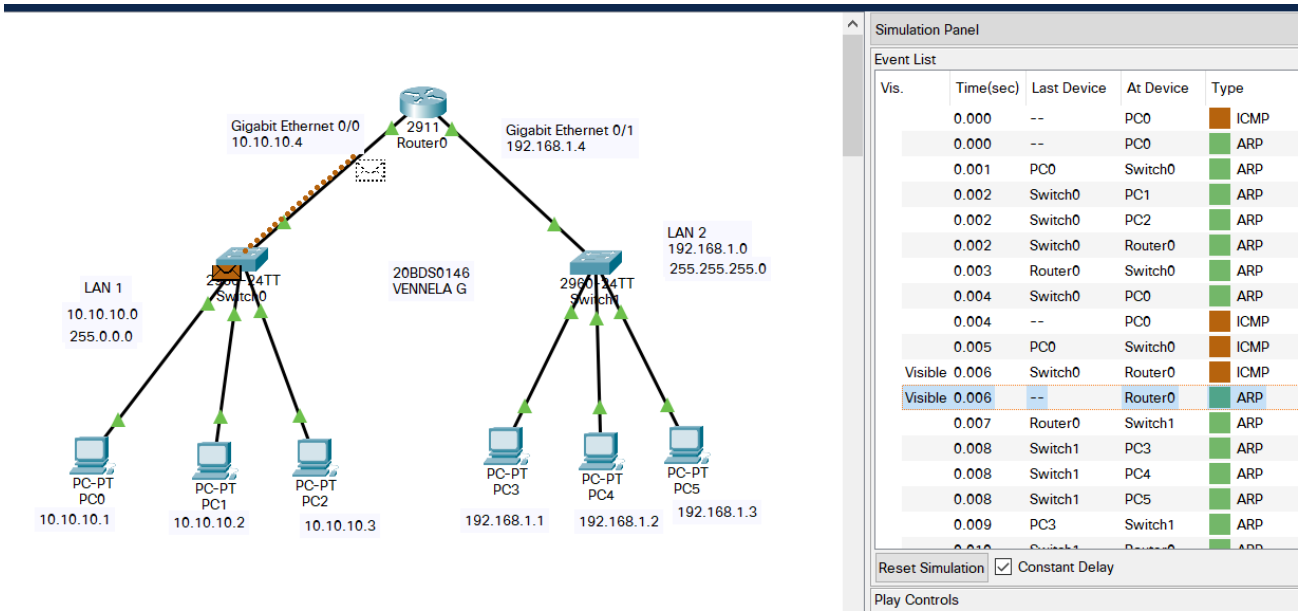
Event List

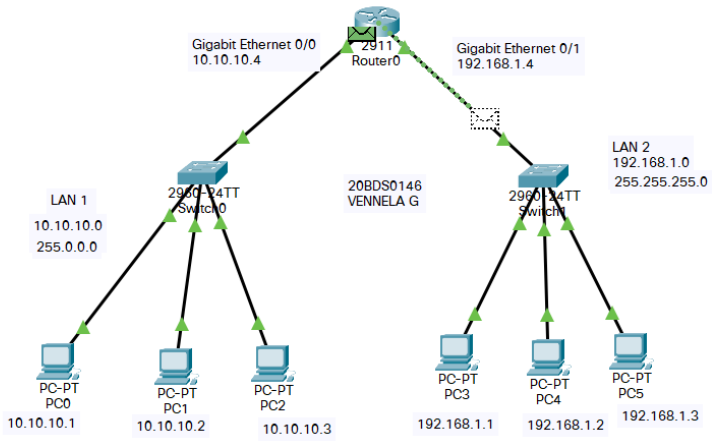
Vis.	Time(sec)	Last Device	At Device	Type
	0.000	--	PC0	ICMP
	0.000	--	PC0	ARP
	0.001	PC0	Switch0	ARP
	0.002	Switch0	PC1	ARP
	0.002	Switch0	PC2	ARP
	0.002	Switch0	Router0	ARP
	0.003	Router0	Switch0	ARP
Visible	0.004	Switch0	PC0	ARP
Visible	0.004	--	PC0	ICMP
	0.005	PC0	Switch0	ICMP
	0.006	Switch0	Router0	ICMP
	0.006	--	Router0	ARP
	0.007	Router0	Switch1	ARP

Reset Simulation | Constant Delay


Gigabit Ethernet 0/0
10.10.10.4
2911
Router0
Gigabit Ethernet 0/1
192.168.1.4
LAN 2
192.168.1.0
255.255.255.0
LAN 1
10.10.10.0
255.0.0.0
20BDS0146
VENNELA G
2960-24TT
Switch0
2960-24TT
Switch1
PC-PT
PC0
10.10.10.1
PC-PT
PC1
10.10.10.2
PC-PT
PC2
10.10.10.3
PC-PT
PC3
192.168.1.1
PC-PT
PC4
192.168.1.2
PC-PT
PC5
192.168.1.3
Simulation Panel
Event List
Vis.
Time(sec)
Last Device
At Device
Type
0.000 -- PC0 ICMP
0.000 -- PC0 ARP
0.001 PC0 Switch0 ARP
0.002 Switch0 PC1 ARP
0.002 Switch0 PC2 ARP
0.002 Switch0 Router0 ARP
0.003 Router0 Switch0 ARP
Visible 0.004 Switch0 PC0 ARP
Visible 0.004 -- PC0 ICMP
0.005 PC0 Switch0 ICMP
0.006 Switch0 Router0 ICMP
0.006 -- Router0 ARP
0.007 Router0 Switch1 ARP
0.008 Switch1 PC3 ARP
0.008 Switch1 PC4 ARP
0.008 Switch1 PC5 ARP
0.009 PC3 Switch1 ARP
Reset Simulation
Constant Delay
Play Controls


Gigabit Ethernet 0/0
10.10.10.4
2911
Router0
Gigabit Ethernet 0/1
192.168.1.4
LAN 2
192.168.1.0
255.255.255.0
LAN 1
10.10.10.0
255.0.0.0
20BDS0146
VENNELA G
2960-24TT
Switch0
2960-24TT
Switch1
PC-PT
PC0
10.10.10.1
PC-PT
PC1
10.10.10.2
PC-PT
PC2
10.10.10.3
PC-PT
PC3
192.168.1.1
PC-PT
PC4
192.168.1.2
PC-PT
PC5
192.168.1.3
Simulation Panel
Event List
Vis.
Time(sec)
Last Device
At Device
Type
0.000 -- PC0 ICMP
0.000 -- PC0 ARP
0.001 PC0 Switch0 ARP
0.002 Switch0 PC1 ARP
0.002 Switch0 PC2 ARP
0.002 Switch0 Router0 ARP
0.003 Router0 Switch0 ARP
0.004 Switch0 PC0 ARP
0.004 -- PC0 ICMP
Visible 0.005 PC0 Switch0 ICMP
0.006 Switch0 Router0 ICMP
0.006 -- Router0 ARP
0.007 Router0 Switch1 ARP
0.008 Switch1 PC3 ARP
0.008 Switch1 PC4 ARP
0.008 Switch1 PC5 ARP
0.009 PC3 Switch1 ARP
Reset Simulation
Constant Delay


Gigabit Ethernet 0/0
10.10.10.4
2911
Router0
Gigabit Ethernet 0/1
192.168.1.4
LAN 2
192.168.1.0
255.255.255.0
LAN 1
10.10.10.0
255.0.0.0
20BDS0146
VENNELA G
2960-24TT
Switch0
2960-24TT
Switch1
PC-PT
PC0
10.10.10.1
PC-PT
PC1
10.10.10.2
PC-PT
PC2
10.10.10.3
PC-PT
PC3
192.168.1.1
PC-PT
PC4
192.168.1.2
PC-PT
PC5
192.168.1.3
Simulation Panel
Event List
Vis.
Time(sec)
Last Device
At Device
Type
0.000 -- PC0 ICMP
0.000 -- PC0 ARP
0.001 PC0 Switch0 ARP
0.002 Switch0 PC1 ARP
0.002 Switch0 PC2 ARP
0.002 Switch0 Router0 ARP
0.003 Router0 Switch0 ARP
0.004 Switch0 PC0 ARP
0.004 -- PC0 ICMP
0.005 PC0 Switch0 ICMP
Visible 0.006 Switch0 Router0 ICMP
Visible 0.006 -- Router0 ARP
0.007 Router0 Switch1 ARP
0.008 Switch1 PC3 ARP
0.008 Switch1 PC4 ARP
0.008 Switch1 PC5 ARP
0.009 PC3 Switch1 ARP
Reset Simulation
Constant Delay
Play Controls



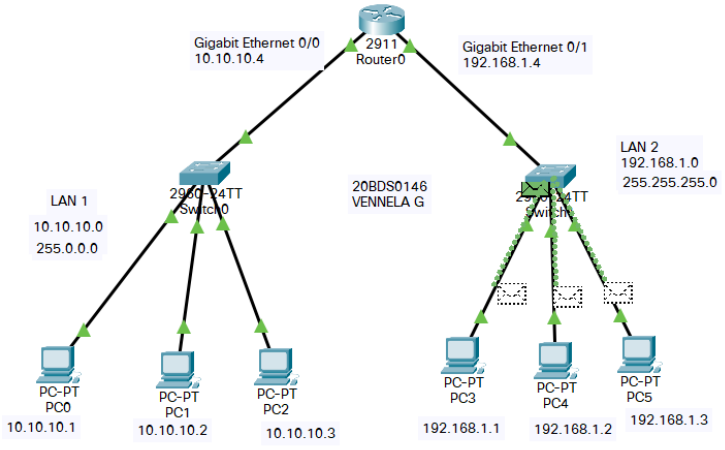
Simulation Panel

Event List

Vis.	Time(sec)	Last Device	At Device	Type
	0.000	--	PC0	ICMP
	0.000	--	PC0	ARP
	0.001	PC0	Switch0	ARP
	0.002	Switch0	PC1	ARP
	0.002	Switch0	PC2	ARP
	0.002	Switch0	Router0	ARP
	0.003	Router0	Switch0	ARP
	0.004	Switch0	PC0	ARP
	0.004	--	PC0	ICMP
	0.005	PC0	Switch0	ICMP
	0.006	Switch0	Router0	ICMP
	0.006	--	Router0	ARP
Visible	0.007	Router0	Switch1	ARP
	0.008	Switch1	PC3	ARP
	0.008	Switch1	PC4	ARP
	0.008	Switch1	PC5	ARP
	0.009	PC3	Switch1	ARP

Reset Simulation | Constant Delay

Play Controls



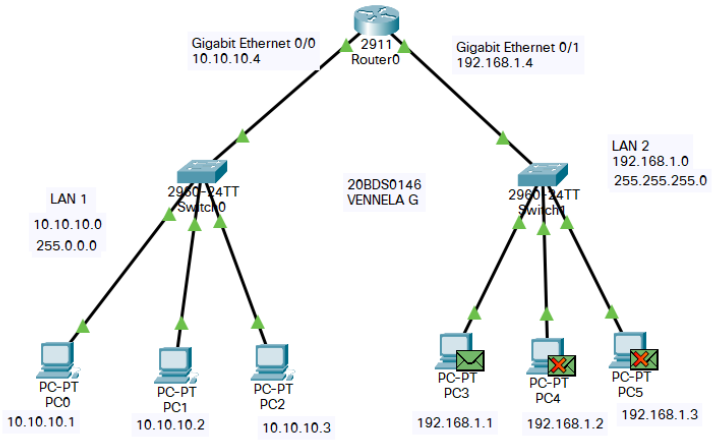
Simulation Panel

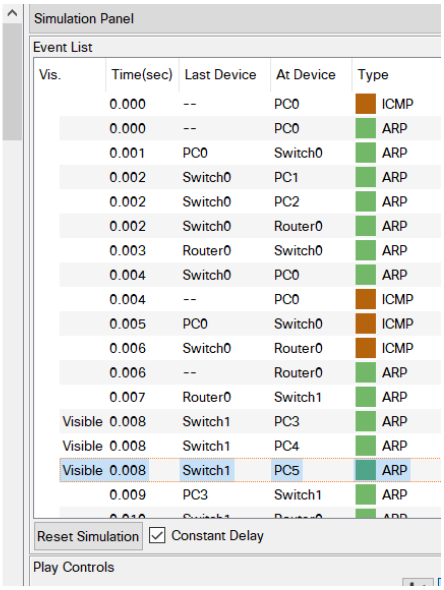
Event List

Vis.	Time(sec)	Last Device	At Device	Type
	0.000	--	PC0	ICMP
	0.000	--	PC0	ARP
	0.001	PC0	Switch0	ARP
	0.002	Switch0	PC1	ARP
	0.002	Switch0	PC2	ARP
	0.002	Switch0	Router0	ARP
	0.003	Router0	Switch0	ARP
	0.004	Switch0	PC0	ARP
	0.004	--	PC0	ICMP
	0.005	PC0	Switch0	ICMP
	0.006	Switch0	Router0	ICMP
	0.006	--	Router0	ARP
	0.007	Router0	Switch1	ARP
Visible	0.008	Switch1	PC3	ARP
Visible	0.008	Switch1	PC4	ARP
Visible	0.008	Switch1	PC5	ARP
	0.009	PC3	Switch1	ARP

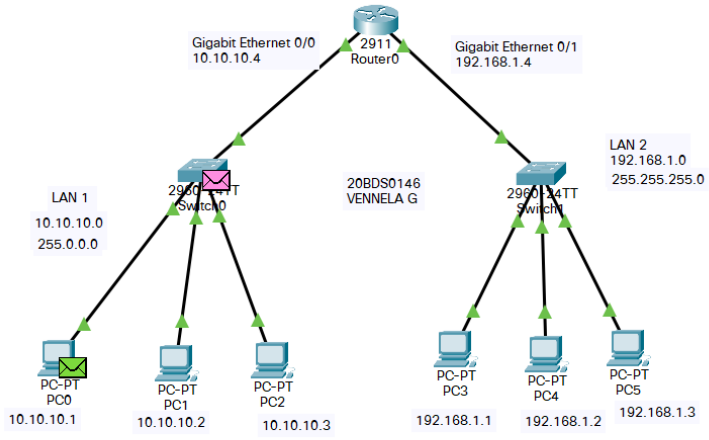
Reset Simulation | Constant Delay

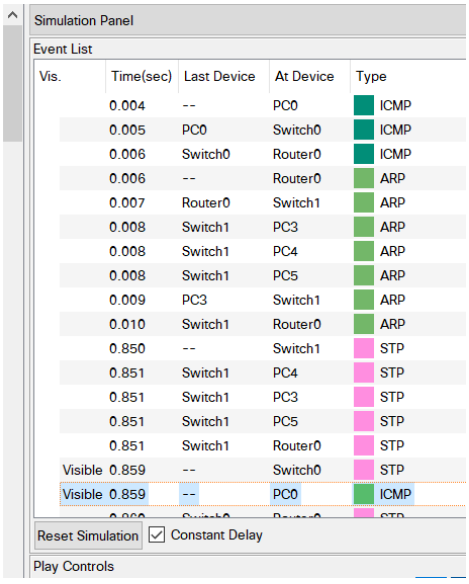
Play Controls

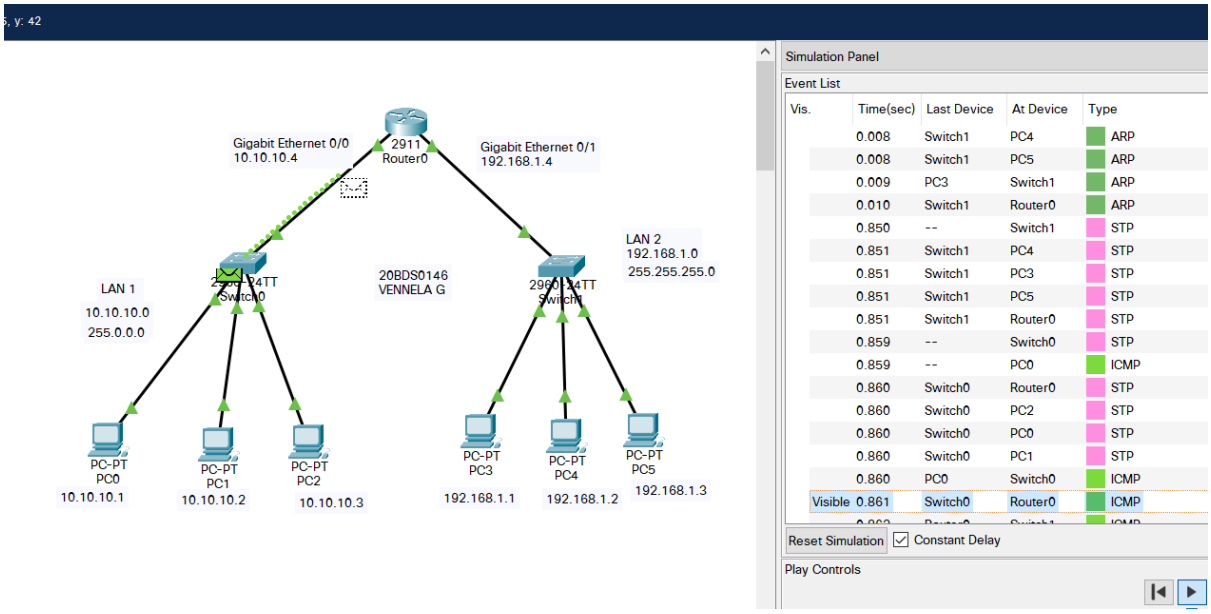


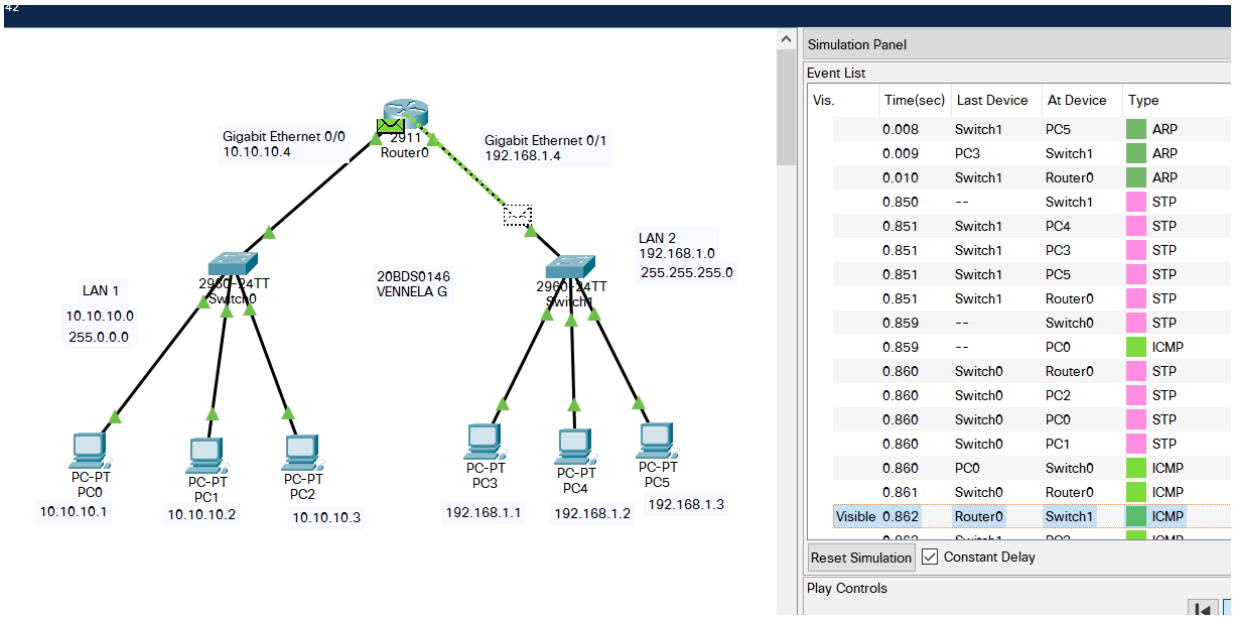


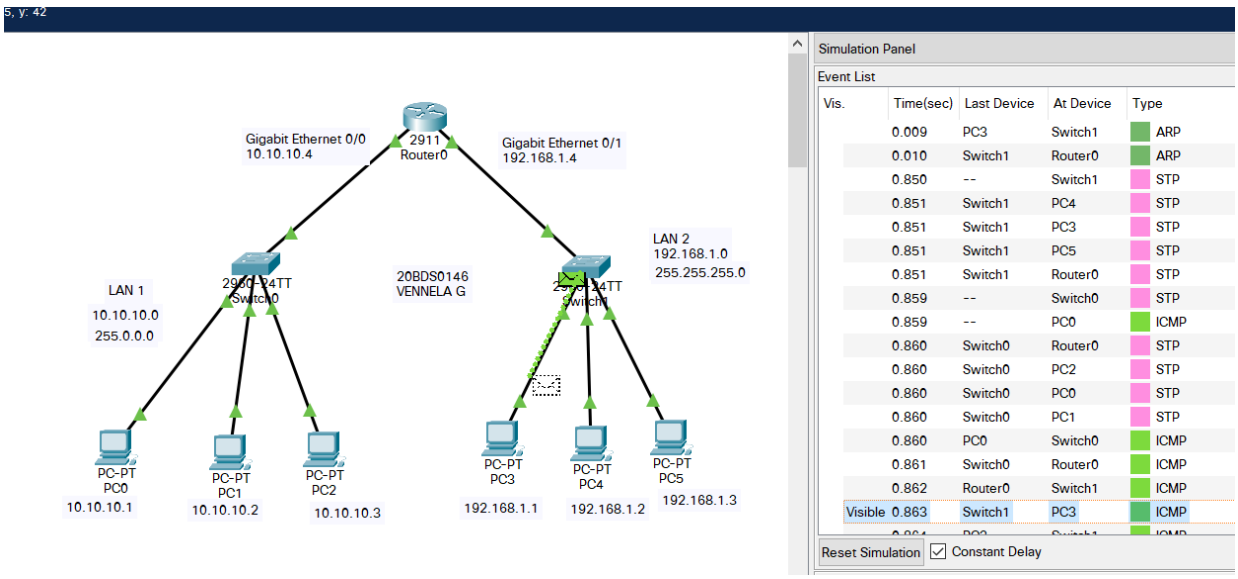
When transferring packet after learning: (it doesn't broadcast)

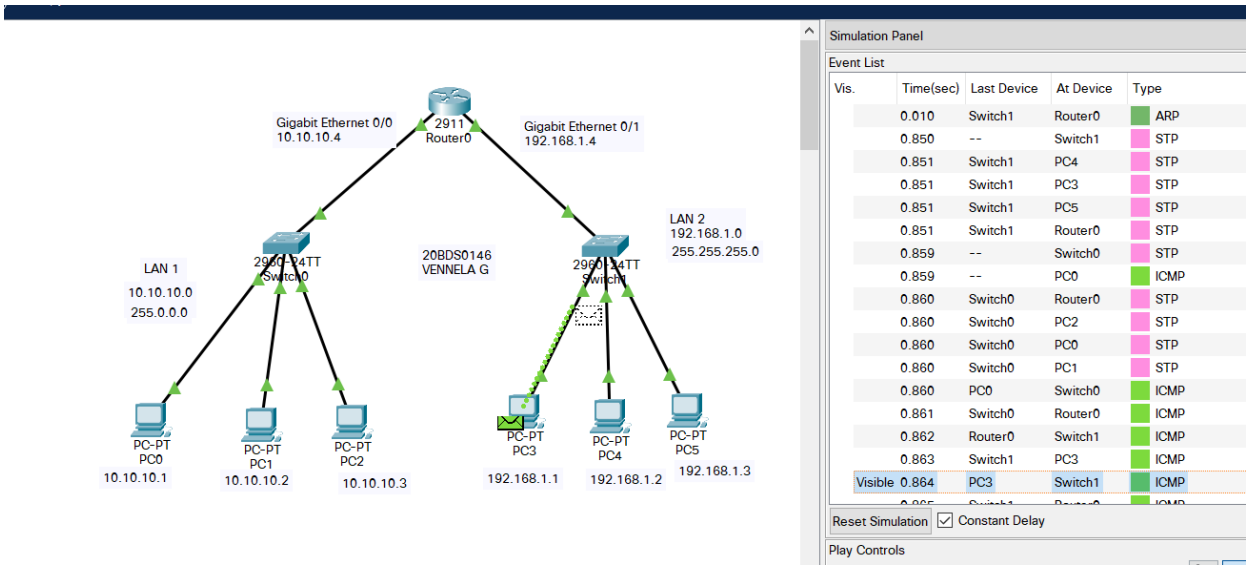


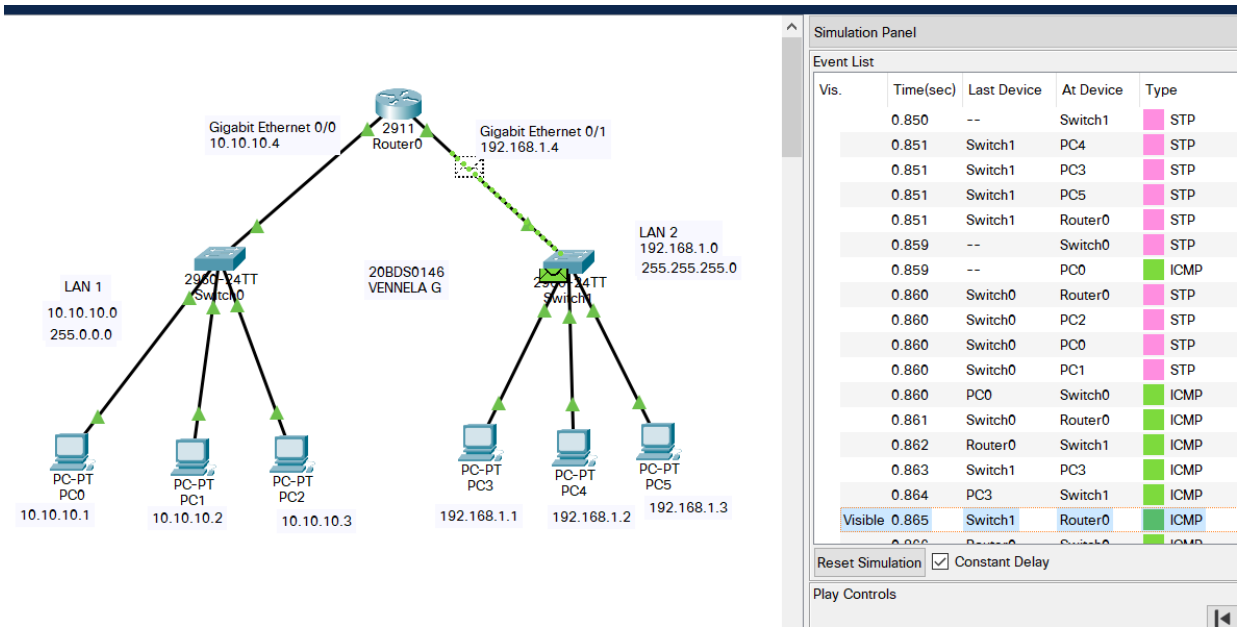


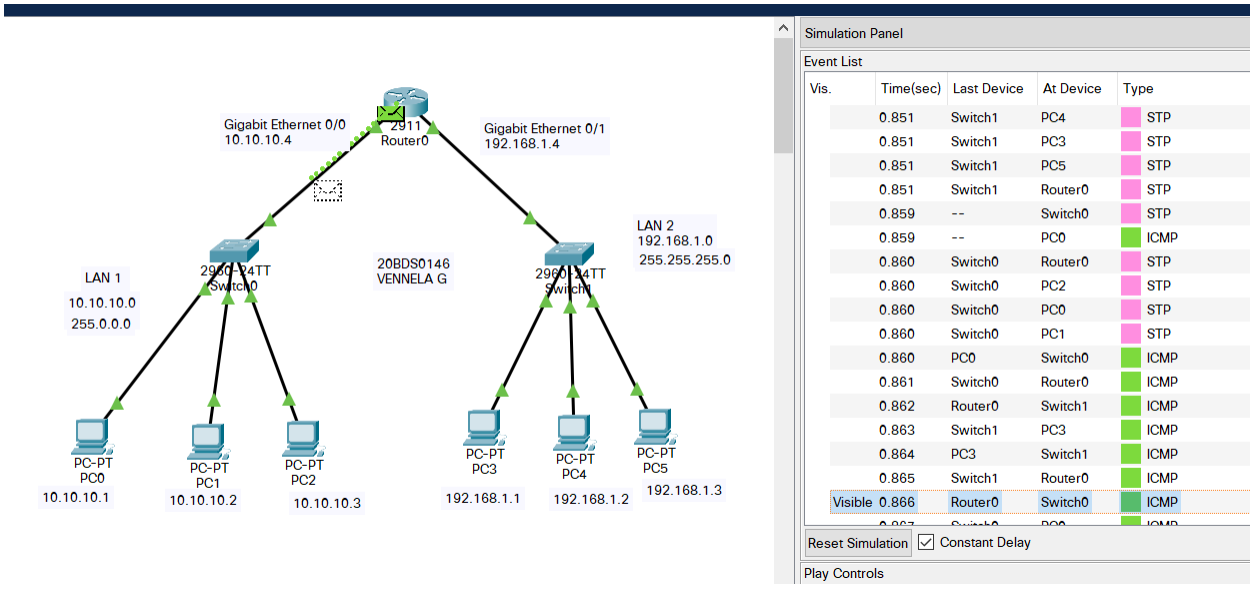

Gigabit Ethernet 0/0
10.10.10.4
2911
Router0
Gigabit Ethernet 0/1
192.168.1.4
LAN 1
10.10.10.0
255.0.0.0
20BDS0146
VENNELA G
LAN 2
192.168.1.0
255.255.255.0
PC-PT PC0
10.10.10.1
PC-PT PC1
10.10.10.2
PC-PT PC2
10.10.10.3
PC-PT PC3
192.168.1.1
PC-PT PC4
192.168.1.2
PC-PT PC5
192.168.1.3
Simulation Panel
Event List
Vis. Time(sec) Last Device At Device Type
0.008 Switch1 PC4 ARP
0.008 Switch1 PC5 ARP
0.009 PC3 Switch1 ARP
0.010 Switch1 Router0 ARP
0.850 -- Switch1 STP
0.851 Switch1 PC4 STP
0.851 Switch1 PC3 STP
0.851 Switch1 PC5 STP
0.851 Switch1 Router0 STP
0.859 -- Switch0 STP
0.859 -- PC0 ICMP
0.860 Switch0 Router0 STP
0.860 Switch0 PC2 STP
0.860 Switch0 PC0 STP
0.860 Switch0 PC1 STP
0.860 PC0 Switch0 ICMP
Visible 0.861 Switch0 Router0 ICMP
Reset Simulation
Constant Delay
Play Controls

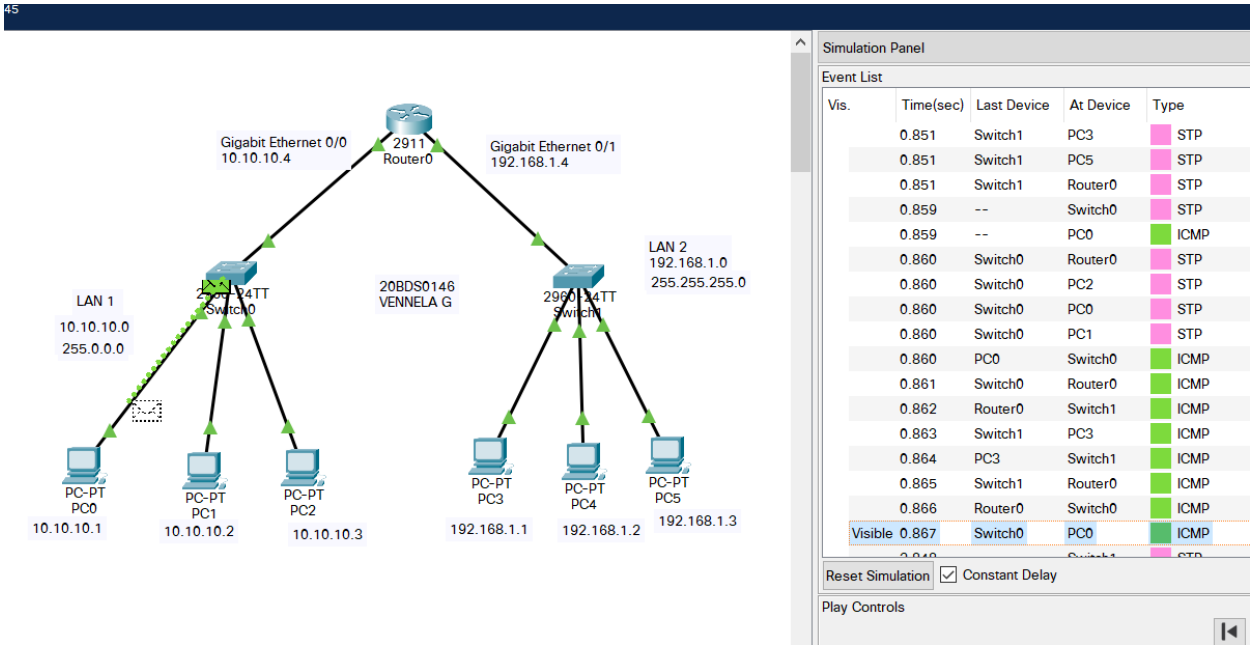

Gigabit Ethernet 0/0
10.10.10.4
2911
Router0
Gigabit Ethernet 0/1
192.168.1.4
LAN 1
10.10.10.0
255.0.0.0
20BDS0146
VENNELA G
LAN 2
192.168.1.0
255.255.255.0
PC-PT PC0
10.10.10.1
PC-PT PC1
10.10.10.2
PC-PT PC2
10.10.10.3
PC-PT PC3
192.168.1.1
PC-PT PC4
192.168.1.2
PC-PT PC5
192.168.1.3
Simulation Panel
Event List
Vis. Time(sec) Last Device At Device Type
0.008 Switch1 PC5 ARP
0.009 PC3 Switch1 ARP
0.010 Switch1 Router0 ARP
0.850 -- Switch1 STP
0.851 Switch1 PC4 STP
0.851 Switch1 PC3 STP
0.851 Switch1 PC5 STP
0.851 Switch1 Router0 STP
0.859 -- Switch0 STP
0.859 -- PC0 ICMP
0.860 Switch0 Router0 STP
0.860 Switch0 PC2 STP
0.860 Switch0 PC0 STP
0.860 Switch0 PC1 STP
0.860 PC0 Switch0 ICMP
0.861 Switch0 Router0 ICMP
Visible 0.862 Router0 Switch1 ICMP
Reset Simulation
Constant Delay
Play Controls


Gigabit Ethernet 0/0
10.10.10.4
2911
Router0
Gigabit Ethernet 0/1
192.168.1.4
LAN 1
10.10.10.0
255.0.0.0
20BDS0146
VENNELA G
LAN 2
192.168.1.0
255.255.255.0
PC-PT PC0
10.10.10.1
PC-PT PC1
10.10.10.2
PC-PT PC2
10.10.10.3
PC-PT PC3
192.168.1.1
PC-PT PC4
192.168.1.2
PC-PT PC5
192.168.1.3
Simulation Panel
Event List
Vis. Time(sec) Last Device At Device Type
0.009 PC3 Switch1 ARP
0.010 Switch1 Router0 ARP
0.850 -- Switch1 STP
0.851 Switch1 PC4 STP
0.851 Switch1 PC3 STP
0.851 Switch1 PC5 STP
0.851 Switch1 Router0 STP
0.859 -- Switch0 STP
0.859 -- PC0 ICMP
0.860 Switch0 Router0 STP
0.860 Switch0 PC2 STP
0.860 Switch0 PC0 STP
0.860 Switch0 PC1 STP
0.860 PC0 Switch0 ICMP
0.861 Switch0 Router0 ICMP
0.862 Router0 Switch1 ICMP
Visible 0.863 Switch1 PC3 ICMP
Reset Simulation
Constant Delay


Gigabit Ethernet 0/0
10.10.10.4
2911
Router0
Gigabit Ethernet 0/1
192.168.1.4
LAN 1
10.10.10.0
255.0.0.0
2960-24TT
Switch0
20BDS0146
VENNELA G
2960-24TT
Switch1
LAN 2
192.168.1.0
255.255.255.0
PC-PT
PC0
10.10.10.1
PC-PT
PC1
10.10.10.2
PC-PT
PC2
10.10.10.3
PC-PT
PC3
192.168.1.1
PC-PT
PC4
192.168.1.2
PC-PT
PC5
192.168.1.3
Simulation Panel
Event List
Vis.
Time(sec)
Last Device
At Device
Type
0.010 Switch1 Router0 ARP
0.850 -- Switch1 STP
0.851 Switch1 PC4 STP
0.851 Switch1 PC3 STP
0.851 Switch1 PC5 STP
0.851 Switch1 Router0 STP
0.859 -- Switch0 STP
0.859 -- PC0 ICMP
0.860 Switch0 Router0 STP
0.860 Switch0 PC2 STP
0.860 Switch0 PC0 STP
0.860 Switch0 PC1 STP
0.860 PC0 Switch0 ICMP
0.861 Switch0 Router0 ICMP
0.862 Router0 Switch1 ICMP
0.863 Switch1 PC3 ICMP
Visible 0.864 PC3 Switch1 ICMP
Reset Simulation
Constant Delay
Play Controls


Gigabit Ethernet 0/0
10.10.10.4
2911
Router0
Gigabit Ethernet 0/1
192.168.1.4
LAN 1
10.10.10.0
255.0.0.0
2960-24TT
Switch0
20BDS0146
VENNELA G
LAN 2
192.168.1.0
255.255.255.0
PC-PT
PC0
10.10.10.1
PC-PT
PC1
10.10.10.2
PC-PT
PC2
10.10.10.3
PC-PT
PC3
192.168.1.1
PC-PT
PC4
192.168.1.2
PC-PT
PC5
192.168.1.3
Simulation Panel
Event List
Vis.
Time(sec)
Last Device
At Device
Type
0.850 -- Switch1 STP
0.851 Switch1 PC4 STP
0.851 Switch1 PC3 STP
0.851 Switch1 PC5 STP
0.851 Switch1 Router0 STP
0.859 -- Switch0 STP
0.859 -- PC0 ICMP
0.860 Switch0 Router0 STP
0.860 Switch0 PC2 STP
0.860 Switch0 PC0 STP
0.860 Switch0 PC1 STP
0.860 PC0 Switch0 ICMP
0.861 Switch0 Router0 ICMP
0.862 Router0 Switch1 ICMP
0.863 Switch1 PC3 ICMP
0.864 PC3 Switch1 ICMP
Visible 0.865 Switch1 Router0 ICMP
Reset Simulation
Constant Delay
Play Controls

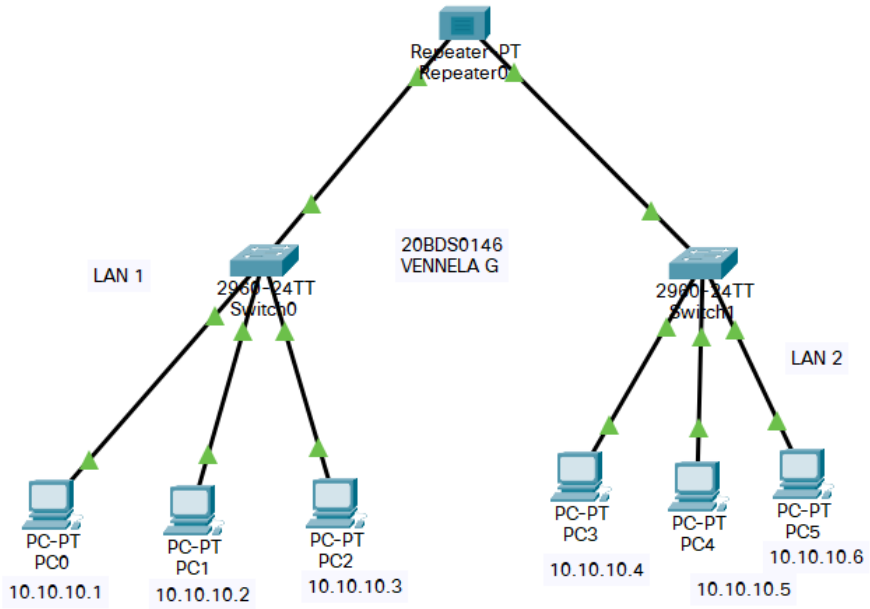

Gigabit Ethernet 0/0
10.10.10.4
2911
Router0
Gigabit Ethernet 0/1
192.168.1.4
LAN 1
10.10.10.0
255.0.0.0
2960-24TT
Switch0
20BDS0146
VENNELA G
2960-24TT
Switch1
LAN 2
192.168.1.0
255.255.255.0
PC-PT
PC0
10.10.10.1
PC-PT
PC1
10.10.10.2
PC-PT
PC2
10.10.10.3
PC-PT
PC3
192.168.1.1
PC-PT
PC4
192.168.1.2
PC-PT
PC5
192.168.1.3
Simulation Panel
Event List
Vis. Time(sec) Last Device At Device Type
0.851 Switch1 PC4 STP
0.851 Switch1 PC3 STP
0.851 Switch1 PC5 STP
0.851 Switch1 Router0 STP
0.859 -- Switch0 STP
0.859 -- PC0 ICMP
0.860 Switch0 Router0 STP
0.860 Switch0 PC2 STP
0.860 Switch0 PC0 STP
0.860 Switch0 PC1 STP
0.860 PC0 Switch0 ICMP
0.861 Switch0 Router0 ICMP
0.862 Router0 Switch1 ICMP
0.863 Switch1 PC3 ICMP
0.864 PC3 Switch1 ICMP
0.865 Switch1 Router0 ICMP
Visible 0.866 Router0 Switch0 ICMP
Reset Simulation
Constant Delay
Play Controls


45
Gigabit Ethernet 0/0
10.10.10.4
2911
Router0
Gigabit Ethernet 0/1
192.168.1.4
LAN 1
10.10.10.0
255.0.0.0
20BDS0146
VENNELA G
LAN 2
192.168.1.0
255.255.255.0
PC-PT
PC0
10.10.10.1
PC-PT
PC1
10.10.10.2
PC-PT
PC2
10.10.10.3
PC-PT
PC3
192.168.1.1
PC-PT
PC4
192.168.1.2
PC-PT
PC5
192.168.1.3
Simulation Panel
Event List
Vis. Time(sec) Last Device At Device Type
0.851 Switch1 PC3 STP
0.851 Switch1 PC5 STP
0.851 Switch1 Router0 STP
0.859 -- Switch0 STP
0.859 -- PC0 ICMP
0.860 Switch0 Router0 STP
0.860 Switch0 PC2 STP
0.860 Switch0 PC0 STP
0.860 Switch0 PC1 STP
0.860 PC0 Switch0 ICMP
0.861 Switch0 Router0 ICMP
0.862 Router0 Switch1 ICMP
0.863 Switch1 PC3 ICMP
0.864 PC3 Switch1 ICMP
0.865 Switch1 Router0 ICMP
0.866 Router0 Switch0 ICMP
Visible 0.867 Switch0 PC0 ICMP
Reset Simulation
Constant Delay
Play Controls

EXERCISE 5

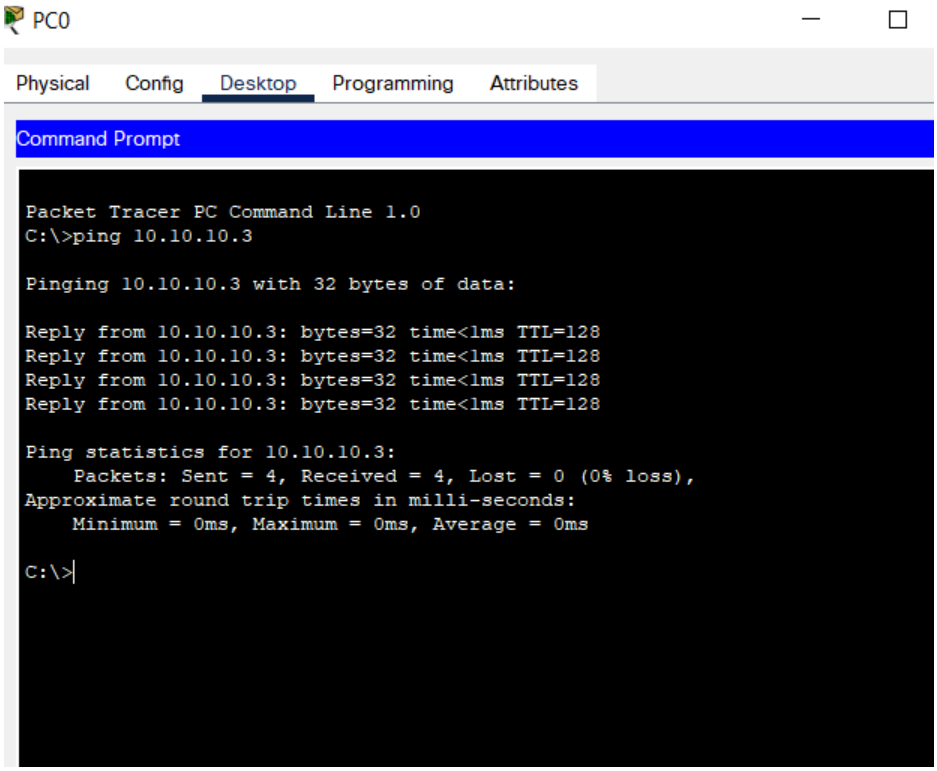
Aim: Create Internetwork i.e. Connect 2 LANs using Repeater

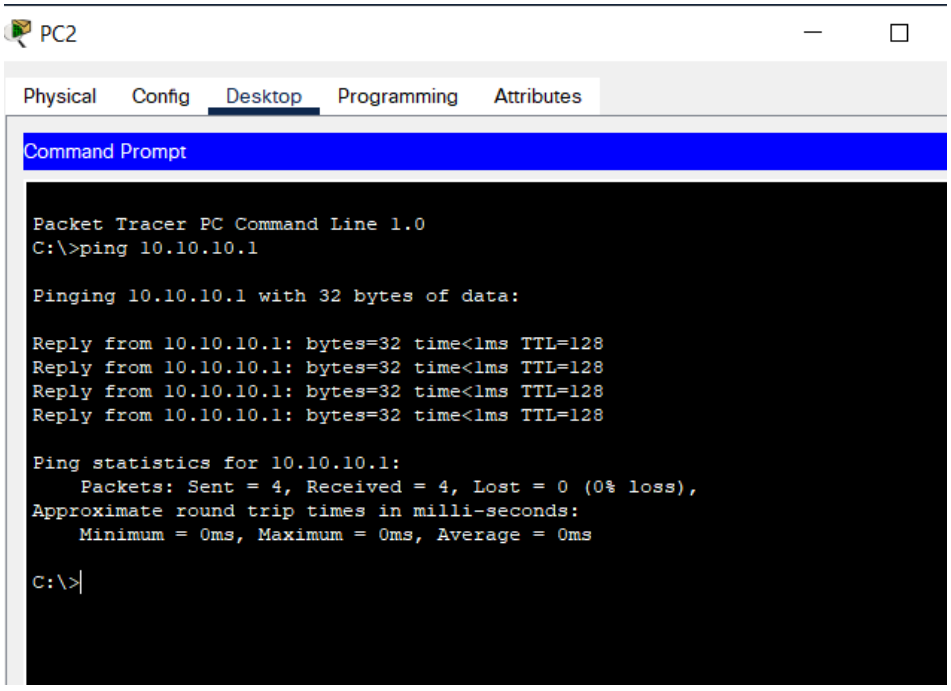
Network:



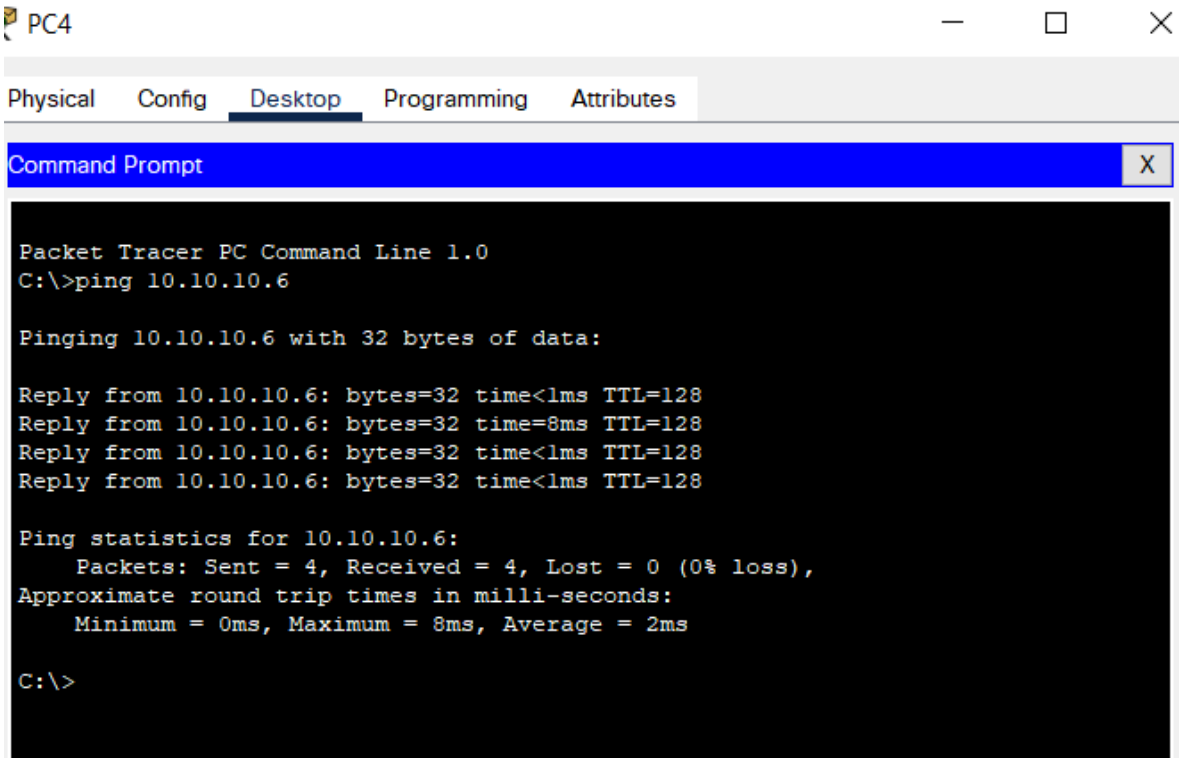
20BDS0146
VENNELA G

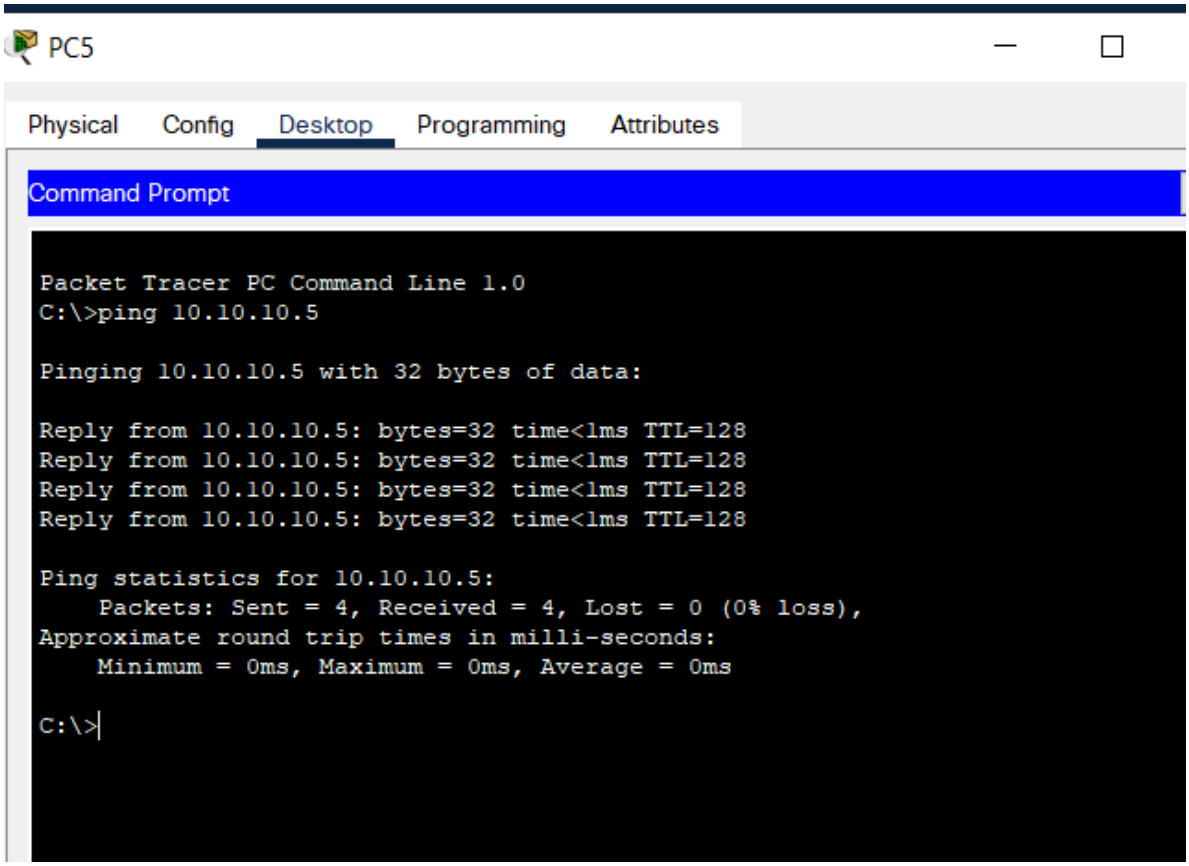
Checking connection between any two devices in LAN1:





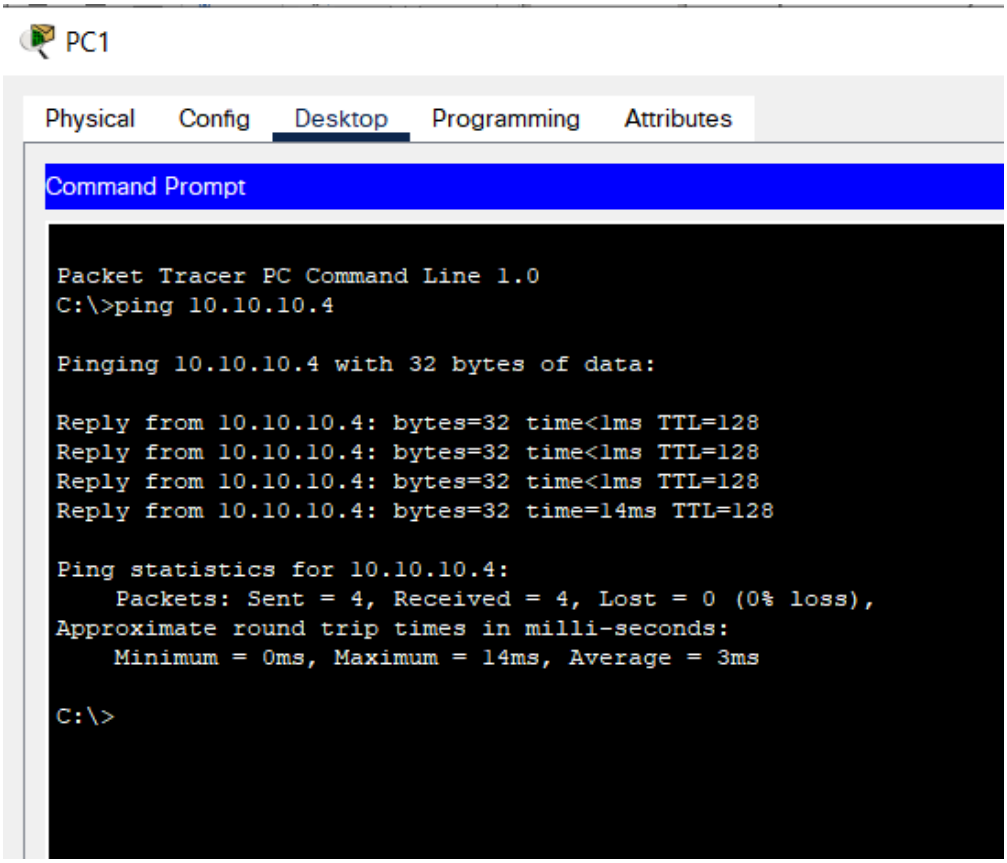
Checking connection between any two devices in LAN2:

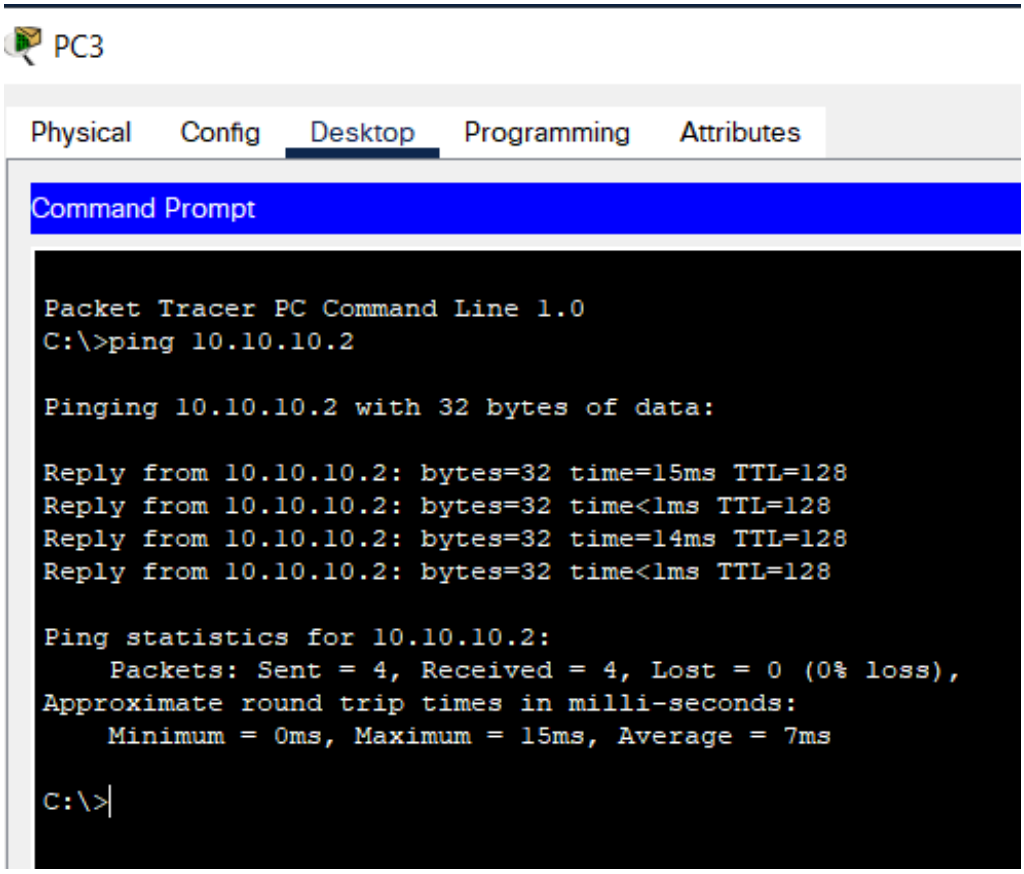




20BDS0146
VENNELA G

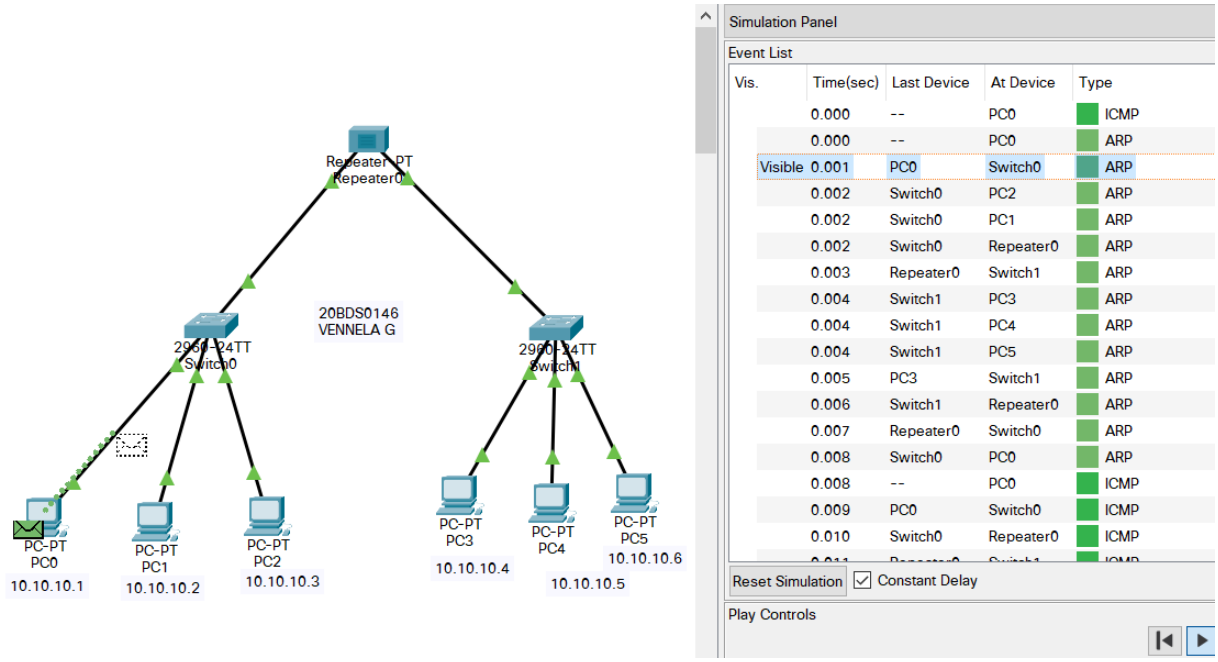
Checking connection between any two devices in LAN1 & LAN2 :

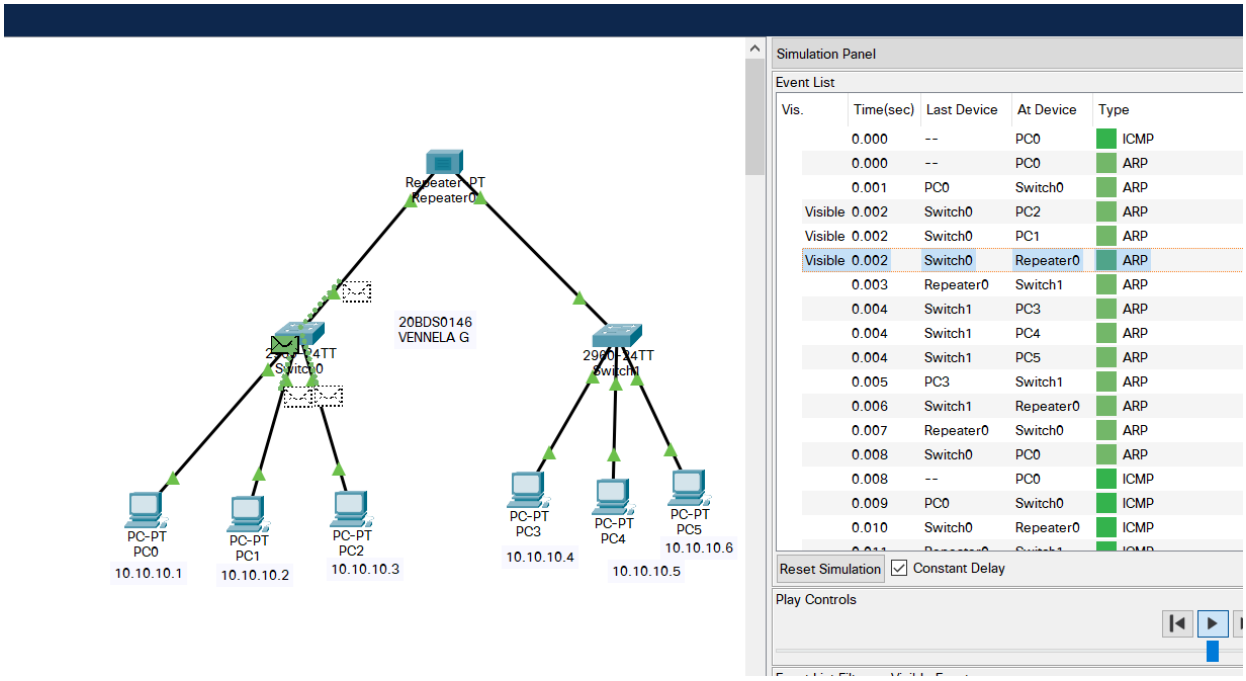


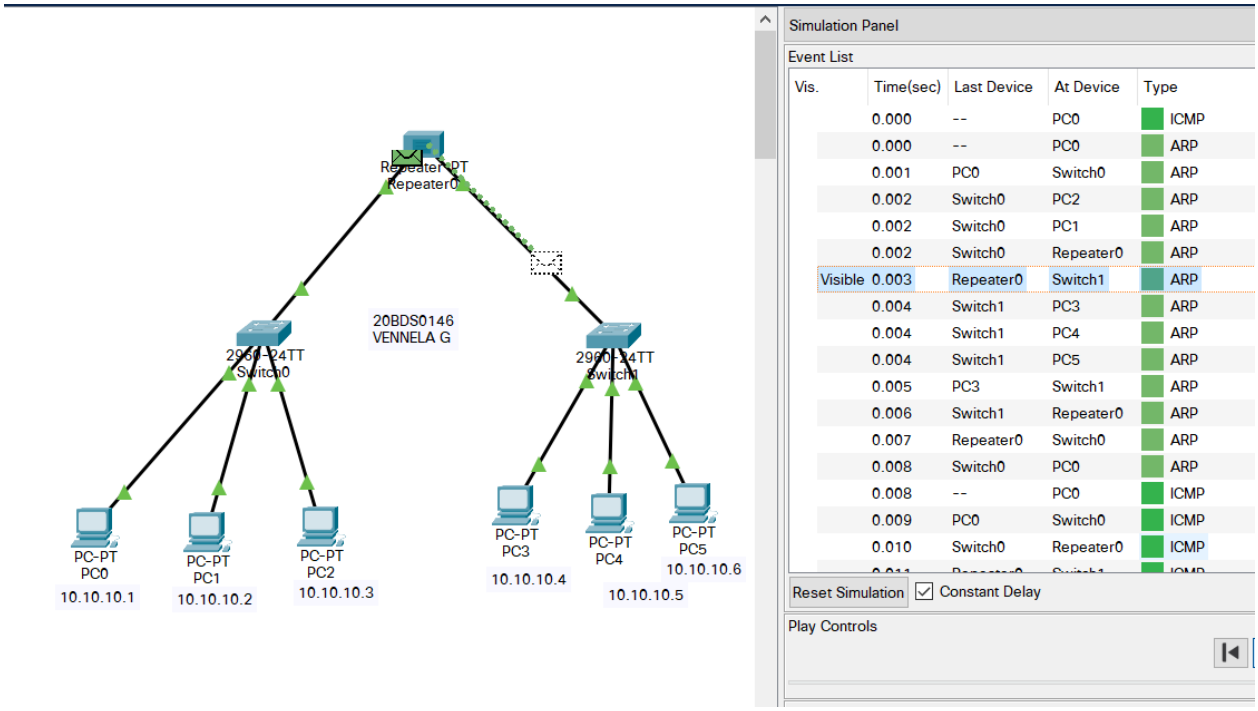


Simulation Model: (Data transfer between PC0 and PC3)

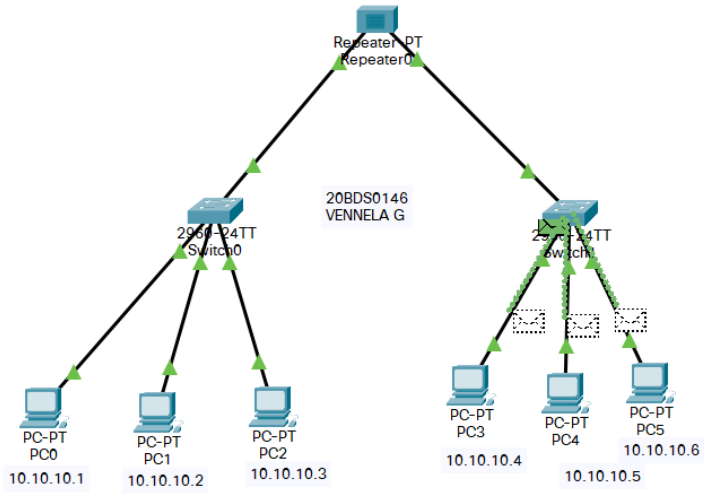
When transferring packet for first time: (it broadcasts)

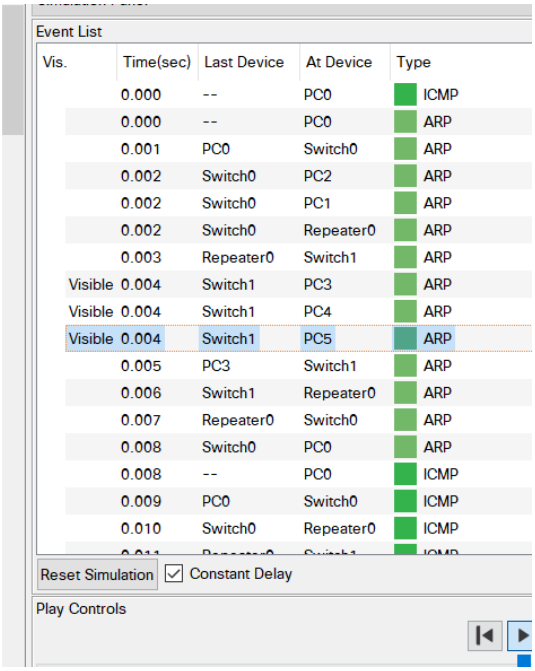


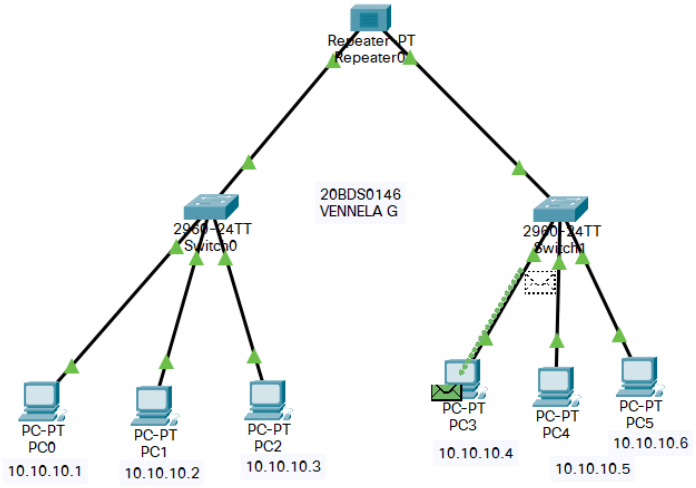

Repeater-PT
Repeater0
20BDS0146
VENNELA G
2960-24TT
Switch0
2960-24TT
Switch1
PC-PT
PC0
10.10.10.1
PC-PT
PC1
10.10.10.2
PC-PT
PC2
10.10.10.3
PC-PT
PC3
10.10.10.4
PC-PT
PC4
10.10.10.5
PC-PT
PC5
10.10.10.6
Simulation Panel
Event List
Vis. Time(sec) Last Device At Device Type
0.000 -- PC0 ICMP
0.000 -- PC0 ARP
0.001 PC0 Switch0 ARP
Visible 0.002 Switch0 PC2 ARP
Visible 0.002 Switch0 PC1 ARP
Visible 0.002 Switch0 Repeater0 ARP
0.003 Repeater0 Switch1 ARP
0.004 Switch1 PC3 ARP
0.004 Switch1 PC4 ARP
0.004 Switch1 PC5 ARP
0.005 PC3 Switch1 ARP
0.006 Switch1 Repeater0 ARP
0.007 Repeater0 Switch0 ARP
0.008 Switch0 PC0 ARP
0.008 -- PC0 ICMP
0.009 PC0 Switch0 ICMP
0.010 Switch0 Repeater0 ICMP
Reset Simulation
Constant Delay
Play Controls

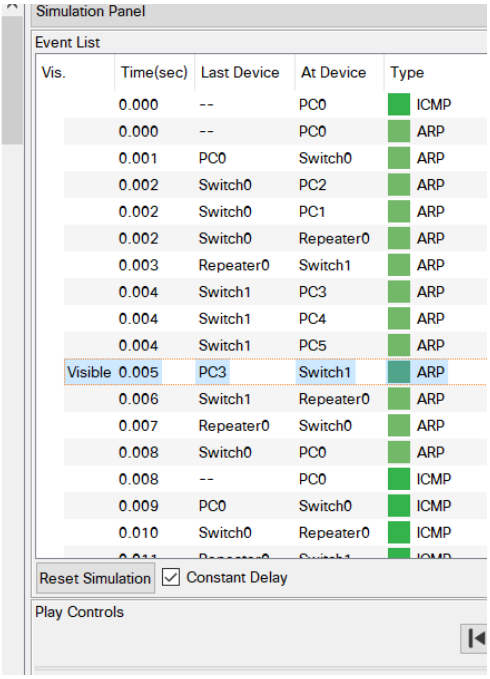

Repeater-PT
Repeater0
20BDS0146
VENNELA G
2960-24TT
Switch0
2960-24TT
Switch1
PC-PT
PC0
10.10.10.1
PC-PT
PC1
10.10.10.2
PC-PT
PC2
10.10.10.3
PC-PT
PC3
10.10.10.4
PC-PT
PC4
10.10.10.5
PC-PT
PC5
10.10.10.6
Simulation Panel
Event List
Vis. Time(sec) Last Device At Device Type
0.000 -- PC0 ICMP
0.000 -- PC0 ARP
0.001 PC0 Switch0 ARP
0.002 Switch0 PC2 ARP
0.002 Switch0 PC1 ARP
0.002 Switch0 Repeater0 ARP
Visible 0.003 Repeater0 Switch1 ARP
0.004 Switch1 PC3 ARP
0.004 Switch1 PC4 ARP
0.004 Switch1 PC5 ARP
0.005 PC3 Switch1 ARP
0.006 Switch1 Repeater0 ARP
0.007 Repeater0 Switch0 ARP
0.008 Switch0 PC0 ARP
0.008 -- PC0 ICMP
0.009 PC0 Switch0 ICMP
0.010 Switch0 Repeater0 ICMP
Reset Simulation
Constant Delay
Play Controls

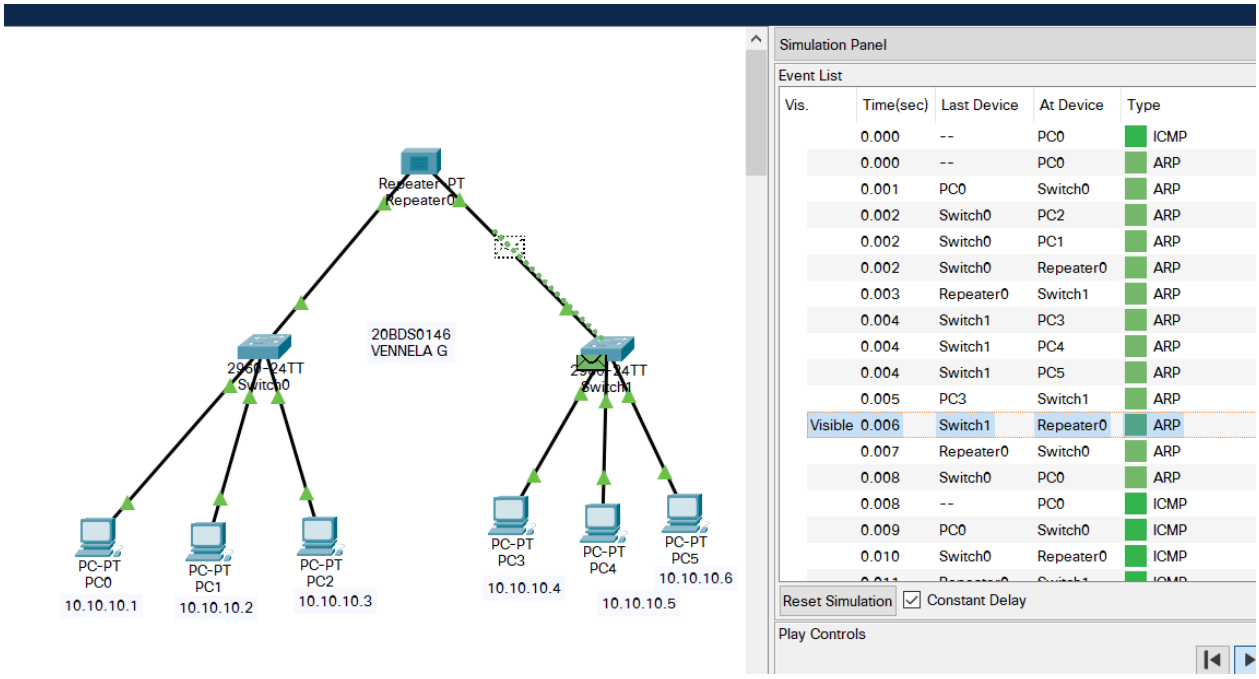
20BDS0146
VENNELA G

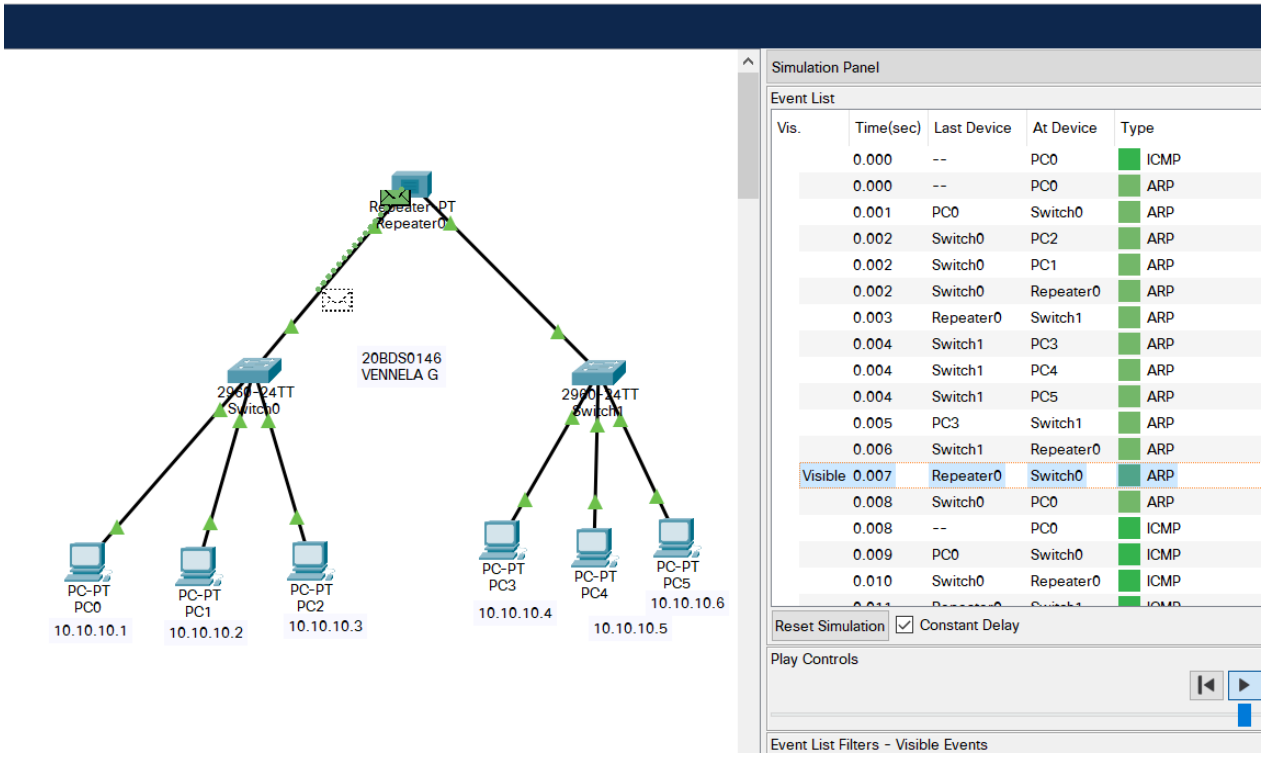


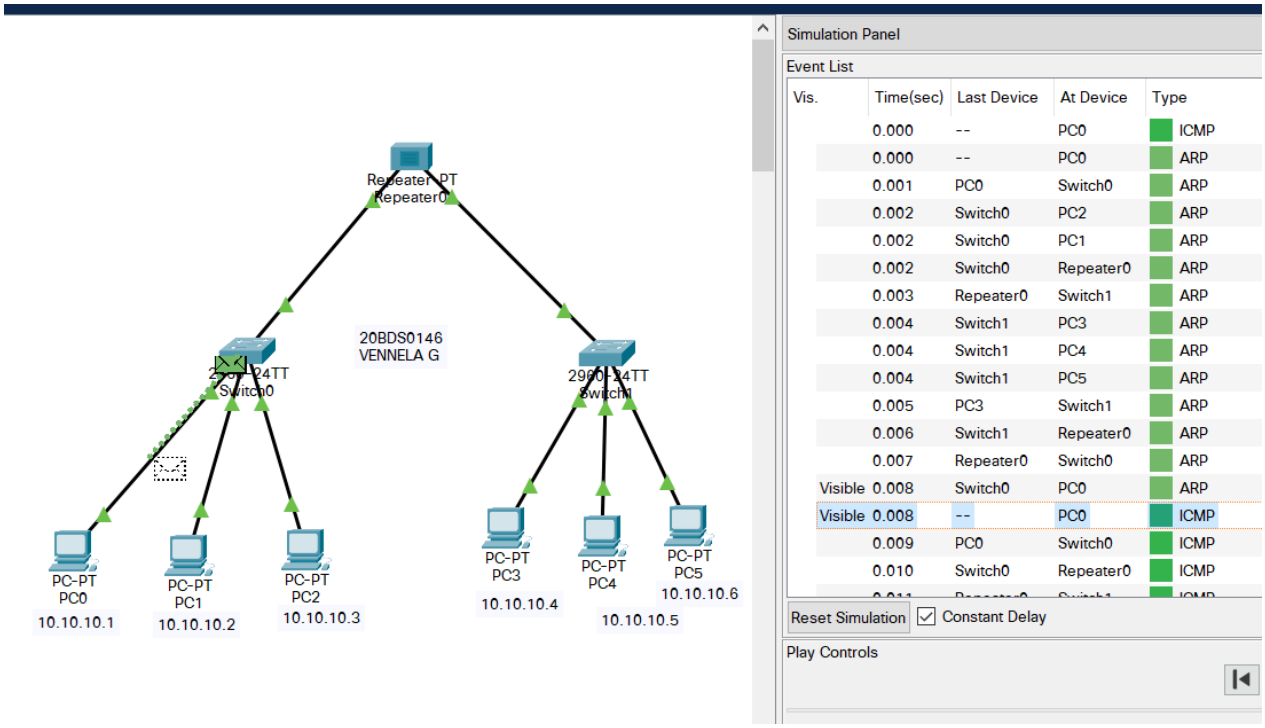




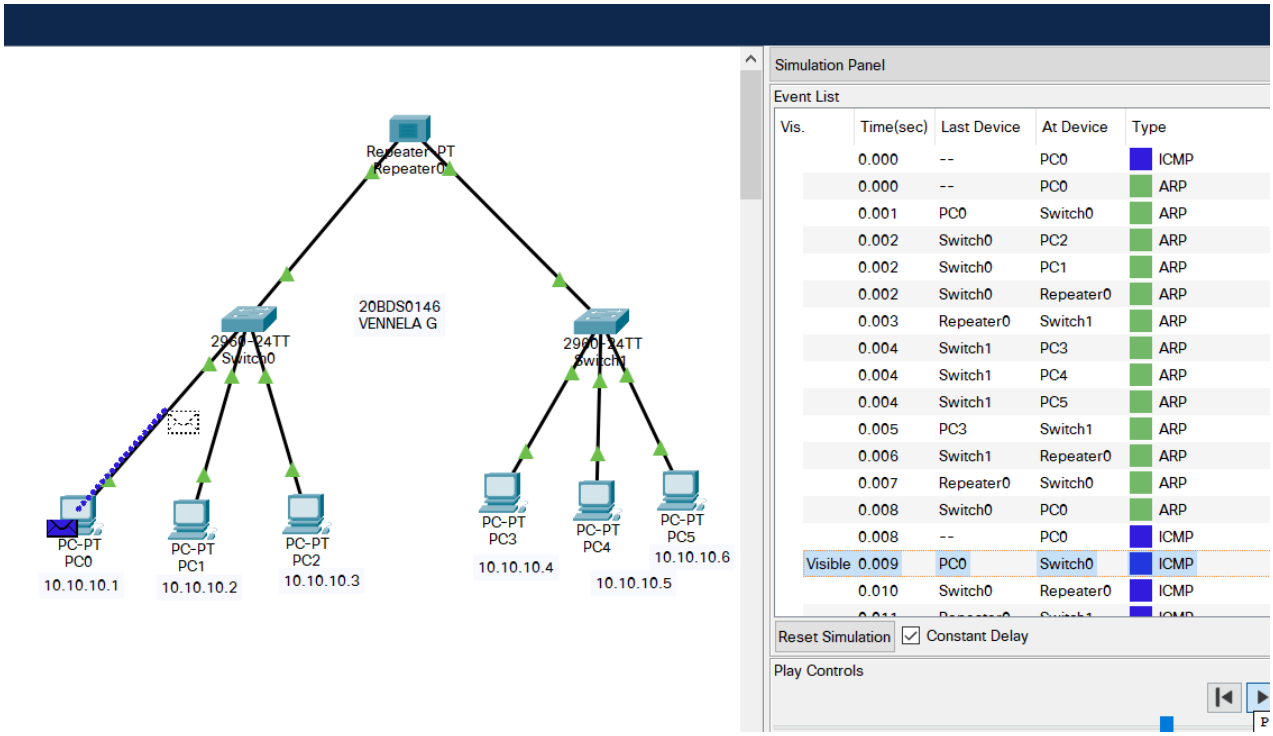


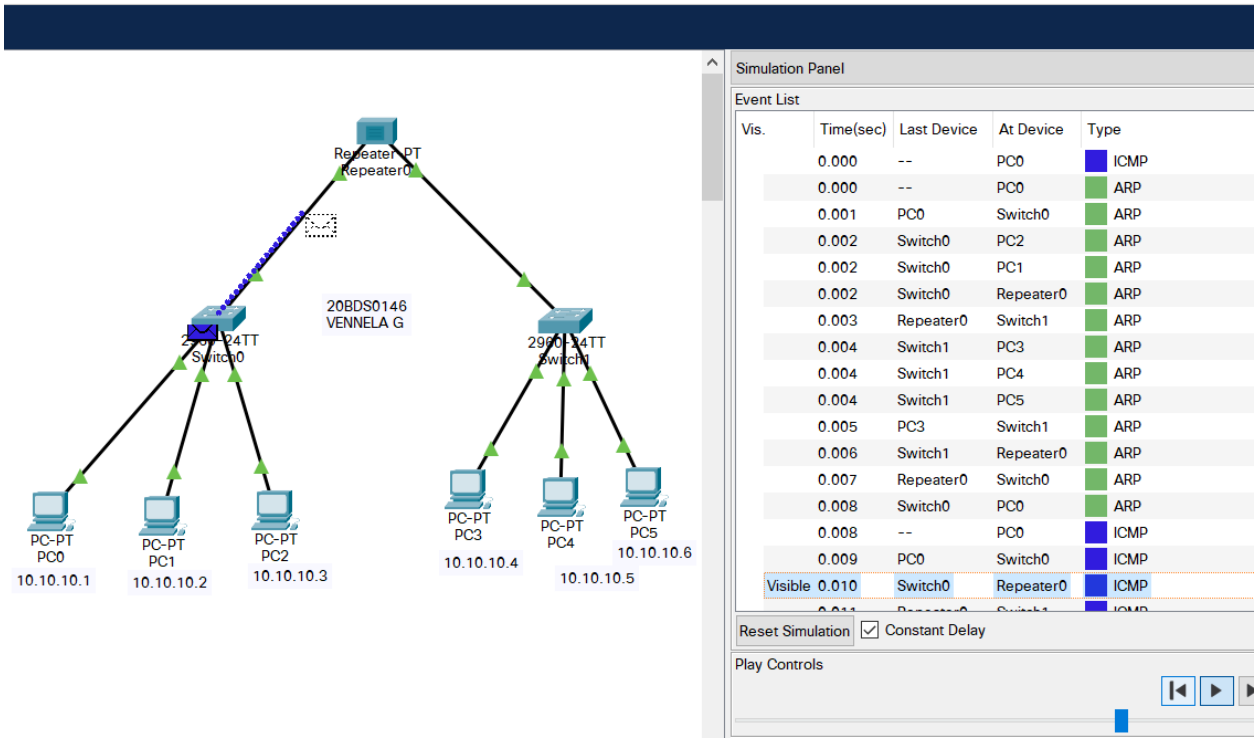

Repeater-PT
Repeater0
20BDS0146
VENNELA G
2960-24TT
Switch0
2960-24TT
Switch1
PC-PT
PC0
10.10.10.1
PC-PT
PC1
10.10.10.2
PC-PT
PC2
10.10.10.3
PC-PT
PC3
10.10.10.4
PC-PT
PC4
10.10.10.5
PC-PT
PC5
10.10.10.6
Simulation Panel
Event List
Vis. Time(sec) Last Device At Device Type
0.000 -- PC0 ICMP
0.000 -- PC0 ARP
0.001 PC0 Switch0 ARP
0.002 Switch0 PC2 ARP
0.002 Switch0 PC1 ARP
0.002 Switch0 Repeater0 ARP
0.003 Repeater0 Switch1 ARP
0.004 Switch1 PC3 ARP
0.004 Switch1 PC4 ARP
0.004 Switch1 PC5 ARP
0.005 PC3 Switch1 ARP
Visible 0.006 Switch1 Repeater0 ARP
0.007 Repeater0 Switch0 ARP
0.008 Switch0 PC0 ARP
0.008 -- PC0 ICMP
0.009 PC0 Switch0 ICMP
0.010 Switch0 Repeater0 ICMP
Reset Simulation
Constant Delay
Play Controls


Repeater-PT
Repeater0
20BDS0146
VENNELA G
2960-24TT
Switch0
2960-24TT
Switch1
PC-PT
PC0
10.10.10.1
PC-PT
PC1
10.10.10.2
PC-PT
PC2
10.10.10.3
PC-PT
PC3
10.10.10.4
PC-PT
PC4
10.10.10.5
PC-PT
PC5
10.10.10.6
Simulation Panel
Event List
Vis. Time(sec) Last Device At Device Type
0.000 -- PC0 ICMP
0.000 -- PC0 ARP
0.001 PC0 Switch0 ARP
0.002 Switch0 PC2 ARP
0.002 Switch0 PC1 ARP
0.002 Switch0 Repeater0 ARP
0.003 Repeater0 Switch1 ARP
0.004 Switch1 PC3 ARP
0.004 Switch1 PC4 ARP
0.004 Switch1 PC5 ARP
0.005 PC3 Switch1 ARP
0.006 Switch1 Repeater0 ARP
Visible 0.007 Repeater0 Switch0 ARP
0.008 Switch0 PC0 ARP
0.008 -- PC0 ICMP
0.009 PC0 Switch0 ICMP
0.010 Switch0 Repeater0 ICMP
Reset Simulation
Constant Delay
Play Controls
Event List Filters - Visible Events

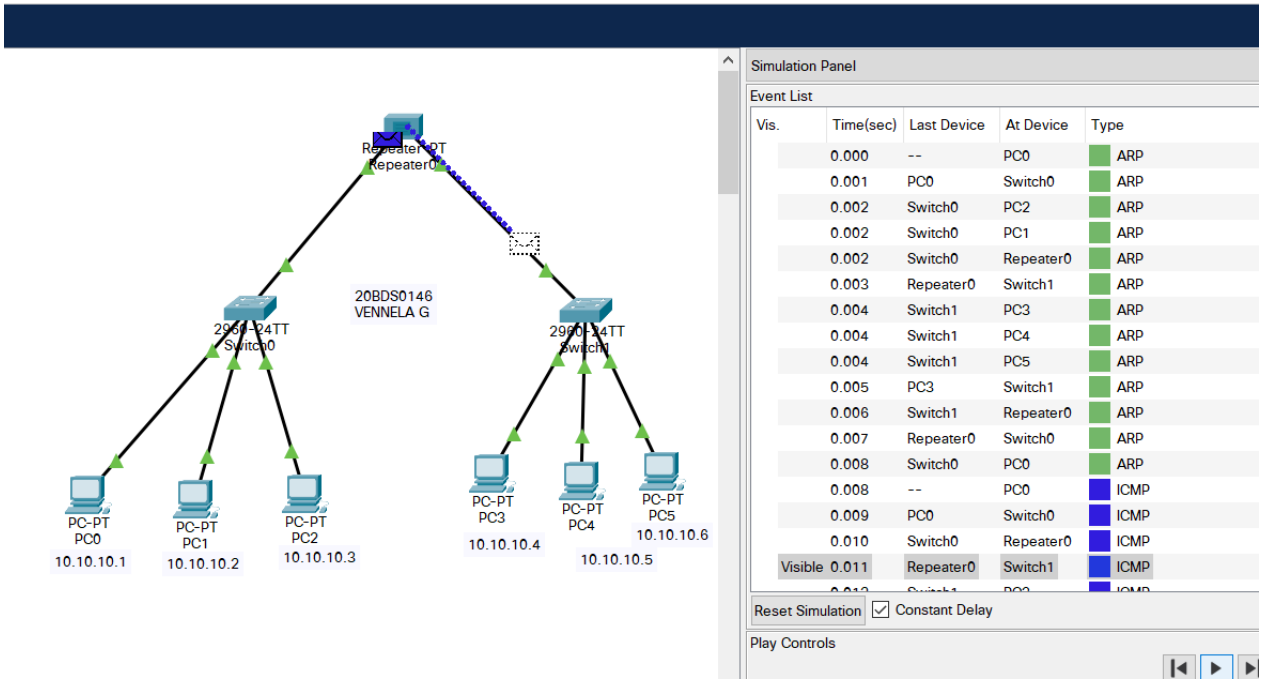


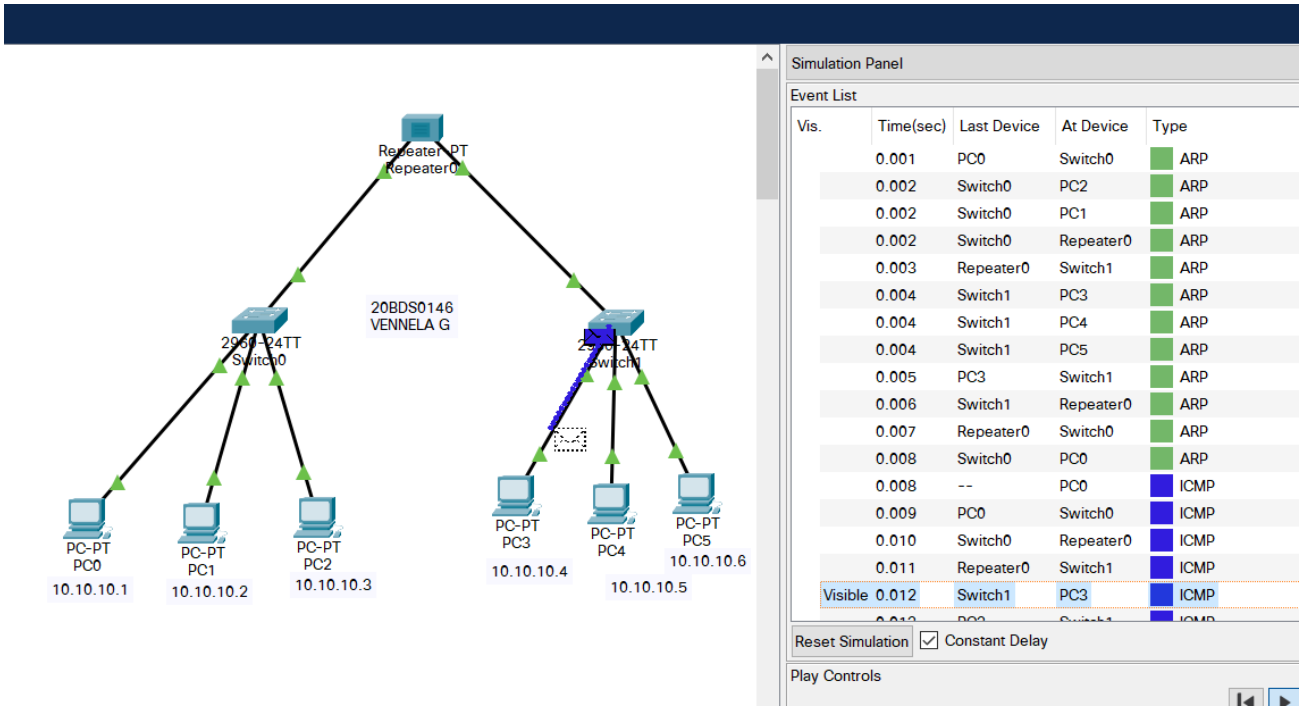
When transferring packet after learning: (it doesn’t broadcast)

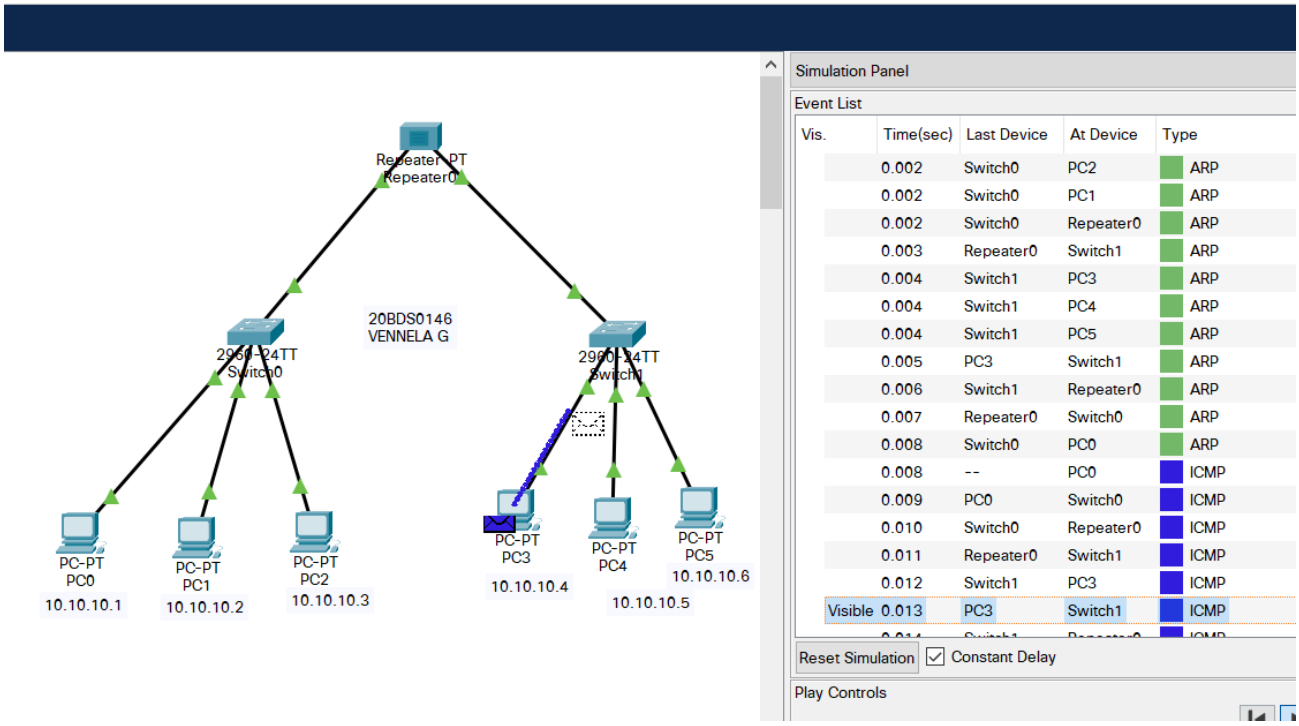

Repeater-PT
Repeater0
20BDS0146
VENNELA G
2960-24TT
Switch0
2960-24TT
Switch1
PC-PT
PC0
10.10.10.1
PC-PT
PC1
10.10.10.2
PC-PT
PC2
10.10.10.3
PC-PT
PC3
10.10.10.4
PC-PT
PC4
10.10.10.5
PC-PT
PC5
10.10.10.6
Simulation Panel
Event List
Vis. Time(sec) Last Device At Device Type
0.000 -- PC0 ICMP
0.000 -- PC0 ARP
0.001 PC0 Switch0 ARP
0.002 Switch0 PC2 ARP
0.002 Switch0 PC1 ARP
0.002 Switch0 Repeater0 ARP
0.003 Repeater0 Switch1 ARP
0.004 Switch1 PC3 ARP
0.004 Switch1 PC4 ARP
0.004 Switch1 PC5 ARP
0.005 PC3 Switch1 ARP
0.006 Switch1 Repeater0 ARP
0.007 Repeater0 Switch0 ARP
0.008 Switch0 PC0 ARP
0.008 -- PC0 ICMP
Visible 0.009 PC0 Switch0 ICMP
0.010 Switch0 Repeater0 ICMP
Reset Simulation
Constant Delay
Play Controls

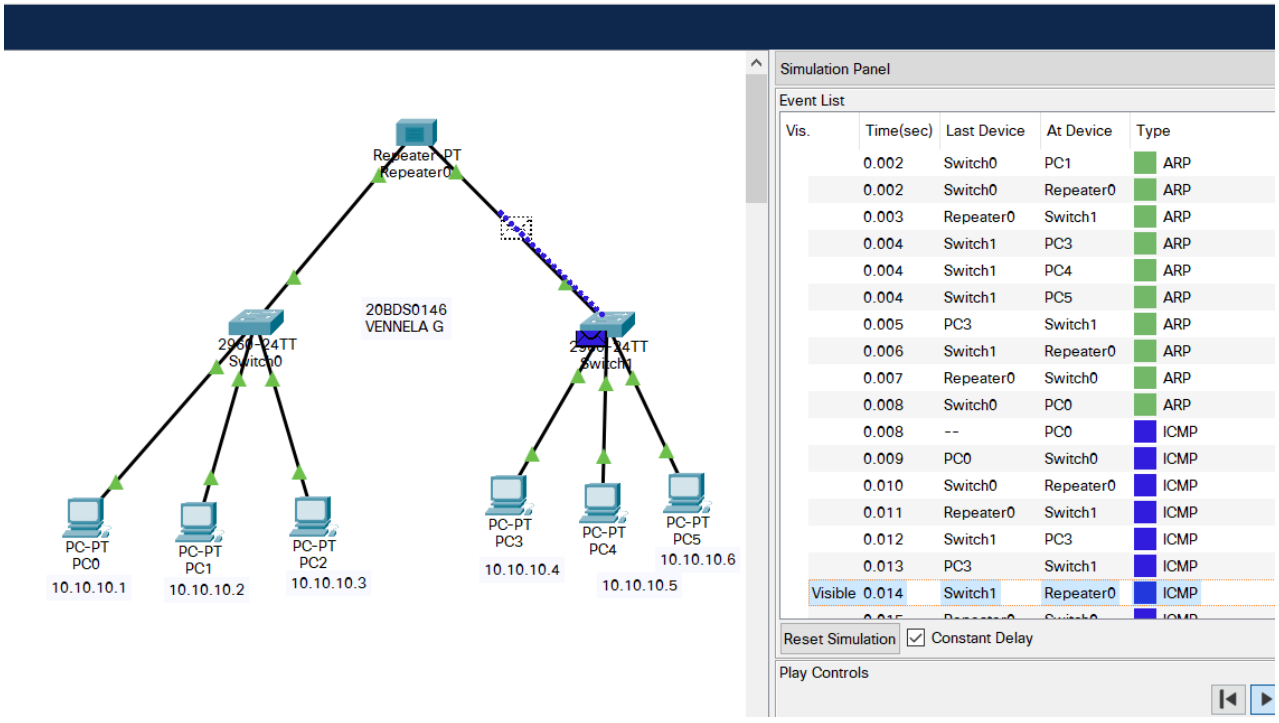

Repeater-PT
Repeater0
20BDS0146
VENNELA G
2960-24TT
Switch0
2960-24TT
Switch1
PC-PT
PC0
10.10.10.1
PC-PT
PC1
10.10.10.2
PC-PT
PC2
10.10.10.3
PC-PT
PC3
10.10.10.4
PC-PT
PC4
10.10.10.5
PC-PT
PC5
10.10.10.6
Simulation Panel
Event List
Vis. Time(sec) Last Device At Device Type
0.000 -- PC0 ICMP
0.000 -- PC0 ARP
0.001 PC0 Switch0 ARP
0.002 Switch0 PC2 ARP
0.002 Switch0 PC1 ARP
0.002 Switch0 Repeater0 ARP
0.003 Repeater0 Switch1 ARP
0.004 Switch1 PC3 ARP
0.004 Switch1 PC4 ARP
0.004 Switch1 PC5 ARP
0.005 PC3 Switch1 ARP
0.006 Switch1 Repeater0 ARP
0.007 Repeater0 Switch0 ARP
0.008 Switch0 PC0 ARP
0.008 -- PC0 ICMP
0.009 PC0 Switch0 ICMP
Visible 0.010 Switch0 Repeater0 ICMP
Reset Simulation
Constant Delay
Play Controls

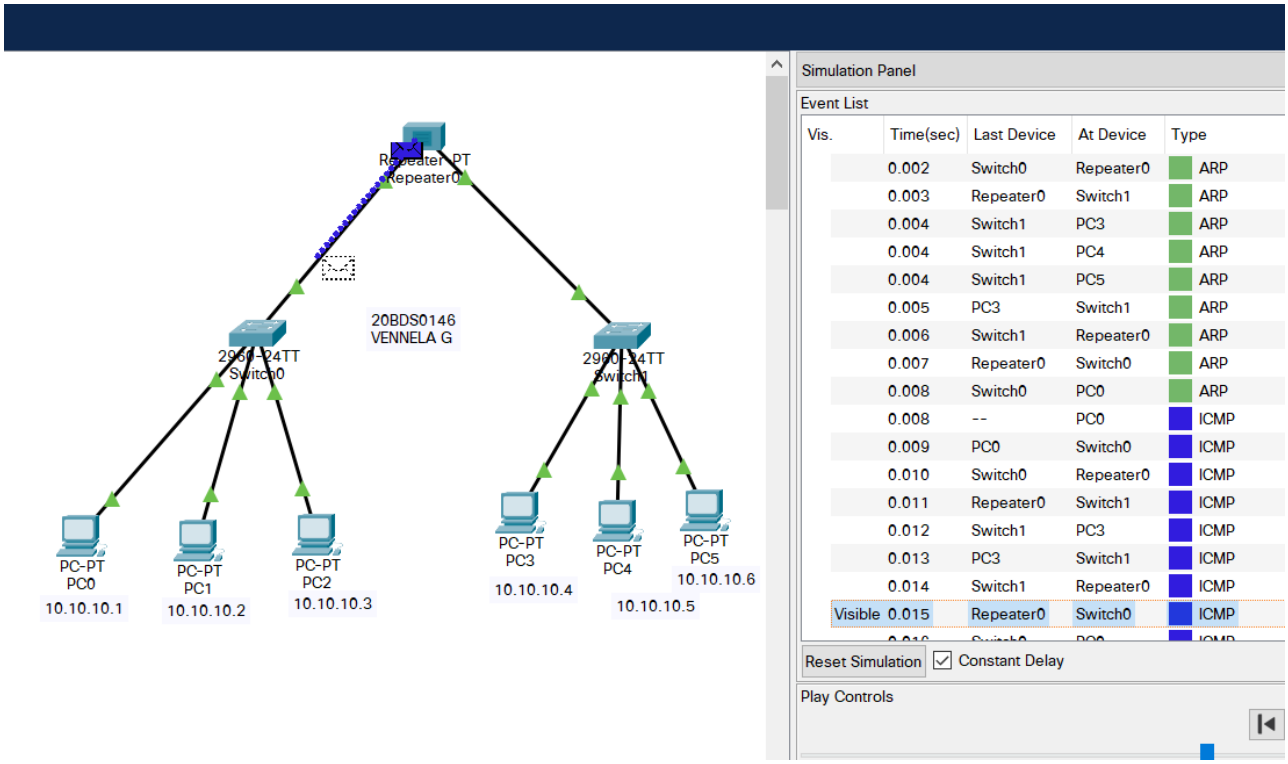
20BDS0146
VENNELA G

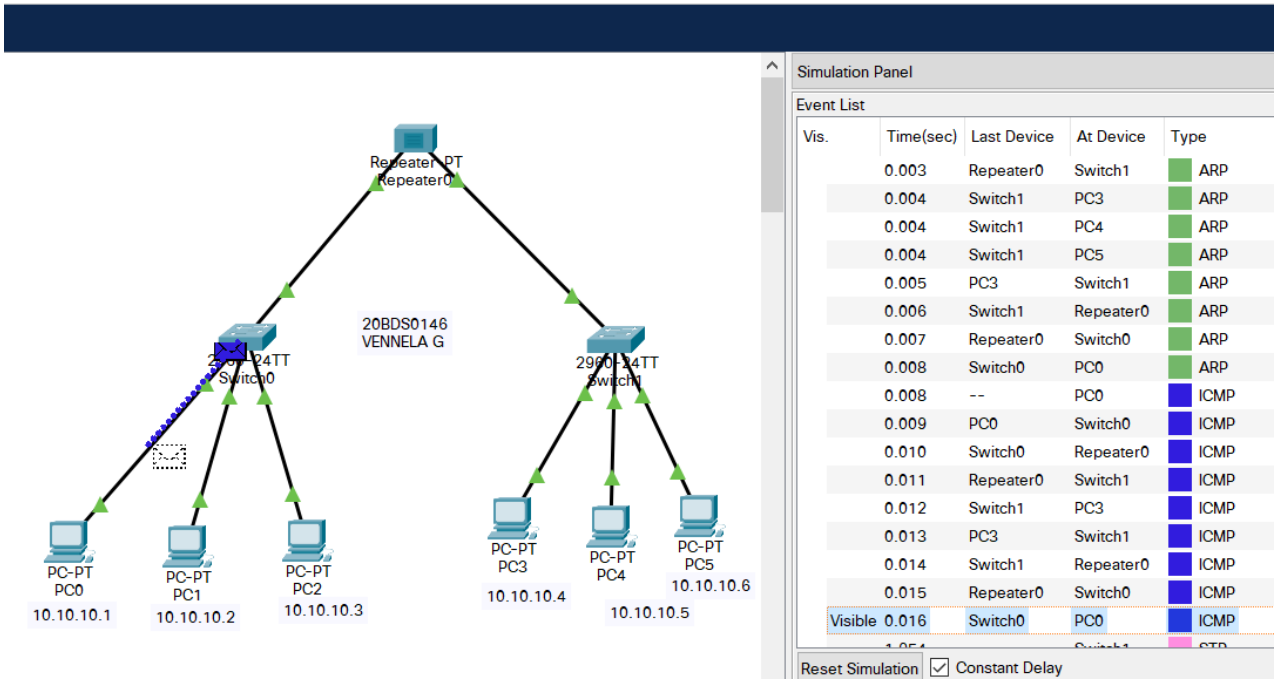





Repeater-PT
Repeater0
20BDS0146
VENNELA G
2960-24TT
Switch0
2960-24TT
Switch1
PC-PT
PC0
10.10.10.1
PC-PT
PC1
10.10.10.2
PC-PT
PC2
10.10.10.3
PC-PT
PC3
10.10.10.4
PC-PT
PC4
10.10.10.5
PC-PT
PC5
10.10.10.6
Simulation Panel
Event List
Vis. Time(sec) Last Device At Device Type
0.002 Switch0 PC2 ARP
0.002 Switch0 PC1 ARP
0.002 Switch0 Repeater0 ARP
0.003 Repeater0 Switch1 ARP
0.004 Switch1 PC3 ARP
0.004 Switch1 PC4 ARP
0.004 Switch1 PC5 ARP
0.005 PC3 Switch1 ARP
0.006 Switch1 Repeater0 ARP
0.007 Repeater0 Switch0 ARP
0.008 Switch0 PC0 ARP
0.008 -- PC0 ICMP
0.009 PC0 Switch0 ICMP
0.010 Switch0 Repeater0 ICMP
0.011 Repeater0 Switch1 ICMP
0.012 Switch1 PC3 ICMP
Visible 0.013 PC3 Switch1 ICMP
Reset Simulation
Constant Delay
Play Controls


Repeater-PT
Repeater0
20BDS0146
VENNELA G
2960-24TT
Switch0
2960-24TT
Switch1
PC-PT
PC0
10.10.10.1
PC-PT
PC1
10.10.10.2
PC-PT
PC2
10.10.10.3
PC-PT
PC3
10.10.10.4
PC-PT
PC4
10.10.10.5
PC-PT
PC5
10.10.10.6
Simulation Panel
Event List
Vis. Time(sec) Last Device At Device Type
0.002 Switch0 PC1 ARP
0.002 Switch0 Repeater0 ARP
0.003 Repeater0 Switch1 ARP
0.004 Switch1 PC3 ARP
0.004 Switch1 PC4 ARP
0.004 Switch1 PC5 ARP
0.005 PC3 Switch1 ARP
0.006 Switch1 Repeater0 ARP
0.007 Repeater0 Switch0 ARP
0.008 Switch0 PC0 ARP
0.008 -- PC0 ICMP
0.009 PC0 Switch0 ICMP
0.010 Switch0 Repeater0 ICMP
0.011 Repeater0 Switch1 ICMP
0.012 Switch1 PC3 ICMP
0.013 PC3 Switch1 ICMP
Visible 0.014 Switch1 Repeater0 ICMP
Reset Simulation
Constant Delay
Play Controls


Repeater-PT
Repeater0
20BDS0146
VENNELA G
2960-24TT
Switch0
2960-24TT
Switch1
PC-PT
PC0
10.10.10.1
PC-PT
PC1
10.10.10.2
PC-PT
PC2
10.10.10.3
PC-PT
PC3
10.10.10.4
PC-PT
PC4
10.10.10.5
PC-PT
PC5
10.10.10.6
Simulation Panel
Event List
Vis. Time(sec) Last Device At Device Type
0.002 Switch0 Repeater0 ARP
0.003 Repeater0 Switch1 ARP
0.004 Switch1 PC3 ARP
0.004 Switch1 PC4 ARP
0.004 Switch1 PC5 ARP
0.005 PC3 Switch1 ARP
0.006 Switch1 Repeater0 ARP
0.007 Repeater0 Switch0 ARP
0.008 Switch0 PC0 ARP
0.008 -- PC0 ICMP
0.009 PC0 Switch0 ICMP
0.010 Switch0 Repeater0 ICMP
0.011 Repeater0 Switch1 ICMP
0.012 Switch1 PC3 ICMP
0.013 PC3 Switch1 ICMP
0.014 Switch1 Repeater0 ICMP
Visible 0.015 Repeater0 Switch0 ICMP
Reset Simulation
Constant Delay
Play Controls


Repeater-PT
Repeater0
20BDS0146
VENNELA G
2960-24TT
Switch0
2960-24TT
Switch1
PC-PT
PC0
10.10.10.1
PC-PT
PC1
10.10.10.2
PC-PT
PC2
10.10.10.3
PC-PT
PC3
10.10.10.4
PC-PT
PC4
10.10.10.5
PC-PT
PC5
10.10.10.6
Simulation Panel
Event List
Vis. Time(sec) Last Device At Device Type
0.003 Repeater0 Switch1 ARP
0.004 Switch1 PC3 ARP
0.004 Switch1 PC4 ARP
0.004 Switch1 PC5 ARP
0.005 PC3 Switch1 ARP
0.006 Switch1 Repeater0 ARP
0.007 Repeater0 Switch0 ARP
0.008 Switch0 PC0 ARP
0.008 -- PC0 ICMP
0.009 PC0 Switch0 ICMP
0.010 Switch0 Repeater0 ICMP
0.011 Repeater0 Switch1 ICMP
0.012 Switch1 PC3 ICMP
0.013 PC3 Switch1 ICMP
0.014 Switch1 Repeater0 ICMP
0.015 Repeater0 Switch0 ICMP
Visible 0.016 Switch0 PC0 ICMP
Reset Simulation
Constant Delay

20BDS0146
VENNELA G