

Experiment-5

Connect two or more networks with router using Cisco Packet Tracer.

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Objectives:

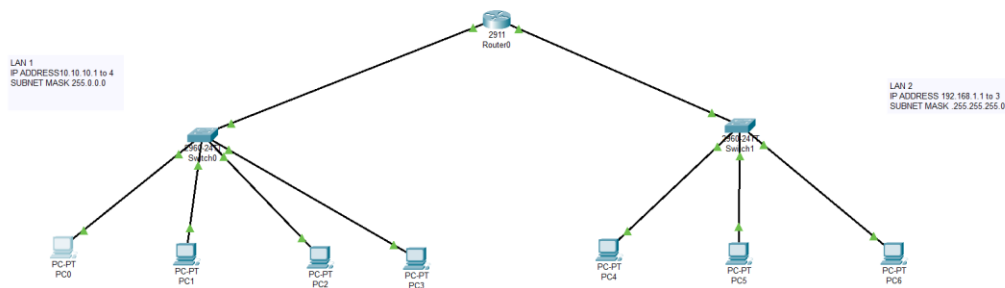
1. To learn how to configure router using graphical user interface (GUI) in Packet Tracer.
2. To learn how to connect two or more LAN with router using Packet Tracer.

Software Required: Cisco Packet Tracer.

Procedure:

To implement this practical following network topology is required to be configured using GUI. After configuring the given network a packet should be ping from any computer of one network to any computer of another network.

Topology:



Addressing Table:

Device	Interface	IP CONFIGURATION
Router0	G0/0	IP ADDRESS 10.10.10.5 SUBNET MASK 255.0.0.0
	G0/1	IP ADDRESS 192.168.1.4 SUBNET MASK 255.255.255.0
Switch0	LAN1	
Switch1	LAN2	
PC0, PC1, PC2, PC3	NIC	IP ADDRESS 10.10.10.1 to 4 SUBNET MASK 255.0.0.0 DEFAULT GATEWAY 10.10.10.5
PC4, PC5, PC6	NIC	IP ADDRESS 192.168.1.1 to 3 SUBNET MASK 255.255.255.0 DEFAULT GATEWAY 192.168.1.4

Step 1: Connect all the devices according the topology.

Step 2: Configure addressing for all devices according to the addressing table.

Router0

Physical **Config** CLI Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

SWITCHING

VLAN Database

INTERFACE

GigabitEthernet0/0

GigabitEthernet0/1

GigabitEthernet0/2

GigabitEthernet0/0

Port Status ☒ On

Bandwidth ☒ 1000 Mbps ☐ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex ☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address 00D0.9779.9D01

IP Configuration

IPv4 Address 10.10.10.5

Subnet Mask 255.0.0.0

Tx Ring Limit 10

Equivalent IOS Commands

```
Router>enable
Router#
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface GigabitEthernet0/0
Router(config-if)#
```

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Router0

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MAC Address 00D0.9779.9D02

IP Configuration

IPv4 Address 192.168.1.4

Subnet Mask 255.255.255.0

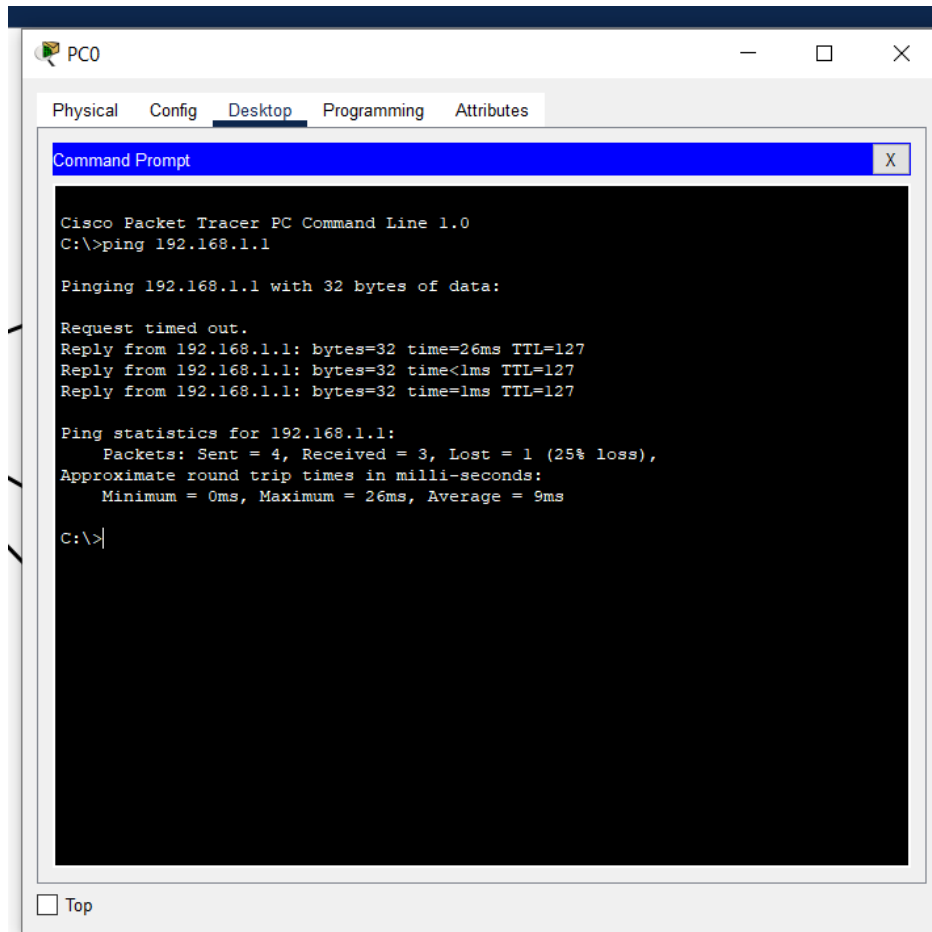
Tx Ring Limit 10

Equivalent IOS Commands

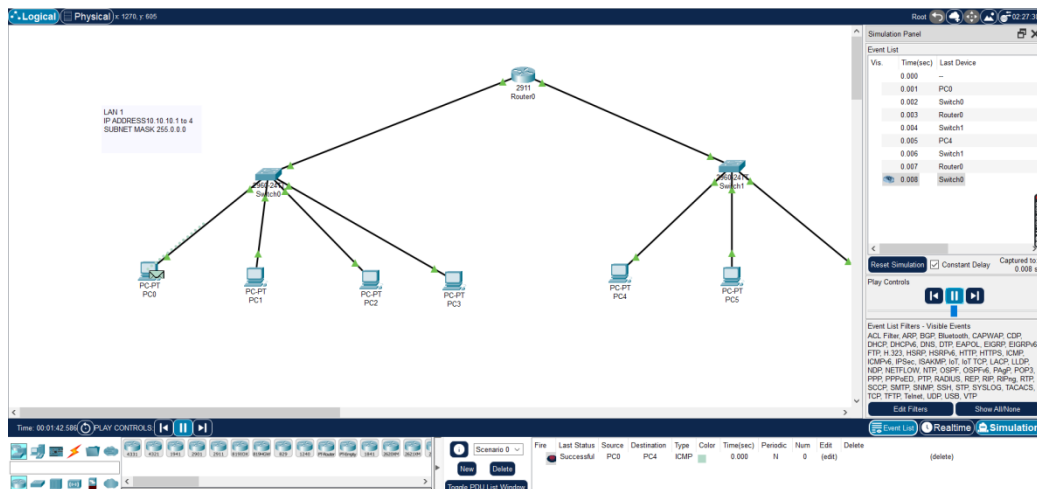
```
Router>enable
Router#
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface GigabitEthernet0/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface GigabitEthernet0/1
Router(config-if)#
```

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Step 3: Check the connectivity of computers using ping command.



Step 4: Check the connectivity of computers in simulation mode.



Exercise:

1. Create three different LANs and connect them with a router.
2. Create the addressing table of the network and configure addressing for all devices according to the table.
3. Verify the connectivity of computers.