

EXPERIMENT NO:10.9

DATE: 21/9/25

INTER NETWORKING WITH ROUTERS

IN CISCO PACKET TRACER SIMULATOR

a> Design and configure a simple internetwork using a Router.

In this network, a router and 2 PCs are used.

Computers are reconnected with Router using a Copper Straight-through cable. After forming the network, the check network connectivity a simple RDV is transferred from PC0 to PC1.

PROCEDURE:

Step-1

- 1> Select the router and open it.
- 2> Press enter to start configuring Router.
- 3> Type enable to activate the privileged mode.

Step-2

- 1> Assign IP Address to every PC in the network.
- 2> Select the PC, go to desktop and select IP configuration and assign an IP address, Default gateway, Subnet mask.
- 3> Assign the default gateway of PC0 as 192.168.20.1
- 4> Assign the default gateway of PC1 as 192.168.20.1

Step 3.

- 1> Connect Fast Ethernet port of PC0 with Fast Ethernet 0/0 Port of Router using a Copper Straight-through cable.
- 2> Connect Fast Ethernet port of PC1 with Fast Ethernet 0/1 Port of Router using a copper straight-through cable.

Router Configuration Table:

Device Name	IP address Port, Ethernet 0/0	Subnet Mask	IP address Port, Ethernet 0/1
Router1	192.168.10.1	255.255.255.0	192.168.20.1

PC Configuration Table:

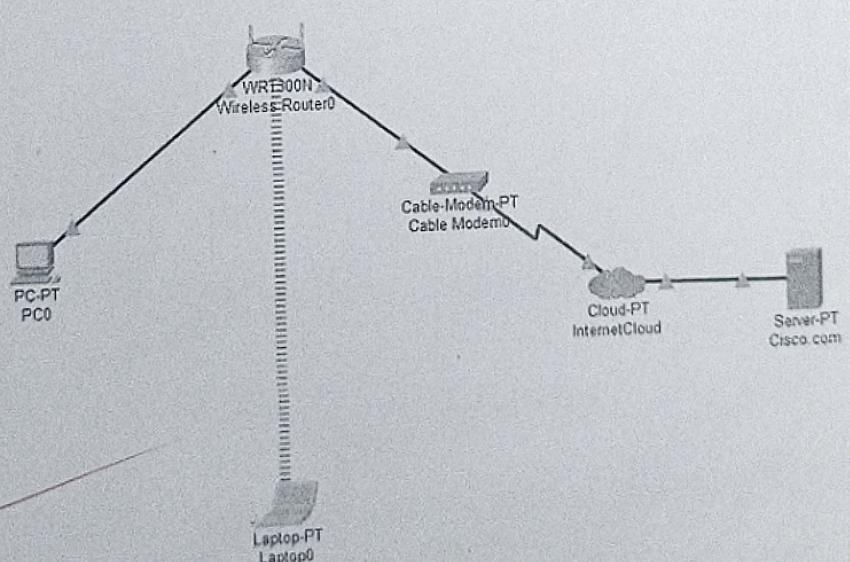
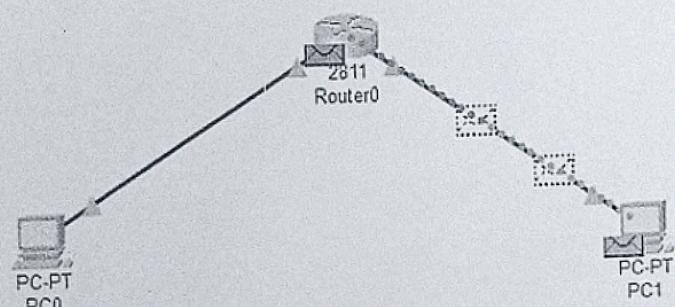
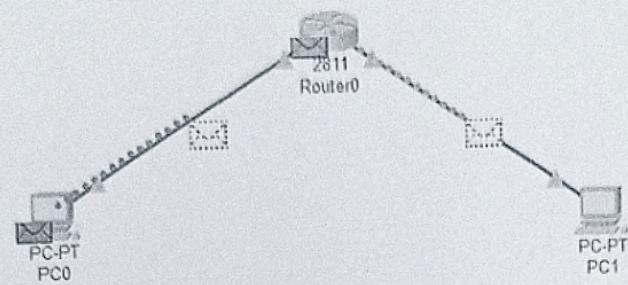
Device Name	IP address	Subnet Mask	Gateway
PC0	192.168.10.2	255.255.255.0	192.168.10.1
PC1	192.168.20.2	255.255.255.0	192.168.20.1

Designed Network Topology:

Simulated ~~Design~~ Network Topology.

Sending a PDU from PC0 to PC1.

Acknowledgement from PC1 to PC0:



Result:

The network was successfully interconnected using routers in Cisco Packet Tracer, enabling communication between different networks.