

Aim:

- a) Interacting with routers in Cisco packet TRACER simulator.

Design and configure a simple internetwork using a router

In this network, a router and 2 PC's are used. Computers are connecting with routers using a copper straight through cable. After forming the network, to check network connectivity a simple PDU is transferred from PC0 to PC1.

Procedure:

Step 1 (Configuring Router 1):

1. Select the router and open CLI
2. Press ENTER to start configuration Router 1.
3. Type enable to activate the privileged mode.

Step 2 (Configuring PC's)

1. Assign IP Address to every PC in the network
2. Select the PC, go to the desktop and select IP configuration and assign an IP address, default gateway, subnet mask.
3. Assign the default gateway of PC0 as 192.168.10.1



4. Assign the default gateway of PC1 as 192.168.20.1

Step-3 (Connecting PC's with routers):

1. Connect FastEthernet 0 port of PC0 with FastEthernet 0/0 port of router1 using a copper straight through cable.
2. Connect FastEthernet 0 port of PC1 with Fast Ethernet 0/1 port of router1 using a copper straight-through cable.

Router configuration Table:

Device Name	ip address Fast ethernet 0/0	subnet mask	IP address Fast ethernet 0/1	subnet mask
Router1	192.168.10.1	255.255.255.0	193.168.20.1	255.255.255.0

PC configuration Table.

Device Name	ip address	subnet mask	gateway
PC0	192.168.10.2	255.255.255.0	192.168.10.1
PC1	198.168.20.2	255.255.255.0	192.168.20.1

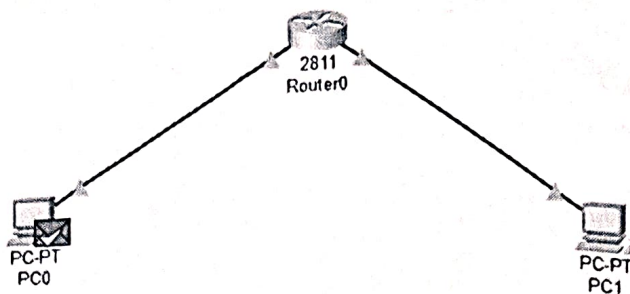
~~Designed~~ Network Topology:

~~simulated~~ of designed Network Topology.



Sending a PDU From PC0 to PC1:

10)a)



Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Item	Edit
●	Successful	PC0	PC1	ICMP	■	0.000	N	0	(edit)
●	Successful	PC0	PC1	ICMP	■	0.000	N	1	(edit)

Acknowledgement From PC1 to PC0:

Result:

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

15/10/20