

a)
19/12

Internetworking

Aim:

a) Internetworking with routers in CISCO PACKET TRACER simulator

d) Design and configure a simple internetwork using a router.

In this network 2 networks & PC are used. Computers are connected with routers using copper straight through cable. After forming the network to check network connectivity a simple PDU from PC0 to PC1

Procedure:

Step 1: (Configuring Router 1);

1. Select the router and when CLI

2. Press Enter to start Configuring Router 1

3. Type enable to activate the privileged mode

Router 1 Command line interface:

Router > enable

Router # Config:

Enter Configuration commands, one per line

Router (Config) # interface Fast Ethernet 0/0

Router (Config-1) # ip address 192.168.10.1

255.255.255.0

Router (Config-1) # no shutdown

Router (Config-1) #

Step 2 (Configuring PCs)

1) Assign IP Address for PCs

2) Select the PC and set IP address

Default Gateway. Subnet Mask.

3) Assign the Default Gateway PC0

as 192.168.10.1

1) Assign the Default Gateway PC1

as 192.168.20.1

Step 3: (Connecting PCs with Router)

1) Connect Fast Ethernet 0 Port of PC0 with Fast Ethernet 0/0 Port of Router (using a Copper

Straight through Cable

2) Same for Fast Ethernet

Router configuration Table

Device Name	IP Address	Subnet Mask	IP Address	Subnet Mask
	Fast Ethernet		Fast Ethernet	
Router1	192.168.10.1	255.255.255.0	192.168.20.1	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	192.168.20.2	255.255.255.0	192.168.20.1

Result:

thus the program is executed successfully and output is verified