

understanding of subnetting:
 large network
 enhancing
 IP address efficiency.
 ask, subnetting
 for network vs
 24) subnet mask
 for network,
 is allows network
 and isolate
 performance and

implementing

nce
 lization

ement

g & successfully
 simplified.

Exp NO : 10 Internetworking with routers in Cisco Packet Tracer simulator

a) Aim:

Implementing internetworking with routers
 in Cisco Packet Tracer simulator.

Router 1 - cell

Router > enable

Router # config

Router (config) # interface g0/0

Router (config-if) # ip address {ip} {subnet}

Router (config-if) # no shutdown

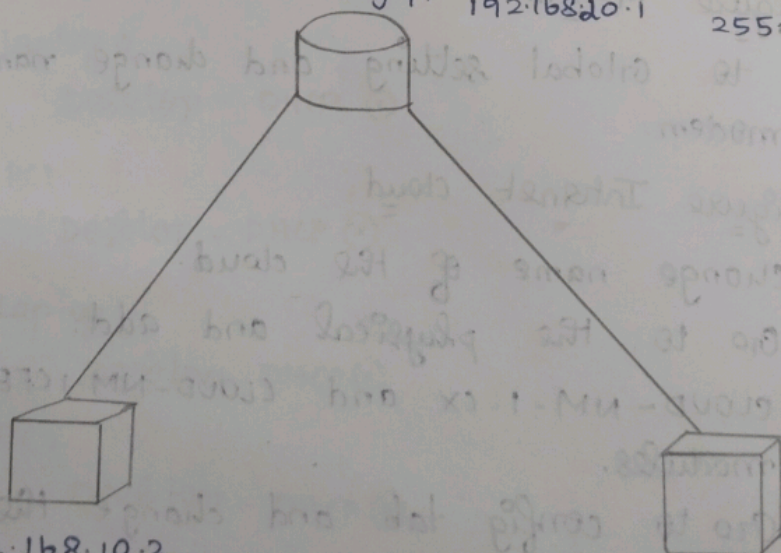
Router (config-if) # interface g0/1

Router (config-if) # ip address {ip} {subnet}

Router (config-if) # no shutdown

g0/0 192.168.10.1 255.255.255.0

g0/1 192.168.20.1 255.255.255.0



192.168.10.2

255.255.255.0

192.168.10.1

192.168.20.2

255.255.255.0

192.168.20.2

b) Aim: Design and configure an internetwork using wireless router, DHCP server and internet cloud.

Configure Wireless Router:

1. Go to Wireless tab.
2. change network name (if required)

1. Go to Setup tab
2. Go to DHCP and enable it
3. Add the DNS of Cisco server (208.67.220.220)

Configure Laptop:

1. Go to physical tab
2. Add the wireless module
3. Go to wireless application
4. Refresh and connect to wireless network

Configure Modem:

Go to Global setting and change name of modem.

Configure Internet cloud:

1. change name of the cloud.
2. Go to the physical and add.
CLOUD-NM-1-CX and CLOUD-NM-1-CFE modules.
3. Go to config tab and change the connection of FastEthernet to cable.
4. Go to cable and add a connection from coaxial to Ethernet.

Configure
change n
configure

DHCP
Go to s
select DHCP
then it o
set start
address an

Procedure:

Arrange
Assign IP
server
↳ S

PC0
- Desktop

Laptop 0
Desktop

PC1
Desktop

Laptop 1
Desktop

PC2
Desktop

Now ping

Configure server:

change name of server to cisco.com
configure the static IP address of server.

DHCP

Go to services
select DHCP and
turn it on.
set start ip
address and su

DNS

Go to services
select DNS and
turn it on.
Give domain name and
IP Address and add it.

Procedure:

Arrange the PC & laptop in the page

Assign IP address:

server - 10.0.0.1

↳ services → DHCP → default gateway - 10.0.0.1
→ service - on

PC0

- Desktop - DHCP ☉

Laptop 0

Desktop - DHCP ☉

PC1

Desktop - DHCP ☉

Laptop 1

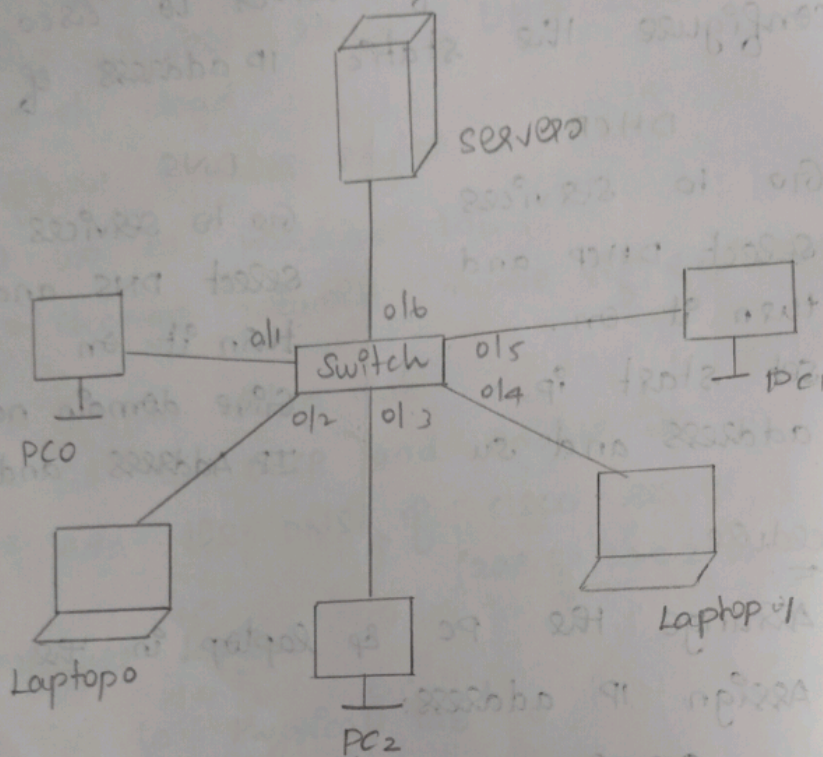
Desktop - DHCP ☉

PC2

Desktop - DHCP ☉

~~Now ping from PCs to server.~~

Diagram:



Output:

Ping Laptop to PC2

Event list

vis	Time(sec)	Last device
	0.0000	--
	0.0001	Laptop 0
	0.0002	Switch 0
	0.0003	PC2
	0.0004	Switch 0
visible	1.994	--

Thus the configuration of DHCP is successfully executed.

Exp No: 110

Aim:

To simulate using Cisco

Procedure:

Arrange

The image

Assign

Router

→

Router

→

PC 0

IP - 10

Gateway

PC 1

IP - 10

Gateway

PC 2

IP - 10

Gateway

PC 3

IP - 10

Gateway

Now click

Netw

Subn

Net