

EXPERIMENT 5

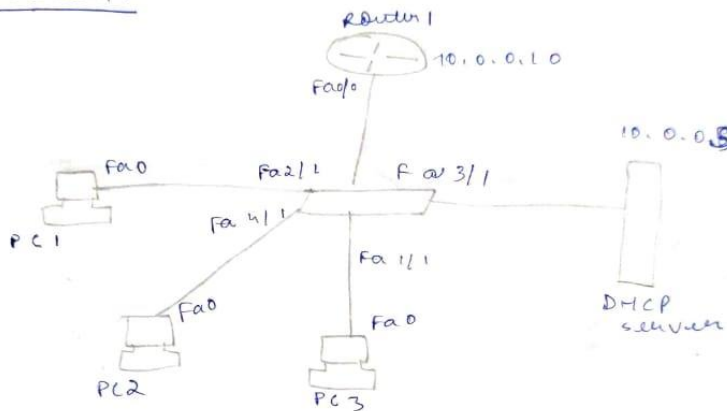
Exp-5

VYSHNAVI, M-A
IBM L8CS 125

Configure DHCP with a LAN in packet
Tracer

AIM: TO automatically assign IP addresses
to PC's in a network
using a DHCP server, LAN by

TOPOLOGY:



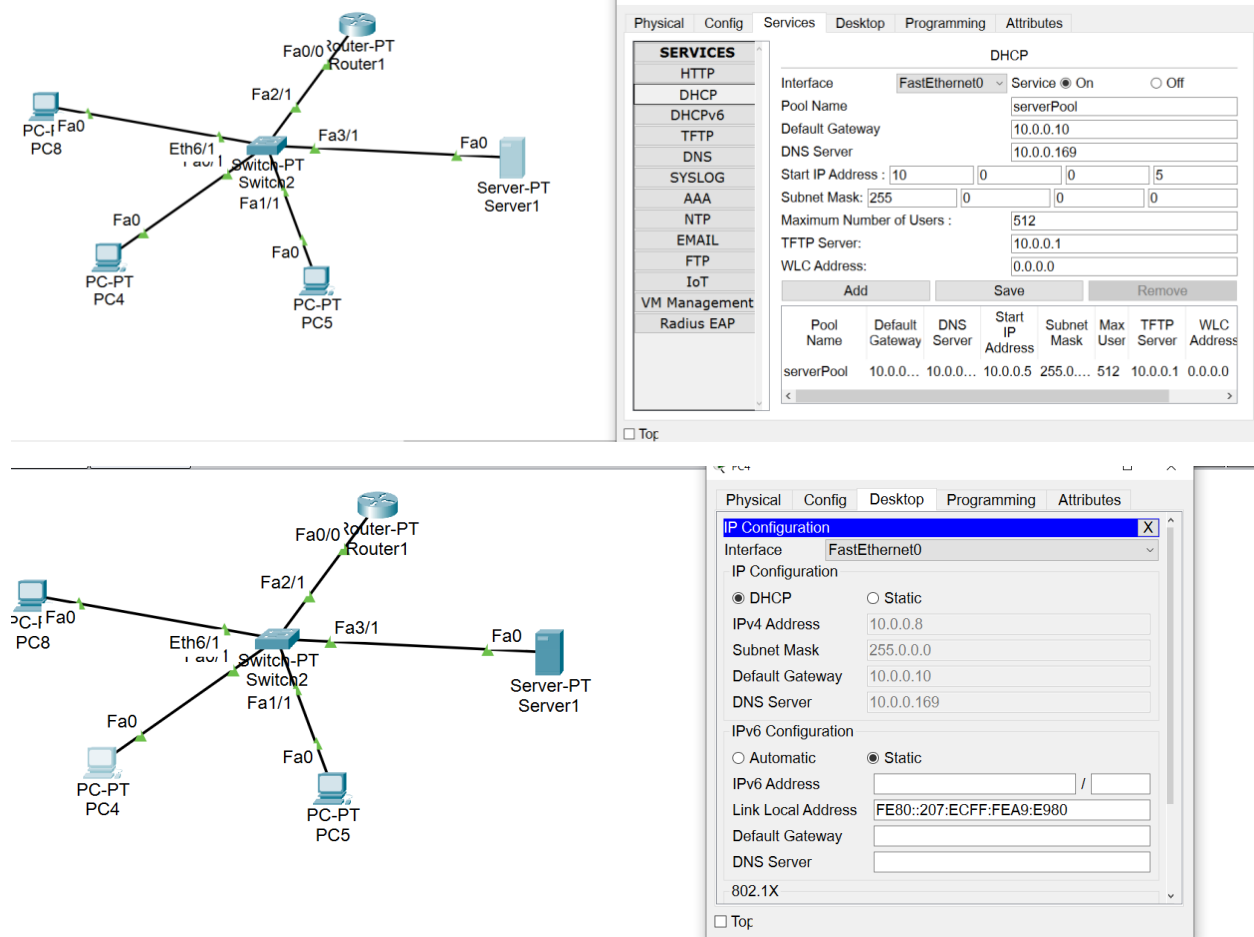
PROCEDURE:

- 1) connect all the PC's to a switch
- 2) connect all the DHCP server to the switch
- 3) configure the router's interface
- 4) configure the DHCP server
- 5) set default gateway, DNS server, interface, IPv4, TFTP server
- 6) Turn on DHCP, save settings
- 7) PC > Desktop > IPconfig > DHCP

OBSERVATIONS:

- 1) The DHCP server assigns IP addresses to the PC's automatically for the given starting IP range.
- 2) If DHCP isn't configured properly, then the PC's use APIPA protocol to set IP addresses.

OUTPUT -



The network diagram shows a central Switch-PT (Switch2) connected to a Router-PT (Router1) via Fa2/1 and Eth6/1. The switch has three other interfaces: Fa0/1 connected to PC-PT PC4, Fa1/1 connected to PC-PT PC5, and Fa0/2 connected to PC-1 Fa0 PC8. The router has Fa3/1 connected to Server-PT Server1 and Fa0/0 connected to the Internet. The configuration screenshots show the DHCP service configuration on the switch and the IP configuration on the switch's Fa0/2 interface.

DHCP Configuration (Switch-PT):

Interface	Service	On	Off
FastEthernet0	DHCP	<input checked="" type="radio"/>	<input type="radio"/>

IP Configuration (Switch-PT):

Interface	IP Configuration	Static	DHCP
FastEthernet0	IP Configuration	<input type="radio"/>	<input checked="" type="radio"/>

DHCP Pool Configuration:

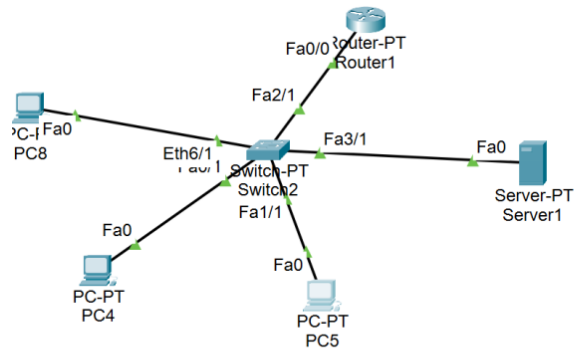
Pool Name	Default Gateway	DNS Server	Start IP Address	Subnet Mask	Max User	TFTP Server	WLC Address
serverPool	10.0.0.10	10.0.0.169	10.0.0.5	255.0.0.0	512	10.0.0.1	0.0.0.0

IP Configuration (Switch-PT):

Interface	IP Configuration	Static	DHCP
FastEthernet0	IP Configuration	<input type="radio"/>	<input checked="" type="radio"/>

DHCP Pool Configuration (Switch-PT):

Pool Name	Default Gateway	DNS Server	Start IP Address	Subnet Mask	Max User	TFTP Server	WLC Address
serverPool	10.0.0.10	10.0.0.169	10.0.0.5	255.0.0.0	512	10.0.0.1	0.0.0.0



Physical	Config	Desktop	Programming	Attributes
IP Configuration				
Interface: FastEthernet0				
IP Configuration				
<input checked="" type="radio"/> DHCP <input type="radio"/> Static				
IPv4 Address: 10.0.0.6				
Subnet Mask: 255.0.0.0				
Default Gateway: 10.0.0.10				
DNS Server: 10.0.0.169				
IPv6 Configuration				
<input type="radio"/> Automatic <input checked="" type="radio"/> Static				
IPv6 Address: <input type="text"/> / <input type="text"/>				
Link Local Address: FE80::201:C9FF:FEE3:4EBC				
Default Gateway: <input type="text"/>				
DNS Server: <input type="text"/>				
802.1X: <input type="text"/>				
<input type="checkbox"/> Top				