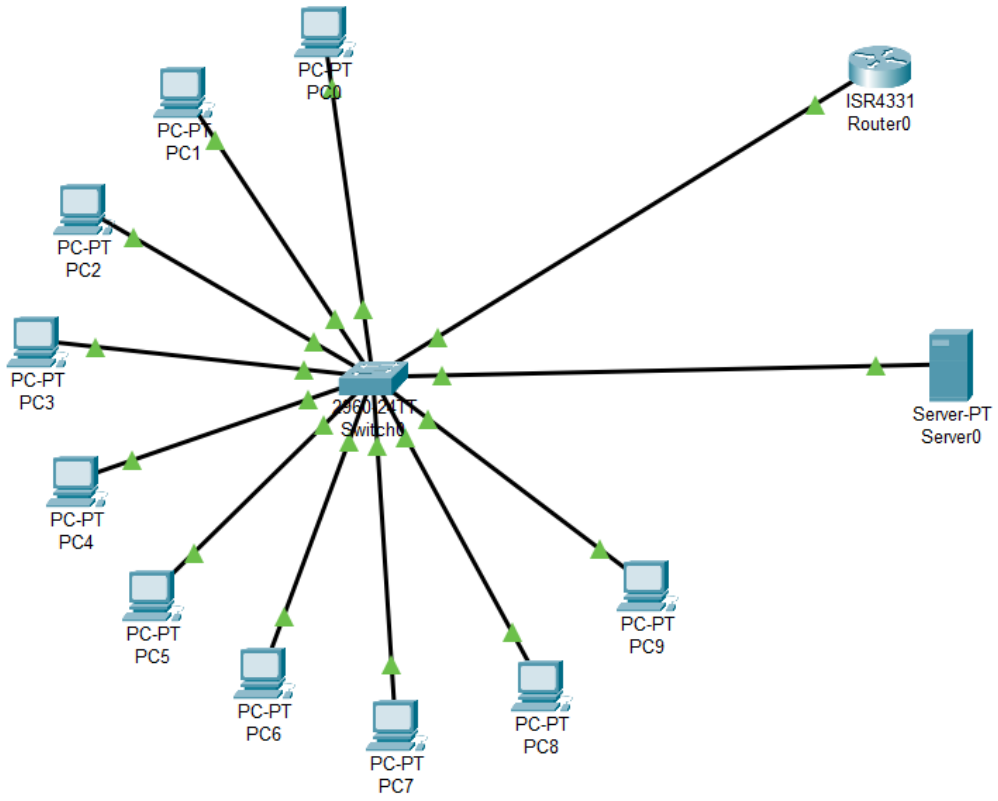
Practical No : 6

Aim : Configure a DHCP server with given scenario.



Theory :

Dynamic Host Configuration Protocol (DHCP) is used to automatically assign IP addresses and network configurations (like subnet mask, gateway, DNS) to devices in a network. It eliminates the need for manual IP configuration and ensures efficient IP address management.

Steps :

DHCP Configuration :

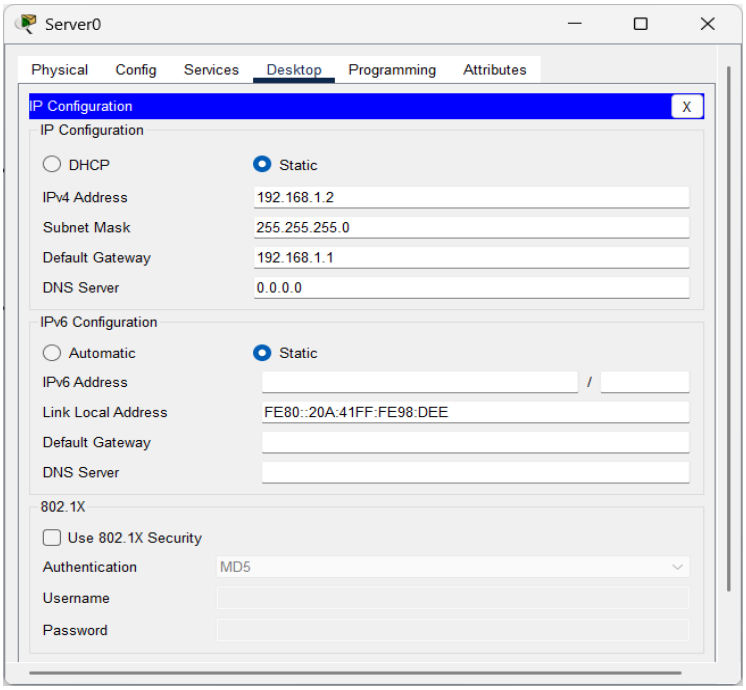
Switch : 2960-24TT

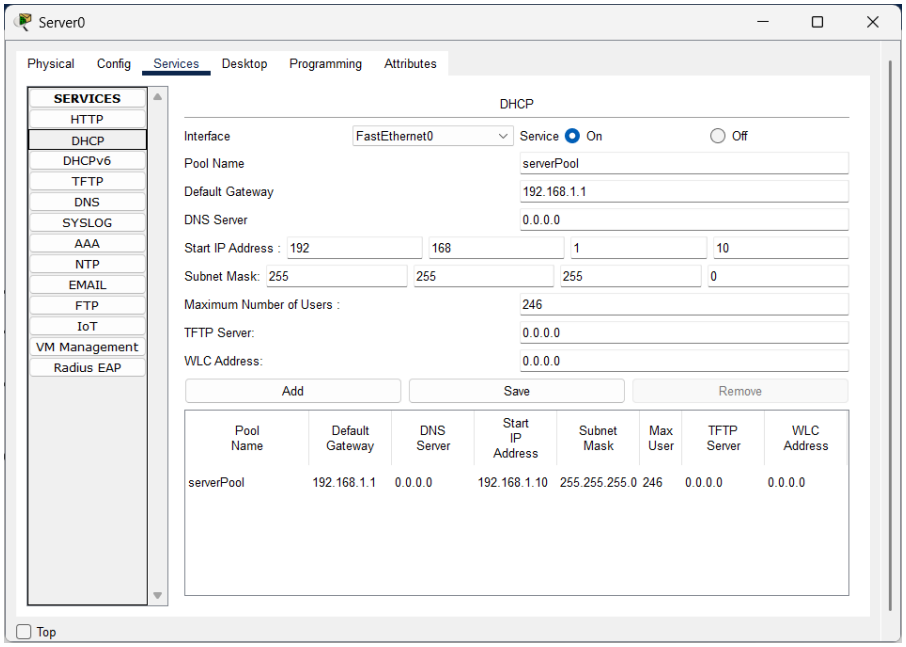
No. of PC's : 0-9(10)

Server : PT

Router : ISR4331

Server Configuration :





Router Configuration in CLI :

Router>enable

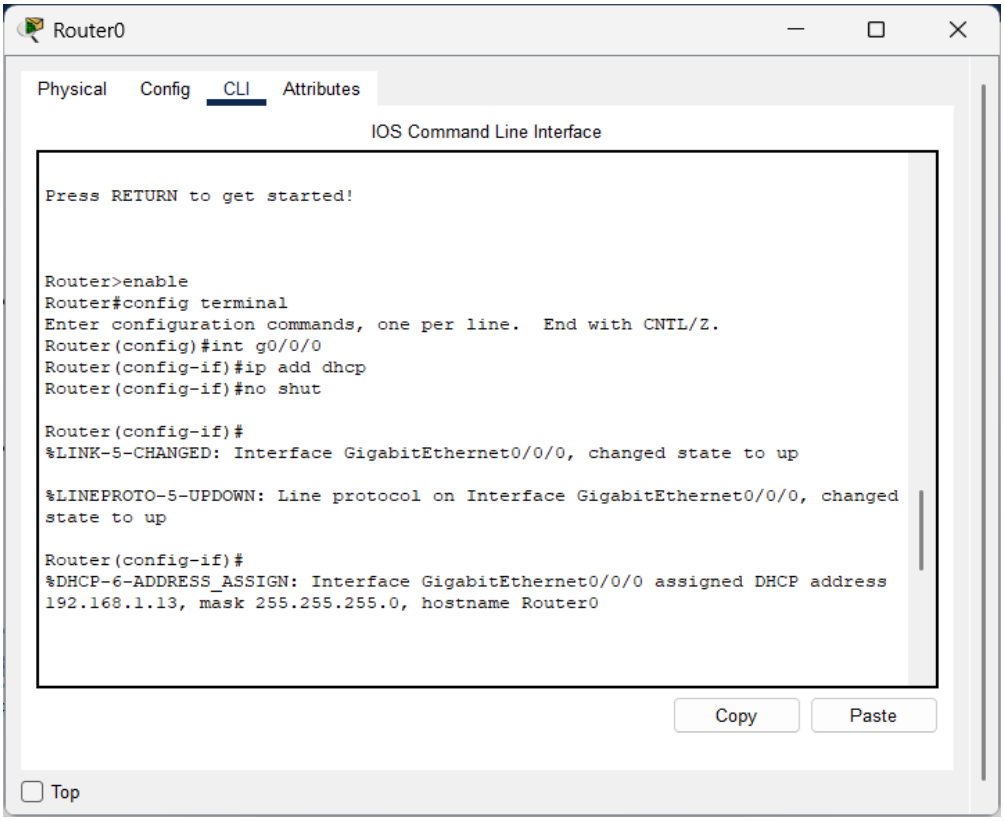
Router#config terminal

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#int g0/0/0

Router(config-if)#ip add dhcp

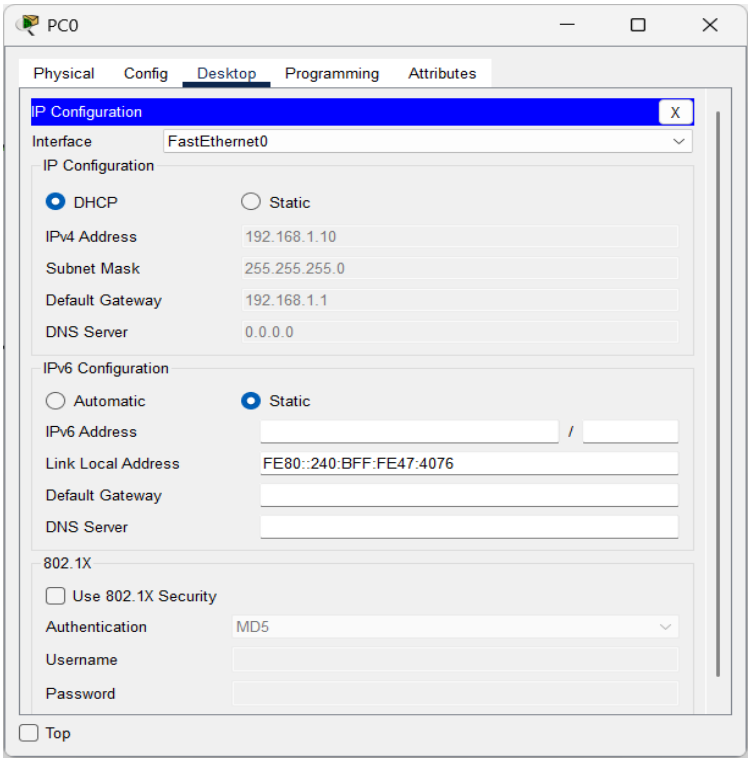
Router(config-if)#no shut

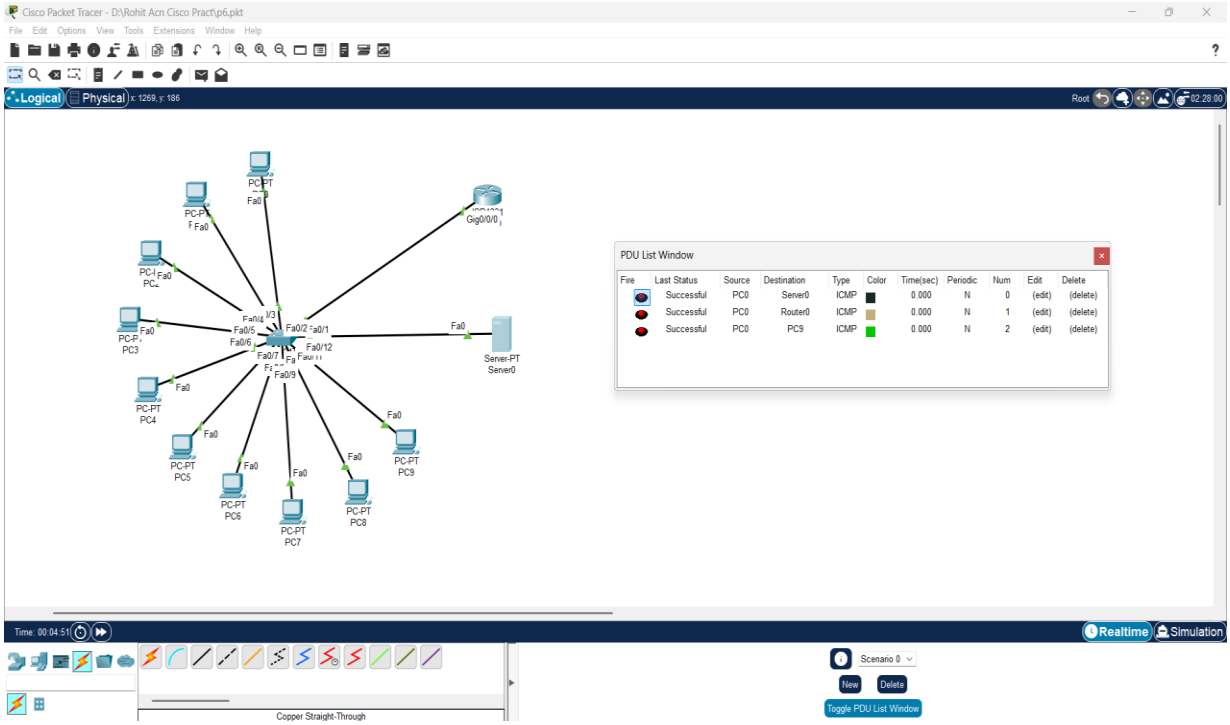


PC Configuration :

Select DHCP instead of Static in IP Configuration of each PC(0-9) , Automatically it will configure.

For ex:




Cisco Packet Tracer - D:\Rohit Acn Cisco Pract\p6.pkt
File Edit Options View Tools Extensions Window Help
Logical
Physical
x: 1269, y: 186
Root
02:28:00
PC-PT PC0
PC-PT PC1
PC-PT PC2
PC-PT PC3
PC-PT PC4
PC-PT PC5
PC-PT PC6
PC-PT PC7
PC-PT PC8
PC-PT PC9
Server-PT Server0
Gig0/0/0
Fa0/1
Fa0/2
Fa0/5
Fa0/6
Fa0/7
Fa0/9
Fa0/12
PDU List Window
Fire
Last Status
Source
Destination
Type
Color
Time(sec)
Periodic
Num
Edit
Delete
Successful PC0 Server0 ICMP 0.000 N 0 (edit) (delete)
Successful PC0 Router0 ICMP 0.000 N 1 (edit) (delete)
Successful PC0 PC9 ICMP 0.000 N 2 (edit) (delete)
Time: 00:04:51
Realtime
Simulation
Copper Straight-Through
Scenario 0
New
Delete
Toggle PDU List Window