QUESTION: Configure DHCP withing a LAN In packet tracer

AIM: To automatically assign IP addresses to PC’s in a network LAN by using a DHCP Server

VARADVITH
1KJ

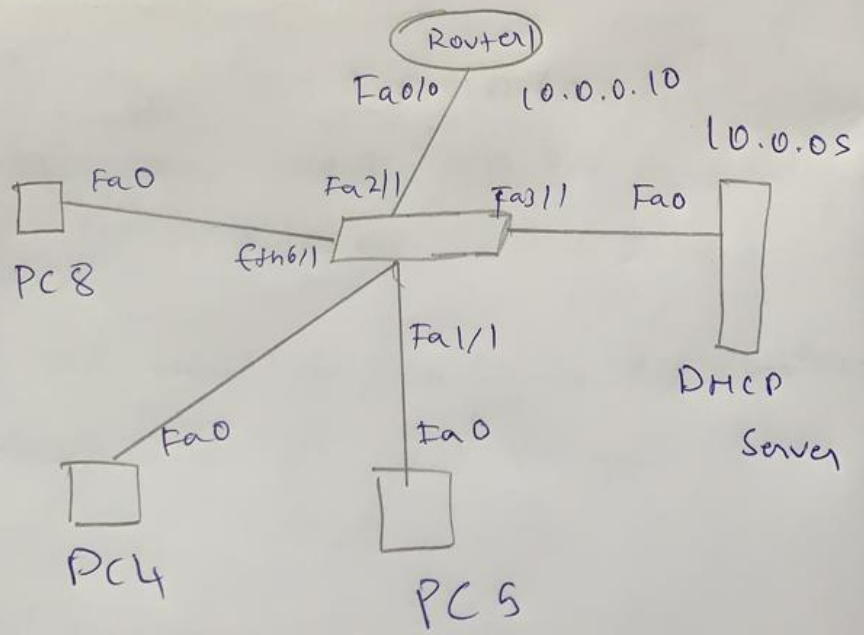
1BM18CS122

Exp-5

Question:- Configure DHCP within a LAN in Packet tracer

Aim:- To automatically assign IP address to PC's in a network LAN by using a DHCP Server

Topology:-



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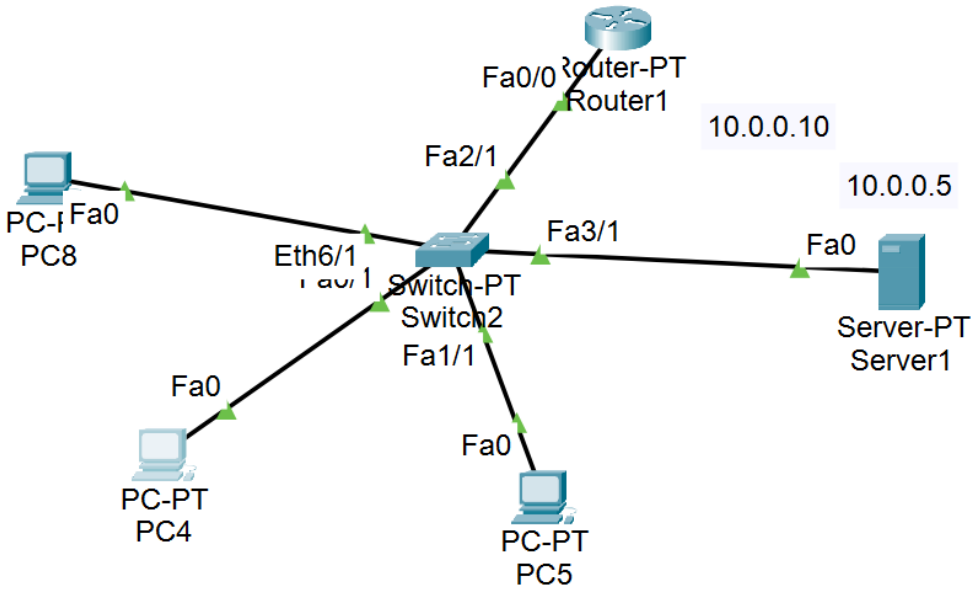
Procedure:-

1) Connect all the PC's to a Switch
2) Connect all the DHCP server to the Switch
3) Configure the routers 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 > IP config > DHCP

Observation:-

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

TOPOLOGY:



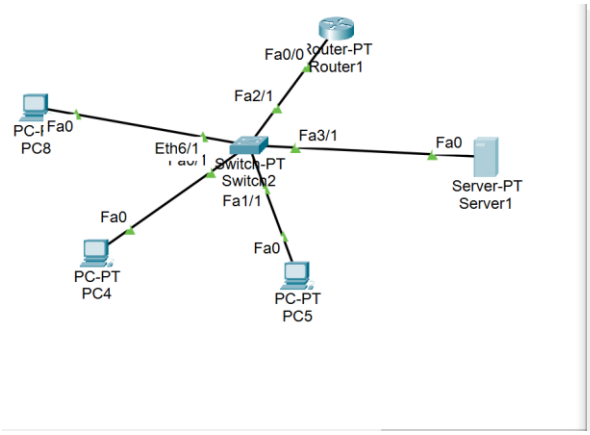
PROCEDURE:

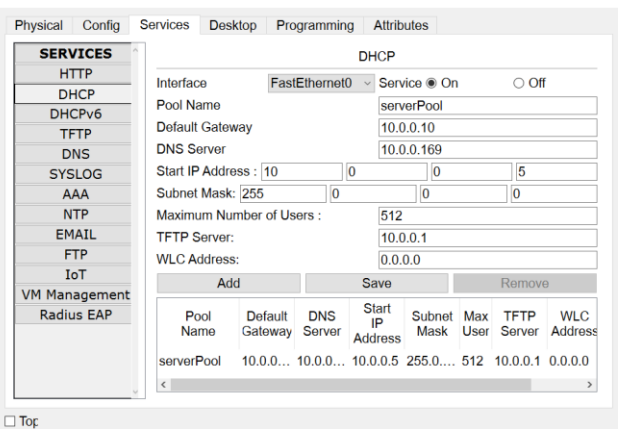
1. Connect all the PC's and to a switch
2. Connect the DHCP Server to the switch
3. Configure the router's interface
4. Configure DHCP server,
5. Set Default gateway,DNS Server, Interface IPv4, TFTP Server
6. Turn on DHCP, Save Settings
7. PC>Desktop>IP Configuration > DHCP

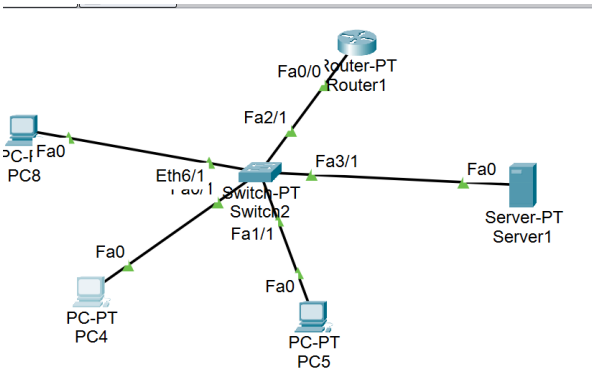
OBSERVATION :

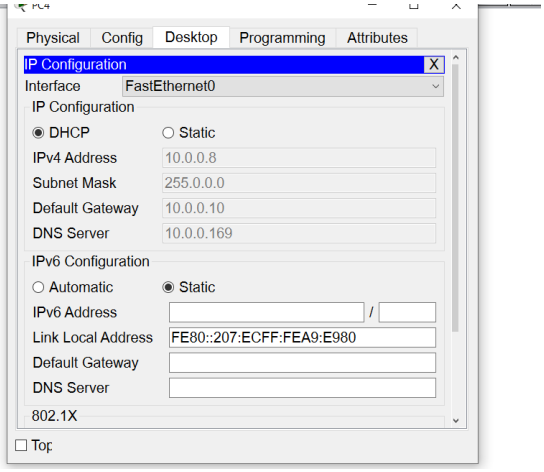
1. The DHCP server assigns IP addresses to the Pc's Automatically from the given starting IP range
2. If DHCP isn't configured properly, then the PC's use APIPA protocol to set IP addresses

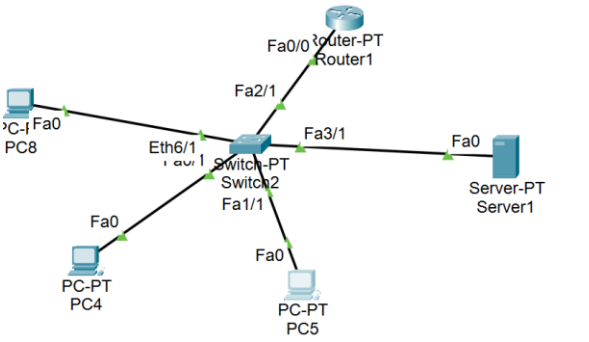
SCREENSHOTS :


Router-PT
Router1
Fa0/0
Fa2/1
Fa3/1
Fa0
PC-PT
PC8
Eth6/1
Switch-PT
Switch2
Fa1/1
Server-PT
Server1
PC-PT
PC4
PC-PT
PC5


Physical
Config
Services
Desktop
Programming
Attributes
SERVICES
HTTP
DHCP
DHCPv6
TFTP
DNS
SYSLOG
AAA
NTP
EMAIL
FTP
IoT
VM Management
Radius EAP
DHCP
Interface
FastEthernet0
Service
On
Off
Pool Name
serverPool
Default Gateway
10.0.0.10
DNS Server
10.0.0.169
Start IP Address :
Subnet Mask:
Maximum Number of Users :
512
TFTP Server:
10.0.0.1
WLC Address:
0.0.0.0
Add
Save
Remove
Pool Name
Default Gateway
DNS Server
Start IP Address
Subnet Mask
Max User
TFTP Server
WLC Address
serverPool
10.0.0.5
255.0....
512
10.0.0.1
0.0.0.0
Top


Router-PT
Router1
Fa0/0
Fa2/1
Fa3/1
Fa0
PC-PT
PC8
Eth6/1
Switch-PT
Switch2
Fa1/1
Server-PT
Server1
PC-PT
PC4
PC-PT
PC5


Physical
Config
Desktop
Programming
Attributes
IP Configuration
Interface
FastEthernet0
IP Configuration
DHCP
Static
IPv4 Address
10.0.0.8
Subnet Mask
255.0.0.0
Default Gateway
10.0.0.10
DNS Server
10.0.0.169
IPv6 Configuration
Automatic
Static
IPv6 Address
Link Local Address
FE80::207:ECFF:FEA9:E980
Default Gateway
DNS Server
802.1X
Top


Router-PT
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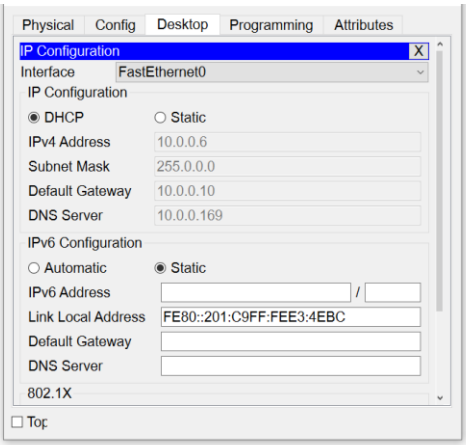
Fa2/1
Fa3/1
Fa0
PC-PT
PC8
Eth6/1
Switch-PT
Switch2
Fa1/1
Server-PT
Server1
PC-PT
PC4
PC-PT
PC5


Physical
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Attributes
IP Configuration
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FastEthernet0
IP Configuration
DHCP
Static
IPv4 Address
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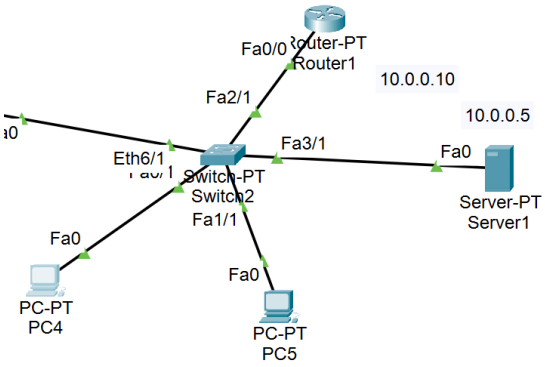
Subnet Mask
255.0.0.0
Default Gateway
10.0.0.10
DNS Server
10.0.0.169
IPv6 Configuration
Automatic
Static
IPv6 Address
Link Local Address
FE80::201:C9FF:FEE3:4EBC
Default Gateway
DNS Server
802.1X
Top

PING

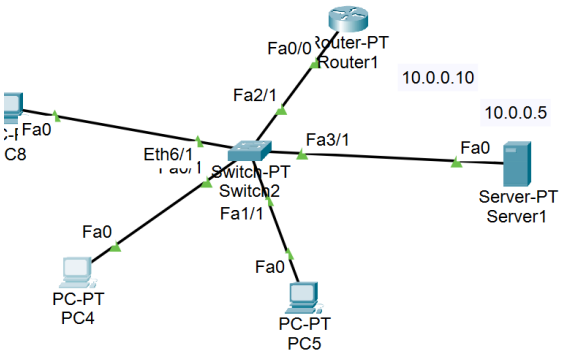


Physical Config Desktop Programming Attributes

Command Prompt

```
C:\>
C:\>
C:\>
C:\>
C:\>ping 10.0.0.6

Pinging 10.0.0.6 with 32 bytes of data:

Reply from 10.0.0.6: bytes=32 time<1ms TTL=128
Reply from 10.0.0.6: bytes=32 time<1ms TTL=128
Reply from 10.0.0.6: bytes=32 time<1ms TTL=128
Reply from 10.0.0.6: bytes=32 time=1ms TTL=128

Ping statistics for 10.0.0.6:
    Packets: Sent = 4, Received = 4, Lost = 0
(0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\>
```

Top



Physical Config Desktop Programming Attributes

Command Prompt

```
(0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\>ping 10.0.0.5

Pinging 10.0.0.5 with 32 bytes of data:

Reply from 10.0.0.5: bytes=32 time=1ms TTL=128
Reply from 10.0.0.5: bytes=32 time<1ms TTL=128
Reply from 10.0.0.5: bytes=32 time<1ms TTL=128
Reply from 10.0.0.5: bytes=32 time<1ms TTL=128

Ping statistics for 10.0.0.5:
    Packets: Sent = 4, Received = 4, Lost = 0
(0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\>
```

Top