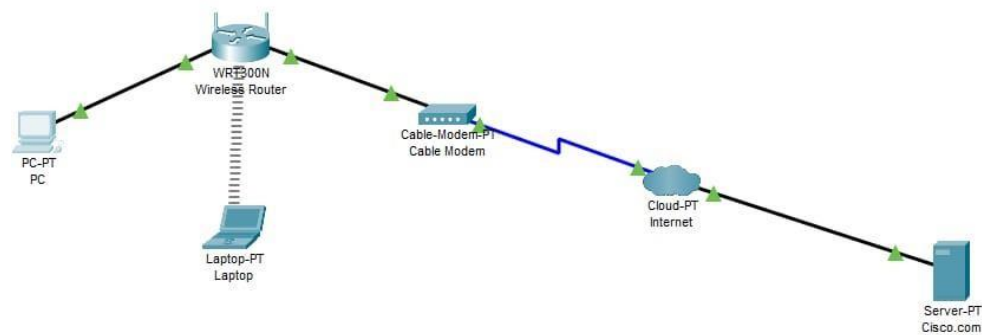


Task 1 :

All the tasks mentioned in the document pdf named **2.1.1.5 Packet Tracer - Create a Simple Network UsingPacket Tracer**

- 1. First we placed all the network devices on logical workspace



- 2. First we configured the wireless settings of the router. In this we changed the name of SSID to “HomeNetwork”.

Wireless-N Broadband Router Firmware Version: v0.93.3

Wireless

Setup

Wireless

Security

Access Restrictions

Applications & Gaming

Administration

Status

Basic Wireless Settings

Wireless Security

Guest Network

Wireless MAC Filter

Advanced Wireless Settings

Basic Wireless Settings

Help...

Network Mode:

Mixed

Network Name (SSID):

HomeNetwork

Radio Band:

Auto

Wide Channel:

Auto

Standard Channel:

1 - 2.412GHz

SSID Broadcast:

Enabled

Disabled

3. Next we changed the DHCP server settings and configured the static IP address of the DNS server as 208.67.220.220.

Physical Config GUI Attributes

Basic Setup DDNS MAC Address Clone Advanced Routing

Internet Setup

Internet Connection typeAutomatic Configuration - DHCP

Optional Settings (required by some internet service providers)Host Name:Domain Name:MTU:Size: 1500

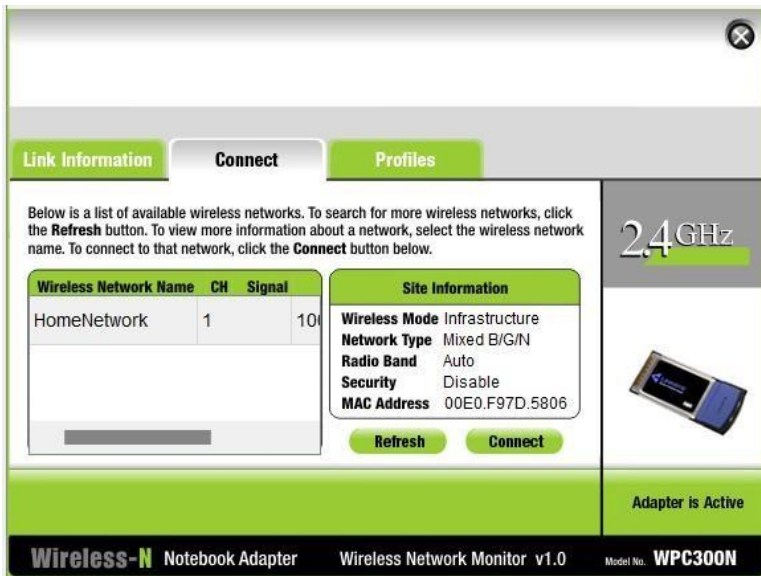
Network Setup

Router IPIP Address:192.168.0.1Subnet Mask:255.255.255.0

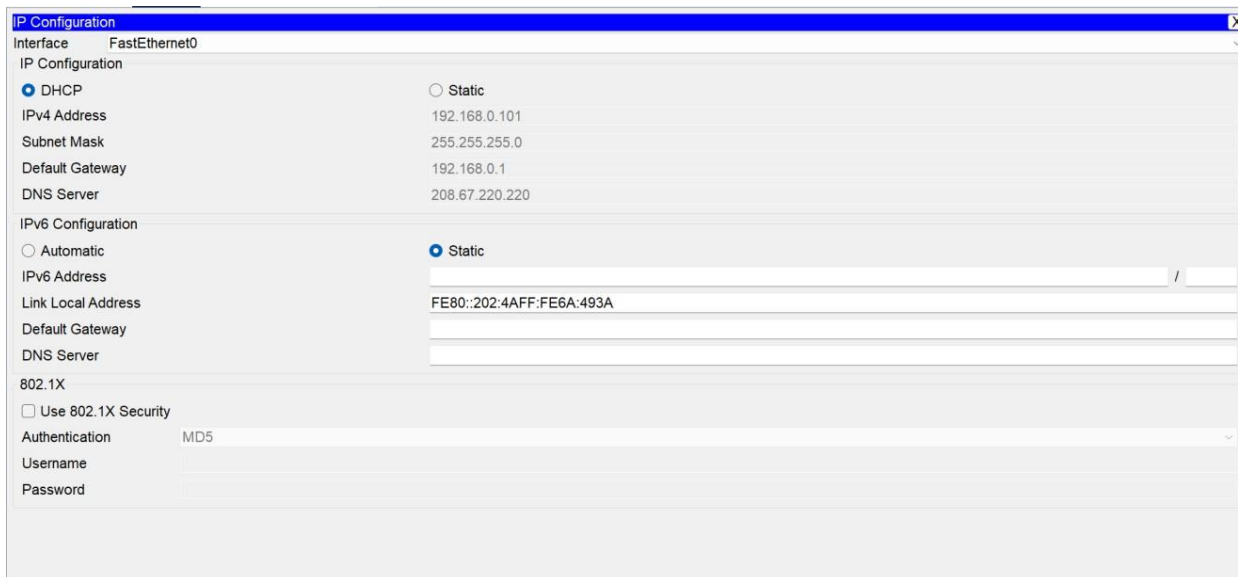
DHCP Server SettingsDHCP Server:EnabledDisabledDHCP ReservationStart IP Address:192.168.0.100Maximum number of Users:50IP Address Range:192.168.0.100 - 149Client Lease Time:0 minutes (0 means one day)Static DNS 1:208.67.220.220Static DNS 2:0.0.0.0Static DNS 3:0.0.0.0WINS:0.0.0.0

Help...

4. Then we changed the ethernet module on laptop with WIFI module and connected it with the Home Network.



- Configuring the PC to DHCP network so that the PC will use DHCP to receive an IPv4 address from the wireless router.



6. Verifying that the PC has received an IPv4 address by issuing the “ipconfig /all” command from the command prompt.

```
Command Prompt
Cisco Packet Tracer SERVER Command Line 1.0
C:\>ipconfig /all

FastEthernet0 Connection:(default port)

    Connection-specific DNS Suffix...:
    Physical Address.....: 00D0.BCA2.C162
    Link-local IPv6 Address.....: FE80::2D0:BCFF:FEA2:C162
    IPv6 Address.....: ::
    IPv4 Address.....: 208.67.220.220
    Subnet Mask.....: 255.255.255.0
    Default Gateway.....: ::
    DHCP Servers.....: 208.67.220.1
    DHCPv6 IAID.....: 0.0.0.0
    DHCPv6 Client DUID.....: 00-01-00-01-AE-E6-80-D1-00-D0-BC-A2-C1-62
    DNS Servers.....: ::
    DNS Servers.....: 208.67.220.220

C:\>
```

7. Configuring the Internet Cloud. In this we identify the to and from port.

Physical Config Attributes

GLOBAL

Settings

TV Settings

CONNECTIONS

Frame Relay

DSL

Cable

INTERFACE

Serial0

Serial1

Serial2

Serial3

Modem4

Modem5

Ethernet6

Coaxial7

FastEthernet8

Coaxial9

Cable

Coaxial7

<=>

Ethernet6

Port

From Port	To Port
Coaxial7	Ethernet6

Add

Remove

8. Making the ethernet as the provider.

Physical Config Attributes

GLOBAL

Settings

TV Settings

CONNECTIONS

Frame Relay

DSL

Cable

INTERFACE

Serial0

Serial1

Serial2

Serial3

Modem4

Modem5

Ethernet6

Coaxial7

FastEthernet8

Coaxial9

Ethernet6

Provider Network

☒ Cable

☐ DSL

9. Configuring the Cisco.com server. In this we change the DHCP settings.

Physical Config Services Desktop Programming Attributes

SERVICES

HTTP

DHCP

DHCPv6

TFTP

DNS

SYSLOG

AAA

NTP

EMAIL

FTP

IoT

VM Management

Radius EAP

DHCP

InterfaceFastEthernet0Service ☒ On ☐ Off

Pool NameserverPool

Default Gateway0.0.0.0

DNS Server0.0.0.0

Start IP Address :208672200

Subnet Mask:2552552552550

Maximum Number of Users :255

TFTP Server:0.0.0.0

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
DHCPpool	208.67.220.220	208.67.220.220	208.67.220.1	255.255.255.0	50	0.0.0.0	0.0.0.0
serverPool	0.0.0.0	0.0.0.0	208.67.220.0	255.255.255.0	255	0.0.0.0	0.0.0.0

10. In this we change the DNS settings.

Physical Config Services Desktop Programming Attributes

SERVICES

HTTP

DHCP

DHCPv6

TFTP

DNS

SYSLOG

AAA

NTP

EMAIL

FTP

IoT

VM Management

Radius EAP

DNS

DNS Service☒ On ☐ Off

Resource Records

NameType A Record

Address

Add

Save

Remove

No.	Name	Type	Detail
0	cisco.com	A Record	208.67.220.220

11. Configuring the Cisco.com server so it receives the data via fastethernet0 port.

The screenshot shows the Cisco configuration interface for the FastEthernet0 port. The left sidebar has tabs for GLOBAL, Settings, Algorithm Settings, INTERFACE, and FastEthernet0. The main area is titled 'FastEthernet0' and contains the following settings:

- Port Status: ☒ On
- Bandwidth: ☐ 100 Mbps ☐ 10 Mbps ☒ Auto
- Duplex: ☐ Half Duplex ☐ Full Duplex ☒ Auto
- MAC Address: 00D0.BCA2.C162
- IP Configuration: ☐ DHCP ☒ Static
 - IPv4 Address: 208.67.220.220
 - Subnet Mask: 255.255.255.0
- IPv6 Configuration: ☐ Automatic ☒ Static
 - IPv6 Address: /
 - Link Local Address: FE80::2D0:BCFF:FEA2:C162

12. Verifying the connections by refreshing PC IPV4 and in output we see the IP address of the PC to be "192.168.0.101". Moreover when we ping Cisco server we receive the first reply after 36ms and subsequent replies after 2ms and a total of 4 replies.

```
Physical Config Desktop Programming Attributes
Command Prompt
IPv6 Address.....: ::
IPv4 Address.....: 192.168.0.101
Subnet Mask.....: 255.255.255.0
Default Gateway.....: ::
DHCP Servers.....: 192.168.0.1
DHCPv6 IAID.....:
DHCPv6 Client DUID.....: 00-01-00-01-85-02-EA-BB-00-02-4A-6A-49-3A
DNS Servers.....: ::
208.67.220.220

Bluetooth Connection:
Connection-specific DNS Suffix...:
Physical Address.....: 00D0.587B.B223
Link-local IPv6 Address.....: ::

C:\>ipconfig /release

IP Address.....: 0.0.0.0
Subnet Mask.....: 0.0.0.0
Default Gateway.....: 0.0.0.0
DNS Server.....: 0.0.0.0

C:\>ipconfig /renew

IP Address.....: 192.168.0.101
Subnet Mask.....: 255.255.255.0
Default Gateway.....: 192.168.0.1
DNS Server.....: 208.67.220.220

C:\>ping Cisco.com

Pinging 208.67.220.220 with 32 bytes of data:

Reply from 208.67.220.220: bytes=32 time=36ms TTL=127
Reply from 208.67.220.220: bytes=32 time=2ms TTL=127
Reply from 208.67.220.220: bytes=32 time=2ms TTL=127
Reply from 208.67.220.220: bytes=32 time=1ms TTL=127

Ping statistics for 208.67.220.220:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 36ms, Average = 10ms

C:\>
```

