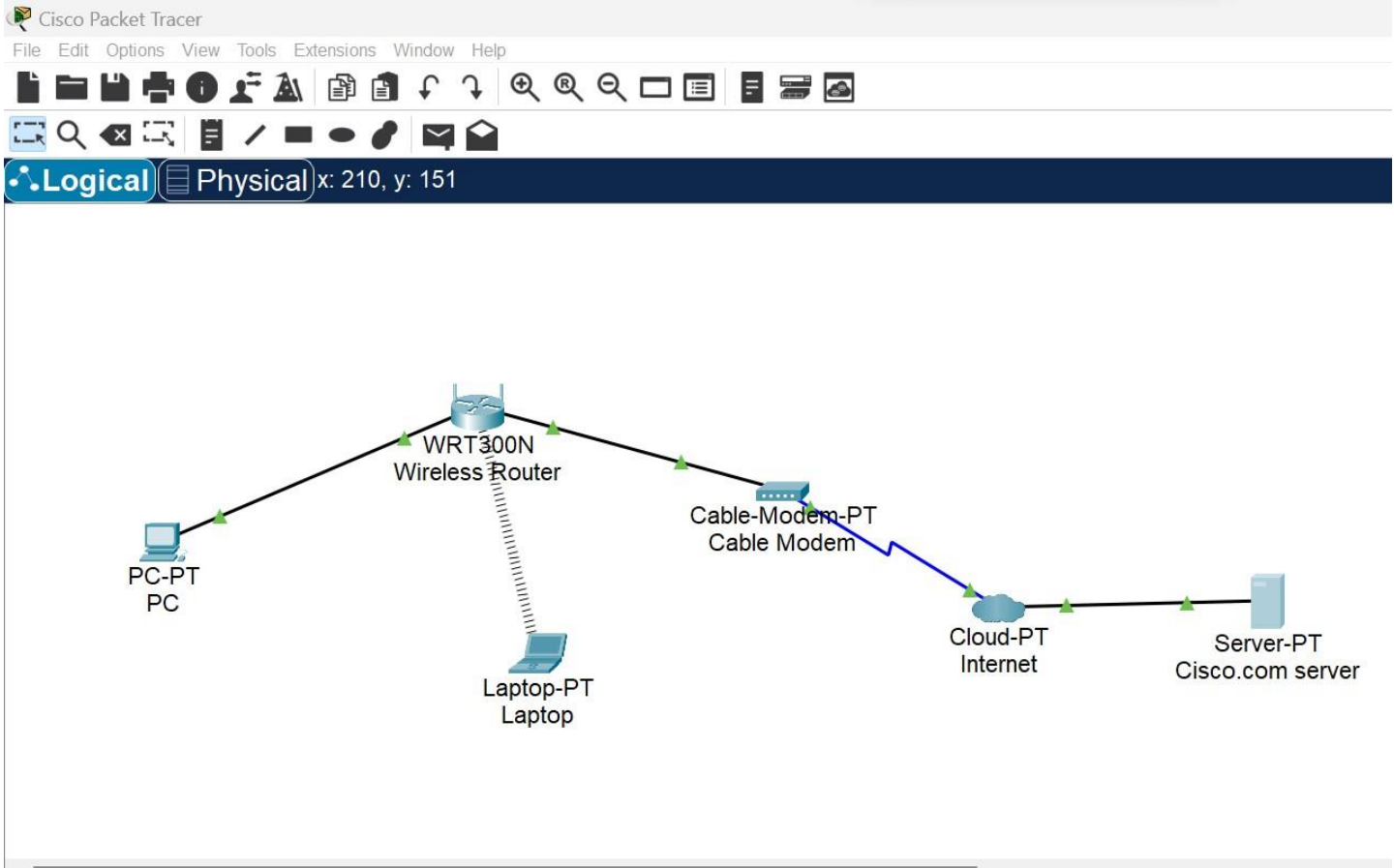# TASK 1: Create a Simple network using Packet Tracer
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1. First we placed all the network devices on logical workspace

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

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

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

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

```
IP Configuration                                                                        X
Interface        FastEthernet0                                                          ∨
IP Configuration
  ● DHCP                                    ○ Static
  IPv4 Address                              192.168.0.101
  Subnet Mask                               255.255.255.0
  Default Gateway                           192.168.0.1
  DNS Server                                208.67.220.220

IPv6 Configuration
  ○ Automatic                               ● Static
  IPv6 Address                              [                                    ] / [   ]
  Link Local Address                        FE80::202:4AFF:FE6A:493A
  Default Gateway                           [                                        ]
  DNS Server                                [                                        ]

802.1X
  ☐ Use 802.1X Security
  Authentication        MD5                                                             ∨
  Username              [                                                              ]
  Password              [                                                              ]
```

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

```
Command Prompt                                                                          X

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.................: ::
                                     208.67.220.1
   DHCP Servers....................: 0.0.0.0
   DHCPv6 IAID.....................:
   DHCPv6 Client DUID..............: 00-01-00-01-AE-E6-80-D1-00-D0-BC-A2-C1-62
   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   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

Interface	FastEthernet0		Service ● On		○ Off
Pool Name			serverPool		
Default Gateway			0.0.0.0		
DNS Server			0.0.0.0		

Start IP Address :	208	67	220	0
Subnet Mask:	255	255	255	0

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

Name		Type	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.

12. Verifying the connections by refreshing PC IPV4 and in output we see thee 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.