

Name – Bramha Nimbalkar

Roll no – 7

Div – E

ASSIGNMENT 1

Straight through cable

A straight through cable is a type of twisted pair cable that is used in local area networks to connect a computer to a network hub such as a router. This type of cable is also sometimes called a patch cable and is an alternative to wireless connections where one or more computers access a router through a wireless signal.

Crossover cable

A crossover Ethernet cable is a type of Ethernet cable used to connect computing devices together directly. Unlike straight through cable, the RJ45 crossover cable uses two different wiring standards: one end uses the T568A wiring standard, and the other end uses the T568B wiring standard.

Straight Through Cable Color Code

EIT/TIA 568B				EIT/TIA 568B	
		White - Orange	White - Orange		
		Orange	Orange		
		White - Green	White - Green		
		Blue	Blue		
		White - Blue	White - Blue		
		Green	Green		
		White - Brown	White - Brown		
		Brown	Brown		

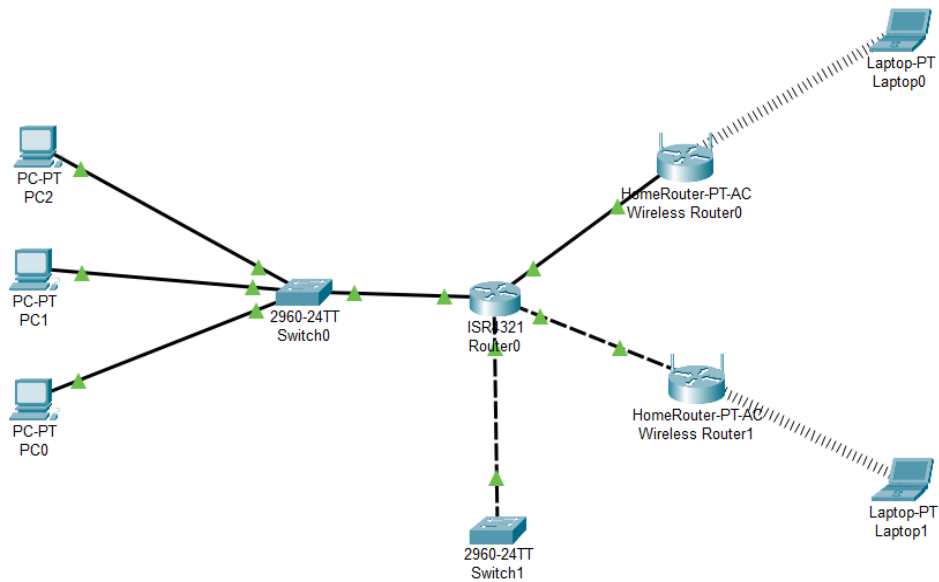
Connects Dissimilar Devices.

Crossover Ethernet Cable Color Code

EIT/TIA 568B				EIA/TIA 568A	
		White - Orange	White - Green		
		Orange	Green		
		White - Green	White - Orange		
		Blue	Blue		
		White - Blue	White - Blue		
		Green	Orange		
		White - Brown	White - Brown		
		Brown	Brown		

Used to connect 2 similar devices. PC – PC, switch - switch, Router – Router.

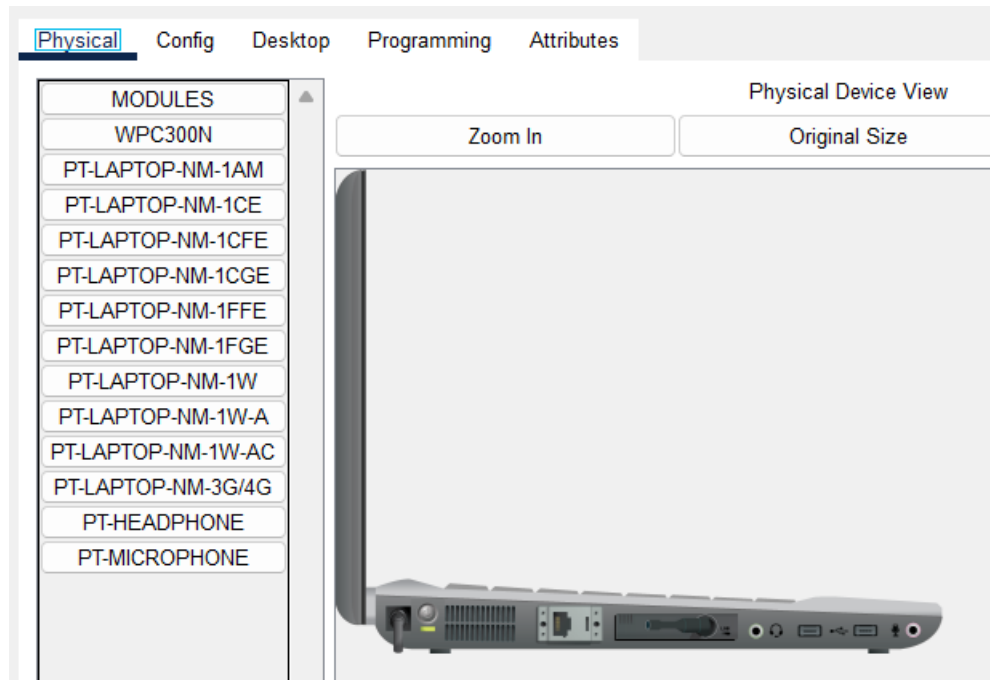
Network :



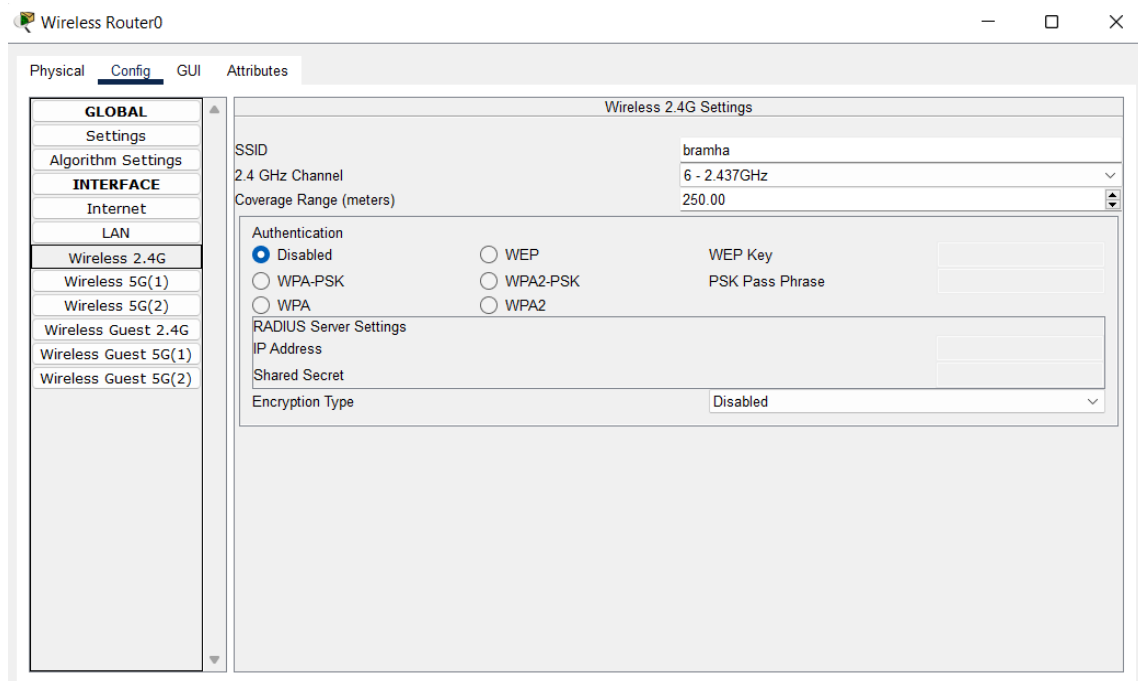
List of Devices :

- Switches -2
- Home router-2
- PC-3
- Laptop-2
- Router-1

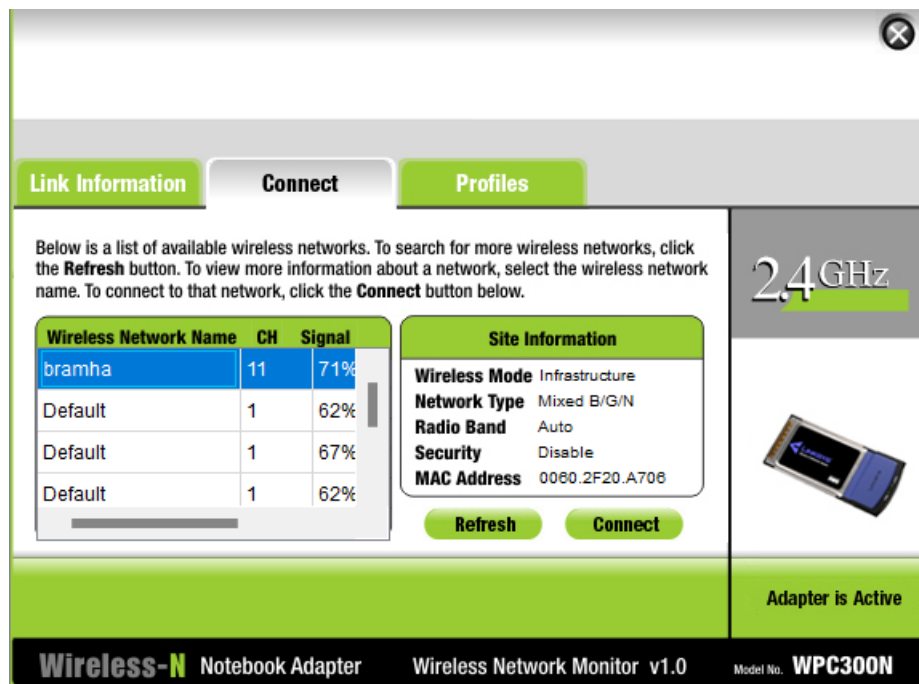
Before connecting to the wireless home router we have added WPC300N to the laptop for wireless connection



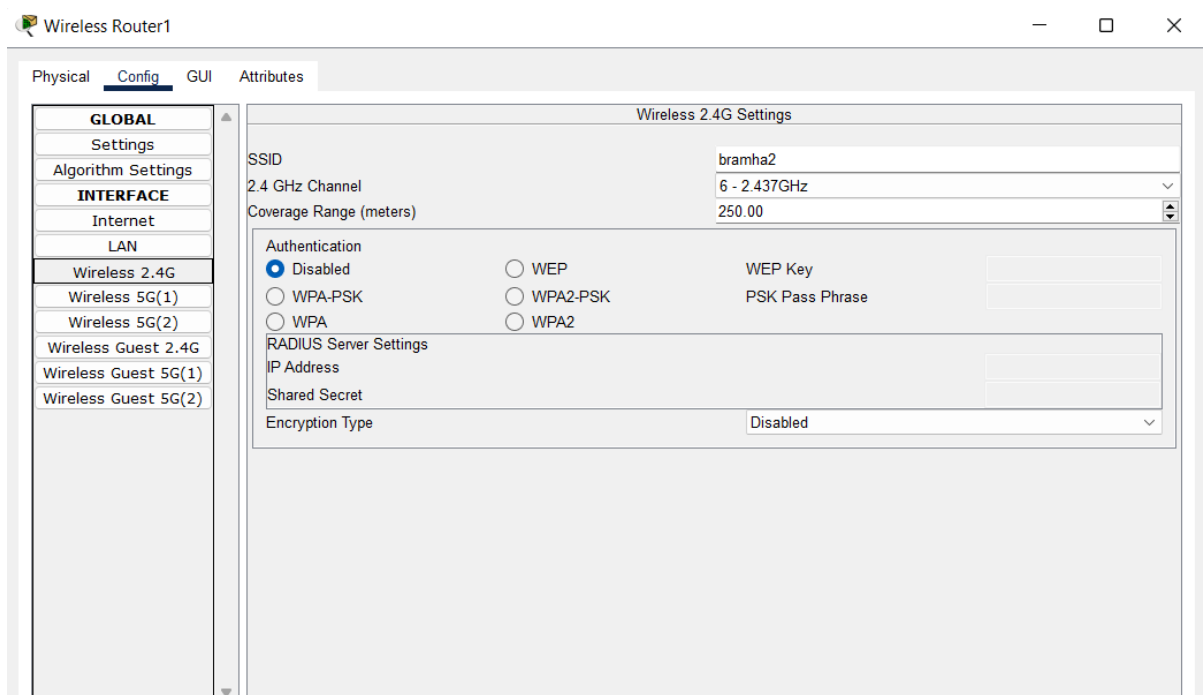
We have named wireless home router as bramha



And connected the wireless home router with a laptop



Similarly we have named another wireless home router as bramha2 and connected with the another laptop



Link Information

Connect

Profiles

Below is a list of available wireless networks. To search for more wireless networks, click the **Refresh** button. To view more information about a network, select the wireless network name. To connect to that network, click the **Connect** button below.

Wireless Network Name	CH	Signal
Default	1	46%
bramha	11	79%
bramha2	1	68%
Default	1	52%

Site Information

Wireless Mode

Infrastructure

Network Type

Mixed B/G/N

Radio Band

Auto

Security

Disable


MAC Address

0060.47CA.8806

Refresh

Connect

2.4GHz



Adapter is Active

Wireless-N Notebook Adapter

Wireless Network Monitor v1.0

Model No. WPC300N

Router – ISR 4321 config

Router0

Physical Config CLI Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

SWITCHING

VLAN Database

INTERFACE

GigabitEthernet0/0/0

GigabitEthernet0/0/1

GigabitEthernet0/1/0

GigabitEthernet0/1/1

GigabitEthernet0/1/2

GigabitEthernet0/1/3

GigabitEthernet0/0/0

Port Status

Bandwidth

Duplex

MAC Address

IP Configuration

IPv4 Address

Subnet Mask

Tx Ring Limit

1000 Mbps

100 Mbps

10 Mbps

On

Auto

Half Duplex

Full Duplex

Auto

0060.5C9B.1D01

10

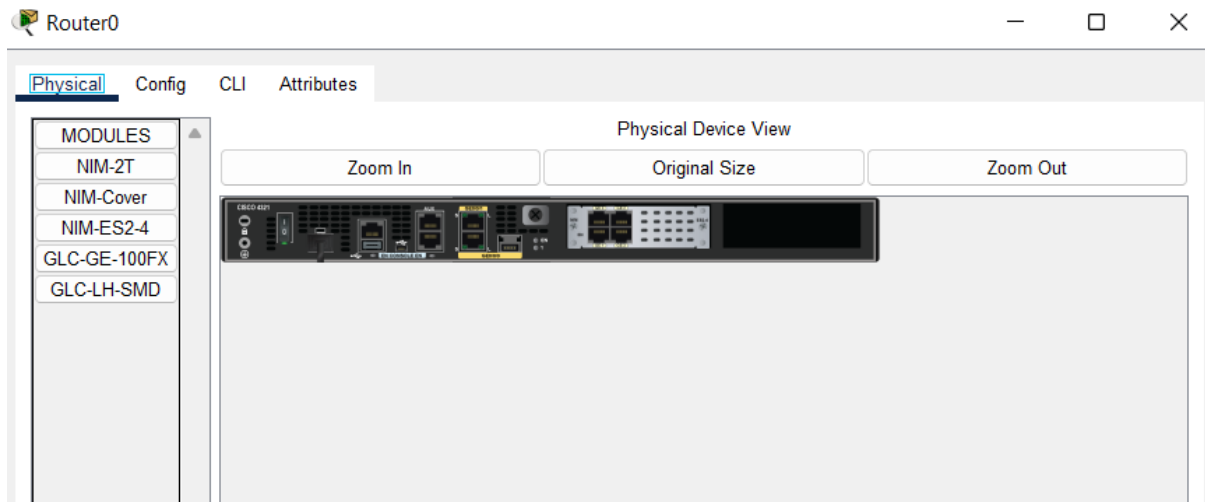
Equivalent IOS Commands

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1/1, changed state to up

Router>enable
Router#
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface GigabitEthernet0/0/0
Router(config-if)#
```

Top

We have added NIM-ES2-4 in the router in order to get 4 more ports for connections .



Before turning ON the port, the connection was not established indicated by red color.

