



PLATINUM JUBILEE
Celebrating 75 years of WCE & 20 years of Department



Walchand College of Engineering, Sangli

(Government Aided Autonomous Institute)

Department of Information Technology

Computer Networks Lab

EVEN SEMESTER AY 2021-22

Submitted by

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Batch: S2

Course Code: 5IT272

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Department of Information Technology

2021-22

Experiment Number: 8

Experiment Name: Configure Wi-Fi router in CISCO packet tracer using DHCP and Wireless Encryption Protocol (WEP) in the local network.

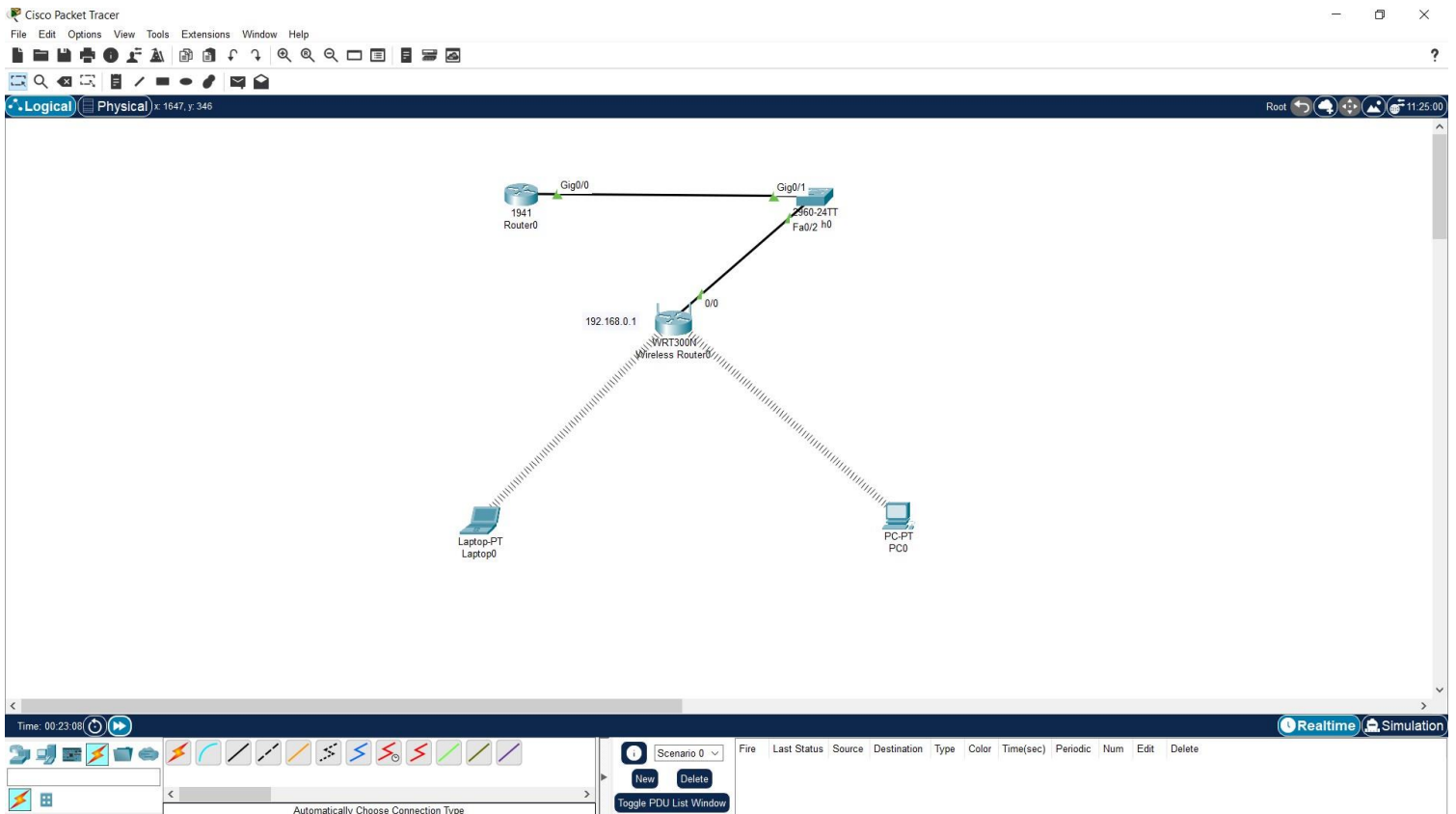
Contents:

Problem Statement : Configure Wi-Fi router in CISCO packet tracer using DHCP and Wireless Encryption Protocol (WEP) in the local network.

Platform : CISCO packet tracer

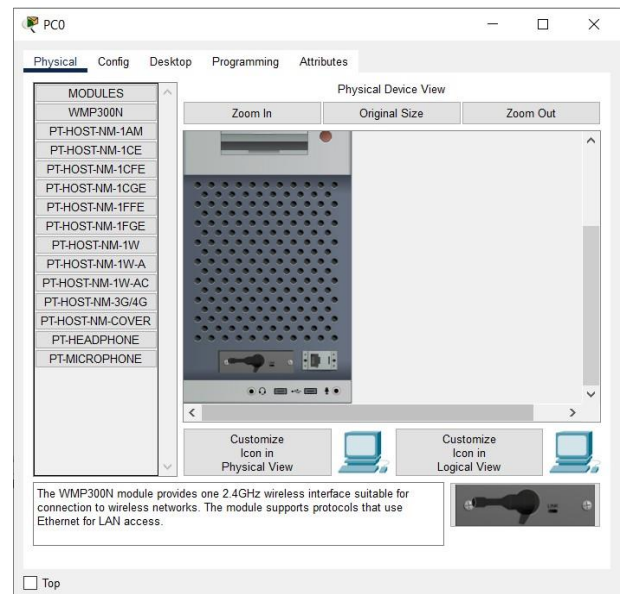
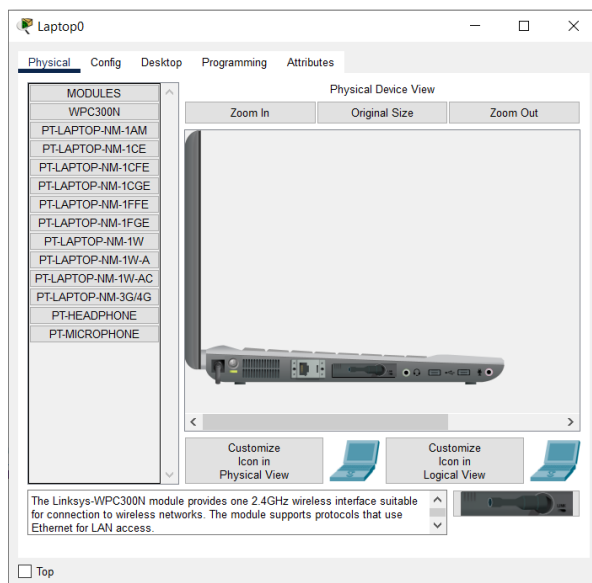
Devices Required : PC , Switch (2960-24TT), Router (1941) and Wireless Router (WRT 300N)

Design :



Implementation :

- i) Create the topology as shown in the above image.
- ii) After creating the topology add WPC300N to the laptop and WMP300N to the computer



iii) Dynamically give the IP addresses to the end devices using DHCP.

Laptop0

Physical Config **Desktop** Programming Attributes

IP Configuration X

Interface Wireless0

IP Configuration

☒ DHCP ☐ Static

IPv4 Address 192.168.0.101

Subnet Mask 255.255.255.0

Default Gateway 192.168.0.1

DNS Server 0.0.0.0

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address /

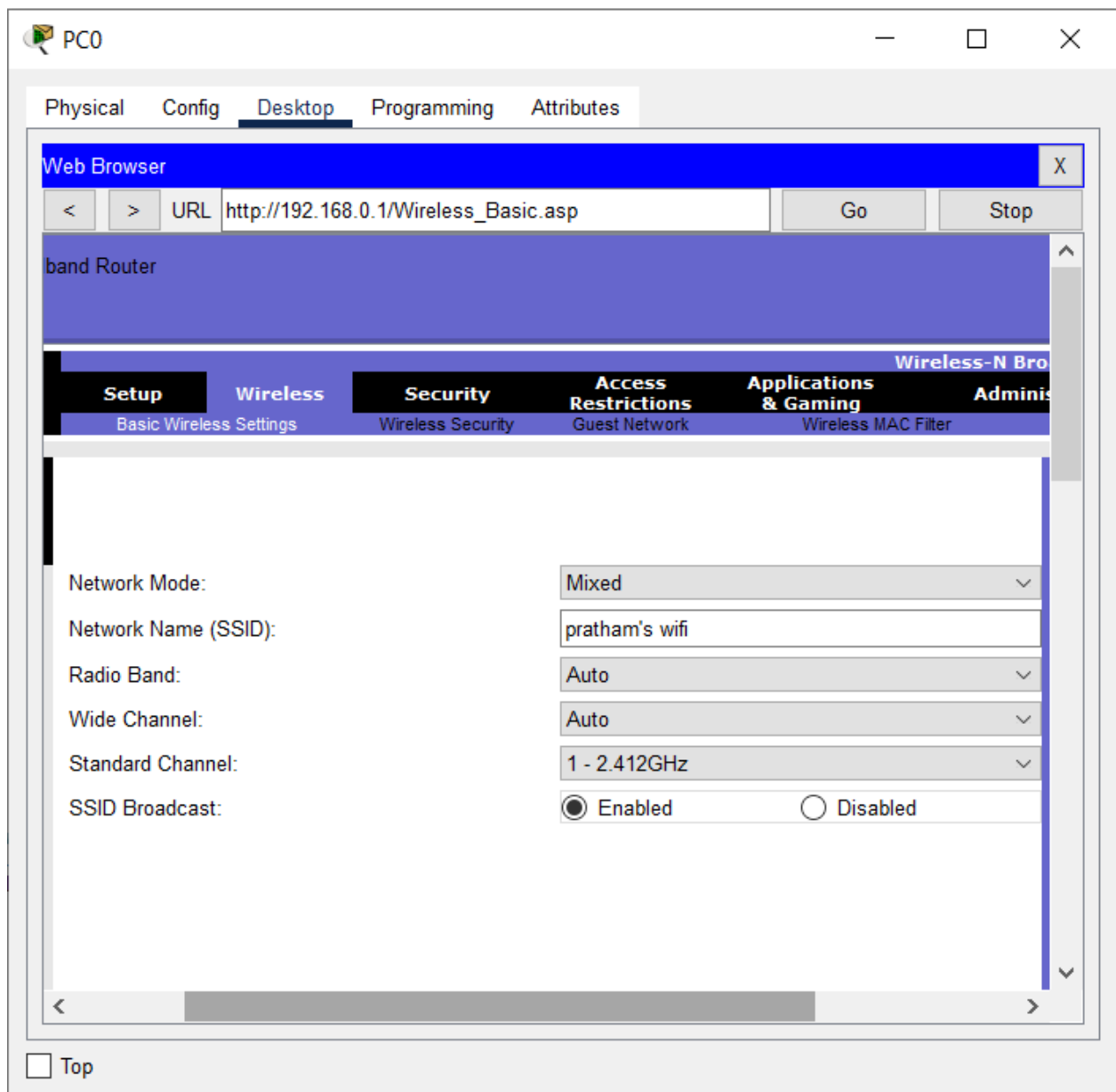
Link Local Address FE80::202:4AFF:FEEC:A1AA

Default Gateway

DNS Server

☐ Top

iv) Connect with the wifi using the web browser of the end devices and give SSID to the wifi.



v) Enter into the wifi and give the security key to it.

Wireless Router0

Physical Config GUI Attributes

GLOBAL

Settings

Algorithm Settings

INTERFACE

Internet

LAN

Wireless

Wireless Settings

SSID: pratham's wifi

2.4 GHz Channel: 1 - 2.412GHz

Coverage Range (meters): 250.00

Authentication:

☐ Disabled ☒ WEP ☐ WPA-PSK ☐ WPA2-PSK ☐ WPA ☐ WPA2

WEP Key: 0123456789

PSK Pass Phrase:

RADIUS Server Settings:

IP Address:

Shared Secret:

Encryption Type: 40/64-Bits (10 Hex digits)

☐ Top

vi) Connect the end devices with wifi by entering the key.

Laptop0

Physical

Config

Desktop

Programming

Attributes

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
pratham's wifi	1	100%

<div>

Site Information

Wireless Mode

Infrastructure

Network Type

Mixed B/G/N

Radio Band

Auto

Security

WEP


MAC Address

0006.2A46.D206

Refresh

Connect

2.4GHz



Adapter is Active

Wireless-N Notebook Adapter

Wireless Network Monitor v1.0

Model No. WPC300N

☐ Top

Results: Wifi router uses wireless medium to transmit data, end users must have wifi modules in them to connect with the wifi.

Dr. P. K. Kharat

(Course Teacher)