



School: Campus:
Academic Year: Subject Name: Subject Code:
Semester: Program: Branch: Specialization:
Date:

Applied and Action Learning

(Learning by Doing and Discovery)

Name of the Experiment :

Coding Phase: Pseudo Code / Flow Chart / Algorithm

- **Device Placement:** Add Router, AP-PT, and 2 Laptops.
- **Connections:** Connect Router to AP-PT via Ethernet; Laptops connect wirelessly.
- **Router Configuration:**
 - Assign IP (e.g., 192.168.1.1).
 - Configure DHCP pool with IP range.
- **AP-PT Configuration:**
 - Set SSID and WPA2-PSK password.
 - Set IP mode to DHCP.
- **Laptop Configuration:**
 - Set IP mode to DHCP.
- **Testing:**
 - Use ping <IP> in Command Prompt for communication check.
 - Simulation Mode (Optional): Capture/Forward packets to observe message flow.

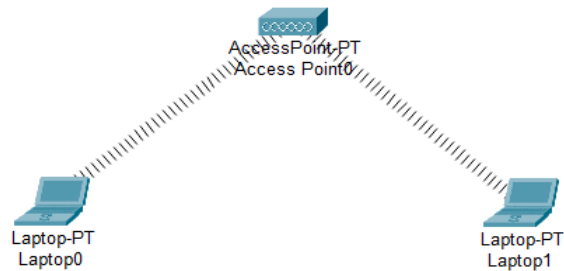
Testing Phase: Compilation of Code (error detection)

There is no error.

Implementation Phase: Final Output(no error)

Add the following devices to the workspace:

- **1 Access Point (AP-PT)**
- **2 Laptops**



Connect the **Laptops** wirelessly to the **AP-PT** by setting their **Wi-Fi mode**.

The screenshot shows the 'Config' tab for Port 1. The 'Port Status' is 'On'. The 'SSID' is 'sasport1'. The '2.4 GHz Channel' is '6'. The 'Coverage Range (meters)' is '140.00'. Under 'Authentication', 'WPA-PSK' is selected. The 'WEP Key' is 'sasmita1234'. The 'PSK Pass Phrase' is 'sasmita1234'. The 'User ID' is empty. The 'Password' is empty. The 'Encryption Type' is 'AES'.

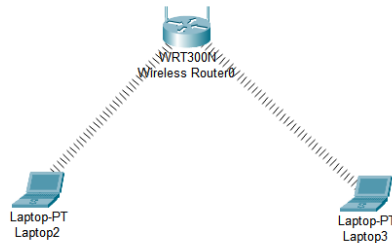
- Go to the **GUI** tab in the AP-PT.
- Set the **SSID** (e.g., WirelessNet).
- Set the **Security Mode** to **WPA2-PSK** with a password (e.g., cisco123).
- In the **Setup Tab**, set the **IP Address Mode** to **DHCP** to receive an IP from the router.

The screenshot shows the 'Desktop' tab for IP Configuration. The 'Interface' is 'Wireless0'. Under 'IP Configuration', 'Static' is selected. The 'IPv4 Address' is '192.168.10.2'. The 'Subnet Mask' is '255.255.255.0'. The 'Default Gateway' is '0.0.0.0'. The 'DNS Server' is '0.0.0.0'.

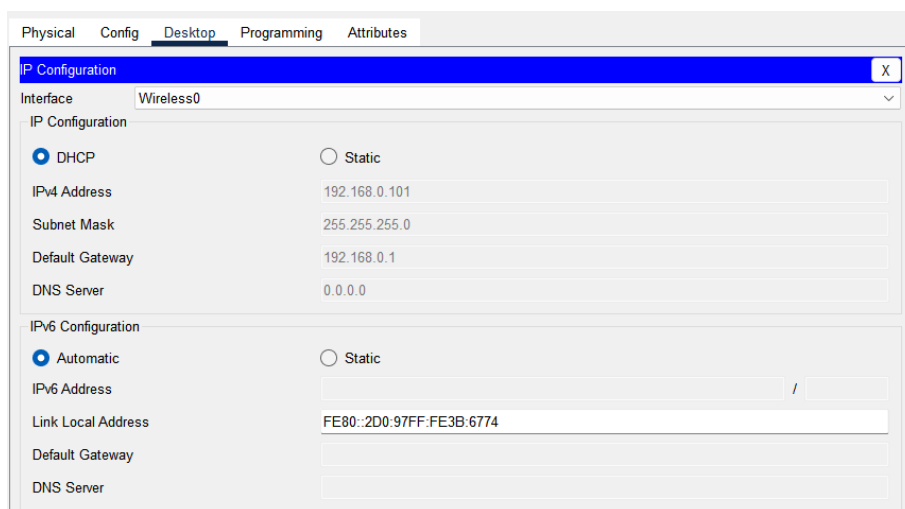
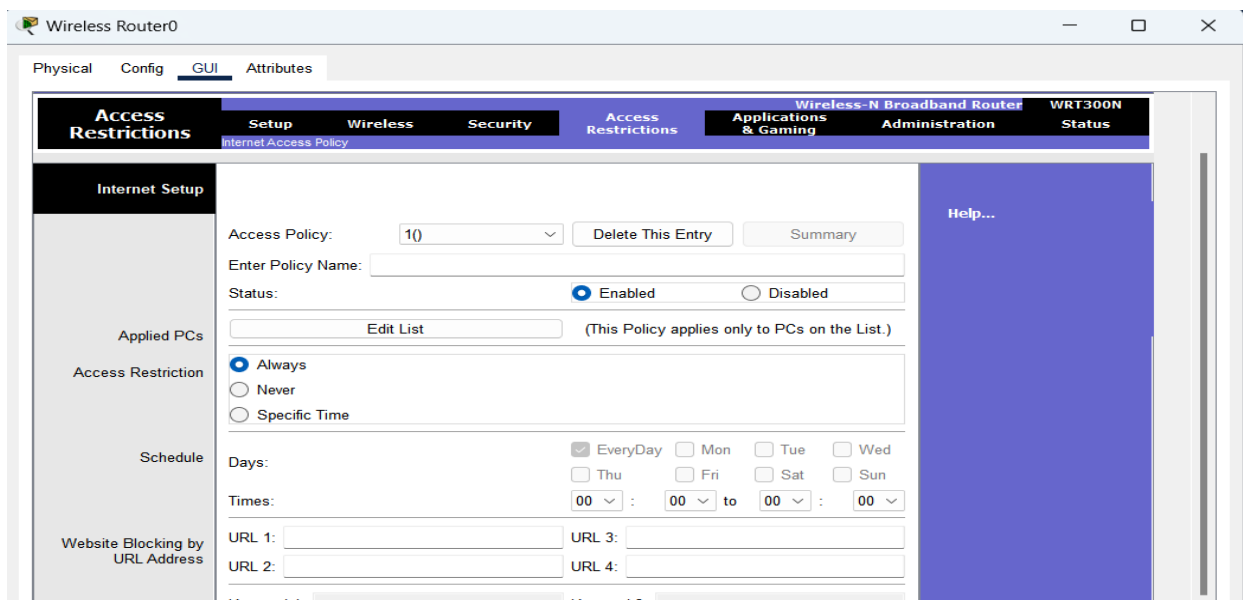
Implementation Phase: Final Output(no error)

Add the following devices to the workspace:

- 1 WRT300N
- 2 Laptops



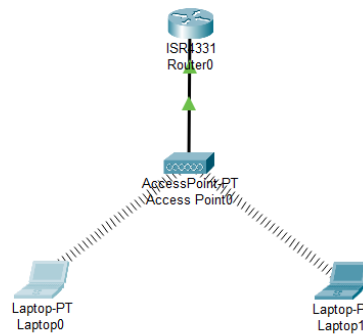
Connect the **Laptops** wirelessly to the **AP-PT** by setting their **Wi-Fi mode**.



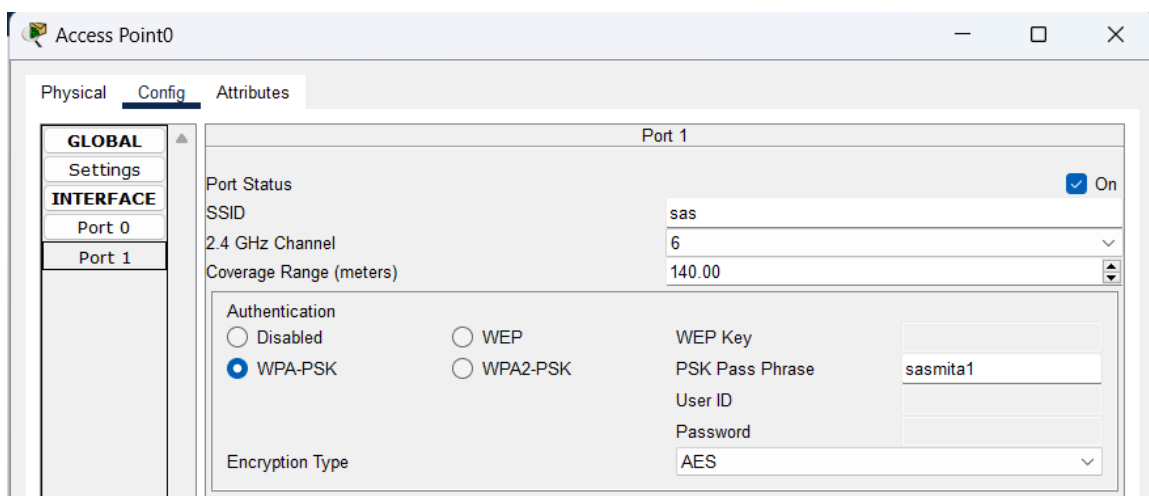
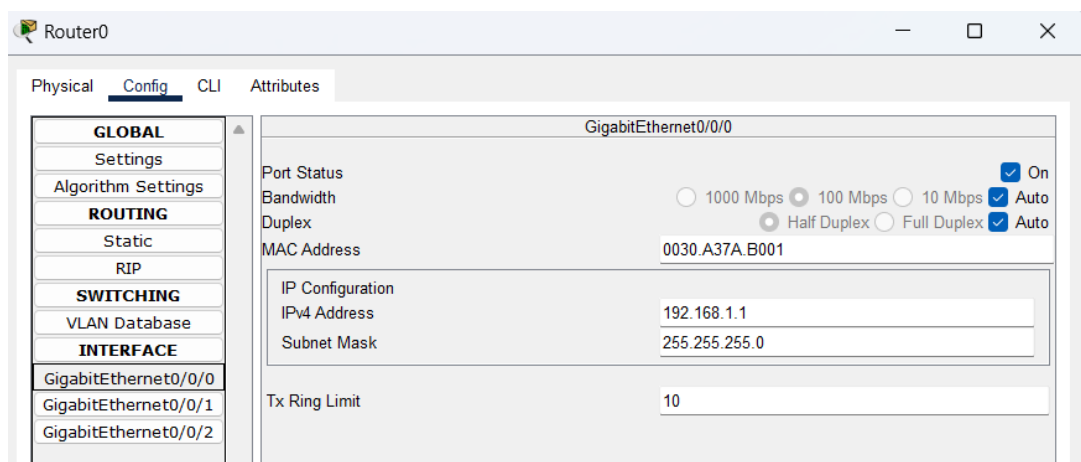
Implementation Phase: Final Output(no error)

Add the following devices to the workspace:

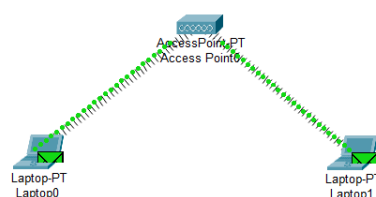
- 1 Access Point (AP-PT)
- 1 Router
- Server
- 2 Laptops



Connect the **Laptops** wirelessly to the **AP-PT** by setting their **Wi-Fi mode**.



Start the simulation and message passing



Physical Config **Desktop** Programming Attributes

Web Browser X

< > URL Go Stop

Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
Laptop0	Laptop1	ICMP		0.000	N	0	(edit)	
Laptop0	Router0	ICMP		0.000	N	1	(edit)	
Laptop0	Laptop1	ICMP		0.000	N	2	(edit)	

Fire

Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num
Successful	Laptop0	Laptop1	ICMP		0.000	N	0

ASSESSMENT

Rubrics	Full Mark	Marks Obtained	Remarks
Concept	10		
Planning and Execution/ Practical Simulation/ Programming	10		
Result and Interpretation	10		
Record of Applied and Action Learning	10		
Viva	10		
Total	50		

Signature of the Student:

Name :

Regn. No. :

Signature of the Faculty:

Page No.....

