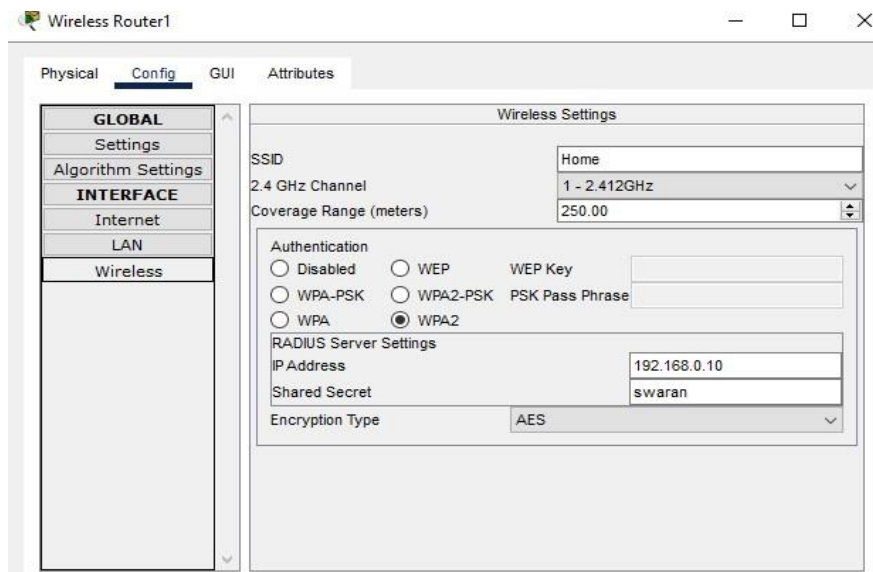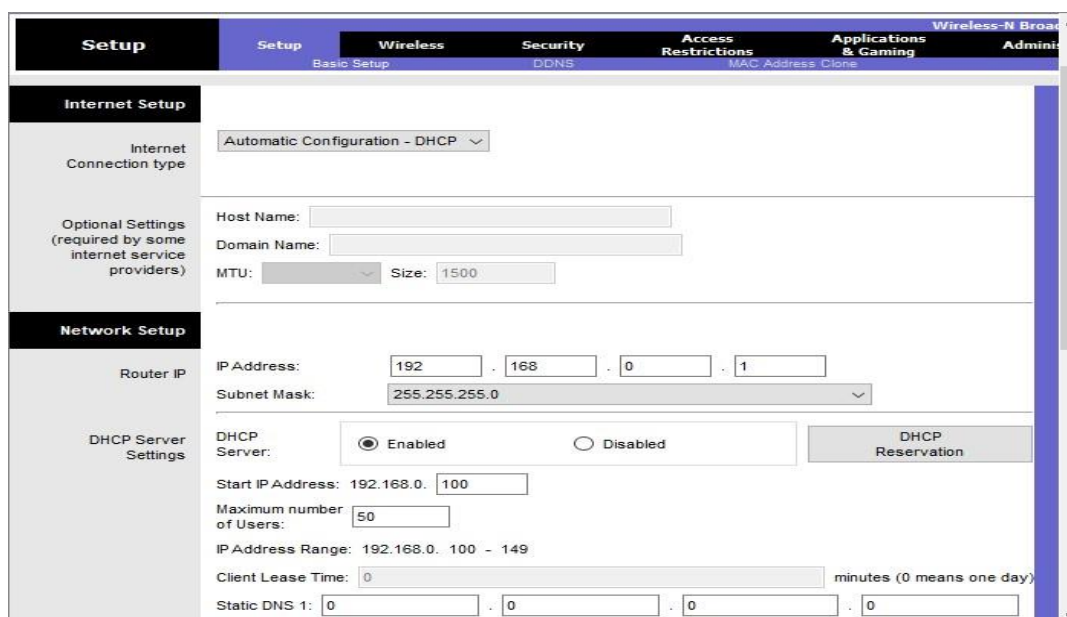**Experiment 6: Implementation of Smart home using Cisco packet tracer and verify the configuration.**

Step 1: Add devices WRT300N Wireless Router,2960-24TTswitch,Server-pt Laptop-PT.

Step 2: open router got to config tab make changes shown in image

wireless

GUI

wireless security

step 3:open server and go to config tab

Physical   Config   Services   Desktop   Programming   Attributes

GLOBAL	
Settings	
Algorithm Settings	
INTERFACE	
FastEthernet0	

FastEthernet0

Port Status   ☑ On
Bandwidth   ○ 100 Mbps ○ 10 Mbps ☑ Auto
Duplex   ○ Half Duplex ○ Full Duplex ☑ Auto
MAC Address   00E0.8FEE.84CD

IP Configuration
○ DHCP
◉ Static
IPv4 Address   192.168.0.10
Subnet Mask   255.255.255.0

IPv6 Configuration
○ Automatic
◉ Static
IPv6 Address
Link Local Address: FE80::2E0:8FFF:FEEE:84CD

**AAA
step 4:open
laptop**

Physical   Config   Services   Desktop   Programming   Attributes

SERVICES
HTTP
DHCP
DHCPv6
TFTP
DNS
SYSLOG
AAA
NTP
EMAIL
FTP
IoT
VM Management
Radius EAP

AAA

Service   ◉ On ○ Off   Radius Port   1645

Network Configuration
Client Name [   ]   Client IP [   ]
Secret [   ]   ServerType [Radius ▼]

	Client Name	Client IP	Server Type	Key	
1	Home	192.168.0.1	Radius	swaran	Add
					Save
					Remove

User Setup
Username [   ]   Password [   ]

	Username	Password	
1	cam	cam	Add
2	door	door	
3	fan	fan	Save
4	garage	garage	
5	light	light	Remove
6	window	window	

Global Settings

Display Name: cilent

Interfaces: FastEthernet0

Gateway/DNS IPv4

- ● DHCP
- ○ Static

Default Gateway: 192.168.0.1

DNS Server: 0.0.0.0

FastEthernet0

Port Status: ☑ On

Bandwidth: ○ 100 Mbps ○ 10 Mbps ☑ Auto

Duplex: ○ Half Duplex ● Full Duplex ☑ Auto

MAC Address: 0090.0CD1.12E9

IP Configuration

- ● DHCP
- ○ Static

IPv4 Address: 192.168.0.112

Subnet Mask: 255.255.255.0

on pc go to desktop and open iot monitor

Physical   Config   Desktop   Programming   Attributes

IoT Monitor   X

IoT Server Address: 192.168.0.1

User Name: mannan

Password: mannan

Login

step 5: add devices like light,ceiling fan,window,door,garage door,webcam select a device go to config wireless setting and update similarly update in server AAA tab.

In global setting update

Display Name	IoT2
Serial Number	PTT081078Q2-
Interfaces	Wireless0

Gateway/DNS IPv4

- ◉ DHCP
- ○ Static

Default Gateway	192.168.0.1
DNS Server	0.0.0.0

Gateway/DNS IPv6

- ◉ Automatic
- ○ Static

Default Gateway	
DNS Server	

IoT Server

- ○ None
- ○ Home Gateway
- ◉ Remote Server

Server Address	192.168.0.10
User Name	swaran
Password	swaran