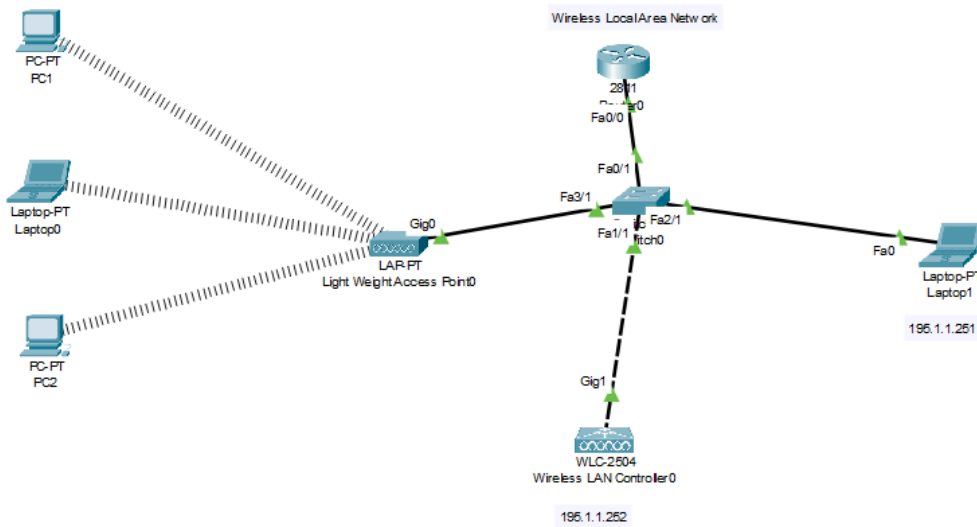


WLAN Setup:

A WLAN (Wireless Local Area Network) is a type of local area network that uses wireless communication (radio waves, typically Wi-Fi) instead of cables to connect devices such as laptops, smartphones, printers, and IoT devices within a limited area (like a home, office, school, or campus).



Wireless Devices:

1. WLAN Controller 2504
2. LAP PT
3. Management Laptop
4. Switch

Router setup :

enable

config t

hostname R1

int fa 0/0

IP address 195.1.1.250 255.255.255.0

no sh

exit

```
Router>en
Router#show ip int brief
Interface                IP-Address      OK? Method Status      Protocol
FastEthernet0/0          195.1.1.250     YES manual up          up
FastEthernet0/1          unassigned      YES unset   administratively down down
Vlan1                    unassigned      YES unset   administratively down down
Router#
```

Router as DHCP:

config t

ip dhcp pool A (A is just a name)

network 195.1.1.0 255.255.255.0 (0 to 255 range to share ips)

dedult-router 195.1.1.250 (gateway, jis interface par ya ip hai ussay is subnet mask mai sai IP dena)

dns-server 8.8.8.8

exit

Exclude IPs:

config t

ip dhcp excluded-address 195.1.1.240 195.1.1.254 (ya ip range sai nikal kar humnay reserve kiya hain)

WLC:

WLC→ config→ management

ip add 195.1.1.252

subnet default

gateway 195.1.1.250

DNS 8.8.8.8

Management Laptop

IP address 195.1.1251

Gateway 195.1.1.250

DNS server 8.8.8.8

ping from PC to WLC*

Physical Config **Desktop** Programming Attributes

IP Configuration X

Interface FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 195.1.1.251

Subnet Mask 255.255.255.0

Default Gateway 195.1.1.250

DNS Server 8.8.8.8

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address /

Link Local Address FE80::201:64FF:FEC8:19BD

Default Gateway

DNS Server

802.1X

☐ Use 802.1X Security

Authentication MD5

Username

Password

Web browser on Management Laptop:

It has default IP 195.1.1.252

create admin acc

user: Admin

pass: Admin123

c.pass:Admin123

start

System name: Corvit

Company name: corvit students

Management IP 195.1.1.252

SUBNET 255.255.255.0

GATEWAY 195.1.1.250

Management VLAN ID 0 (let it zero for automatic config)

next

network name: network (it is SSID)

Security WAP2 personal

Passphrase:

same pass:

next

virtual ip address= dont change

next

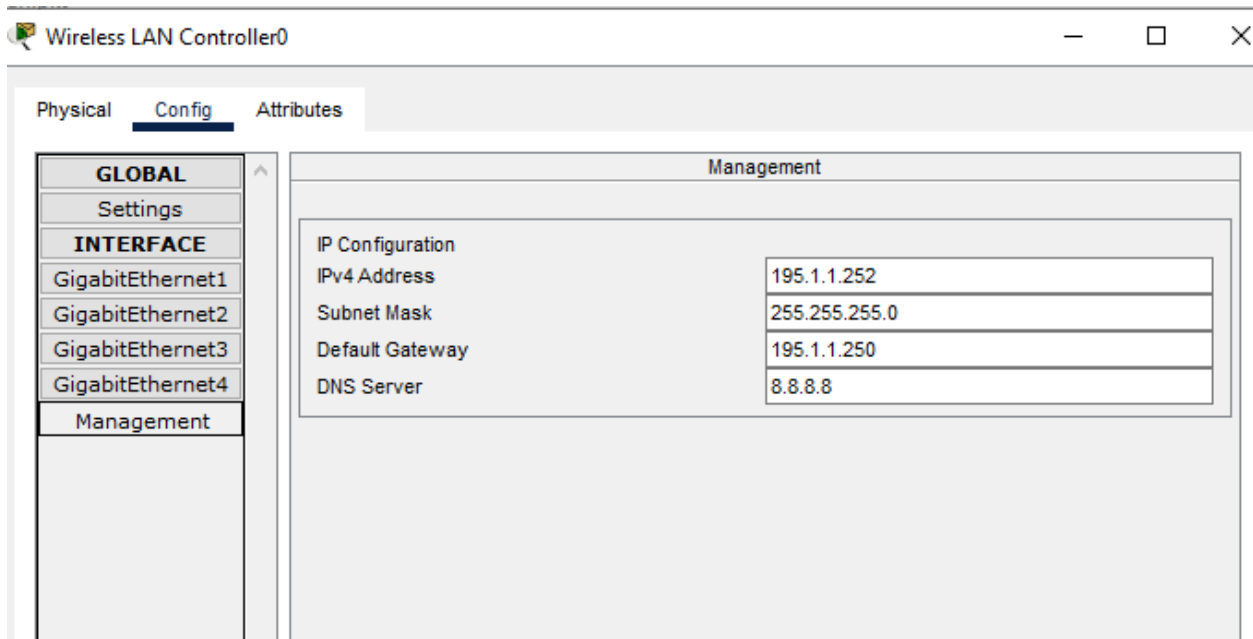
apply

ok

close window

cmd

ping 195.1.1.252



LAP_PT

just plug in the wire and next
off

PC

off → card remove → wifi card → on

physical

config

wireless

wpa2 personal WPA2/PSK

SSID: network

paraphrase: @beer@6K

IP Config

DHCP

Static

Laptop

GLOBAL	Wireless0	
Settings		
Algorithm Settings		
INTERFACE		
Wireless0		
Bluetooth		

Port Status	<input checked="" type="checkbox"/> On	
Bandwidth	300 Mbps	
MAC Address	0030.F292.7601	
SSID	network	

Authentication		
<input type="radio"/> Disabled	<input type="radio"/> WEP	WEP Key
<input type="radio"/> WPA-PSK	<input checked="" type="radio"/> WPA2-PSK	PSK Pass Phrase
<input type="radio"/> WPA	<input type="radio"/> WPA2	User ID
<input type="radio"/> 802.1X	Method:	Password
		MD5
		User Name
		Password
Encryption Type		
AES		

IP Configuration	
<input checked="" type="radio"/> DHCP	
<input type="radio"/> Static	
IPv4 Address	195.1.1.5
Subnet Mask	255.255.255.0

IPv6 Configuration	
<input checked="" type="radio"/> Automatic	
<input type="radio"/> Static	
IPv6 Address	
Link Local Address:	FE80::230:F2FF:FE92:7601