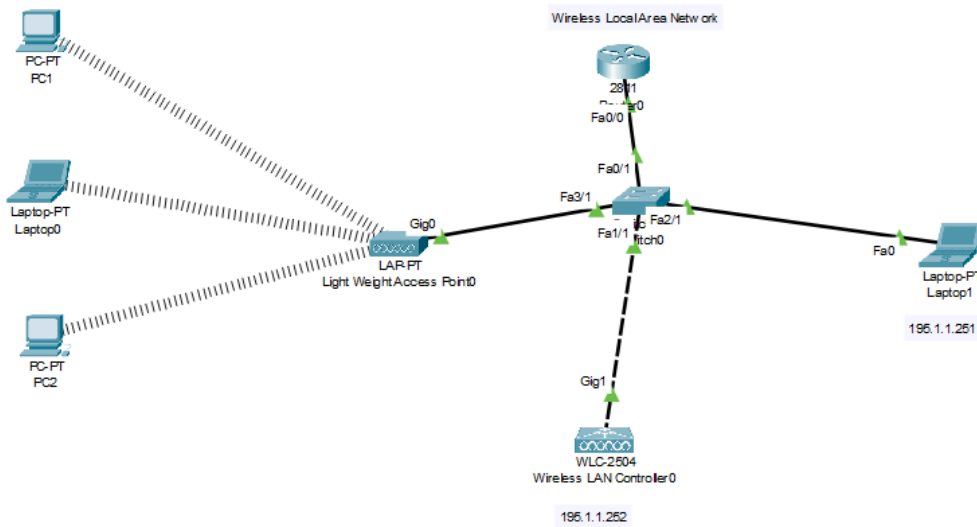


# WLAN Setup:

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: @beer@6K

same pass: @beer@6K

next

virtual ip address= dont change

next

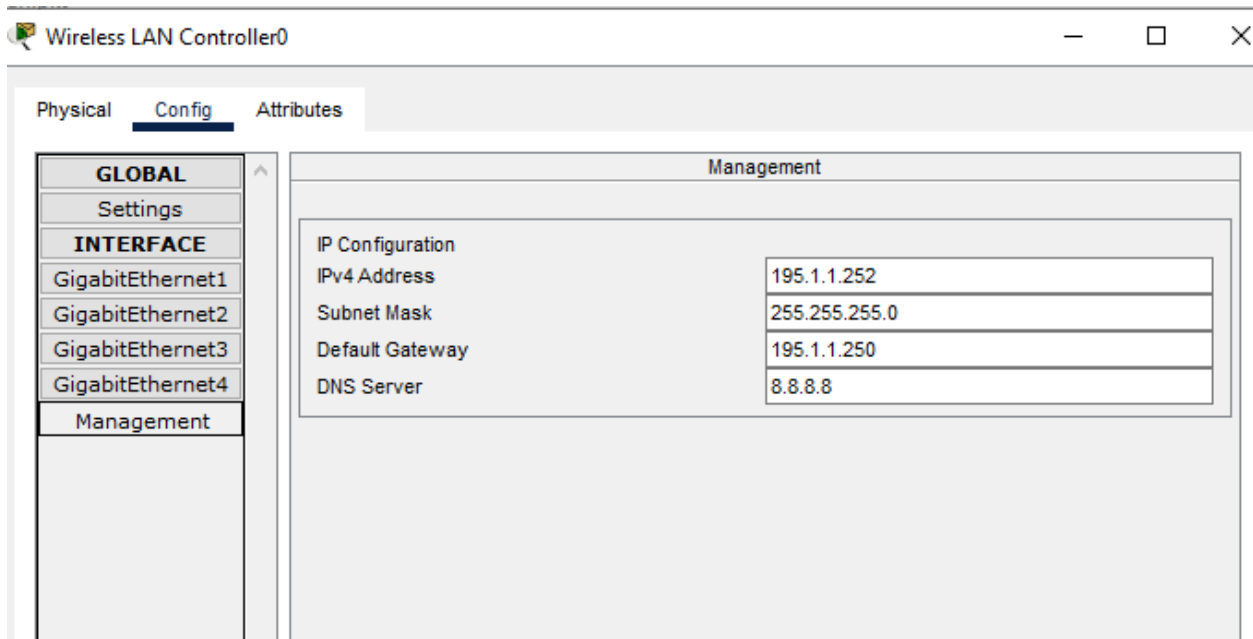
apply

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

Physical	Config	Desktop	Programming	Attributes
<div> <div> <div>GLOBAL</div> <div>Settings</div> <div>Algorithm Settings</div> <div>INTERFACE</div> <div>Wireless0</div> <div>Bluetooth</div> </div> <div> <div>Wireless0</div> </div> </div>				
<div> <div>Port Status</div> <div> <input checked="" type="checkbox"/> On </div> </div>				
<div> <div>Bandwidth</div> <div>300 Mbps</div> </div>				
<div> <div>MAC Address</div> <div>0030.F292.7601</div> </div>				
<div> <div>SSID</div> <div>network</div> </div>				
<div> <div>Authentication</div> <div> <div> <input type="radio"/> Disabled <input type="radio"/> WEP </div> <div> <input type="radio"/> WPA-PSK <input checked="" type="radio"/> WPA2-PSK </div> <div> <input type="radio"/> WPA <input type="radio"/> WPA2 </div> <div> <input type="radio"/> 802.1X <div>Method:</div> </div> </div> <div> <div>WEP Key</div> <div>PSK Pass Phrase</div> <div>User ID</div> <div>Password</div> <div>MD5</div> <div>User Name</div> <div>Password</div> </div> <div> <div>@beer@6K</div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> </div> </div>				
<div> <div>Encryption Type</div> <div>AES</div> </div>				
<div> <div>IP Configuration</div> <div> <input checked="" type="radio"/> DHCP <input type="radio"/> Static </div> <div> <div>IPv4 Address</div> <div>195.1.1.5</div> </div> <div> <div>Subnet Mask</div> <div>255.255.255.0</div> </div> </div>				
<div> <div>IPv6 Configuration</div> <div> <input checked="" type="radio"/> Automatic <input type="radio"/> Static </div> <div> <div>IPv6 Address</div> <div></div> </div> <div> <div>Link Local Address:</div> <div>FE80::230:F2FF:FE92:7601</div> </div> </div>				