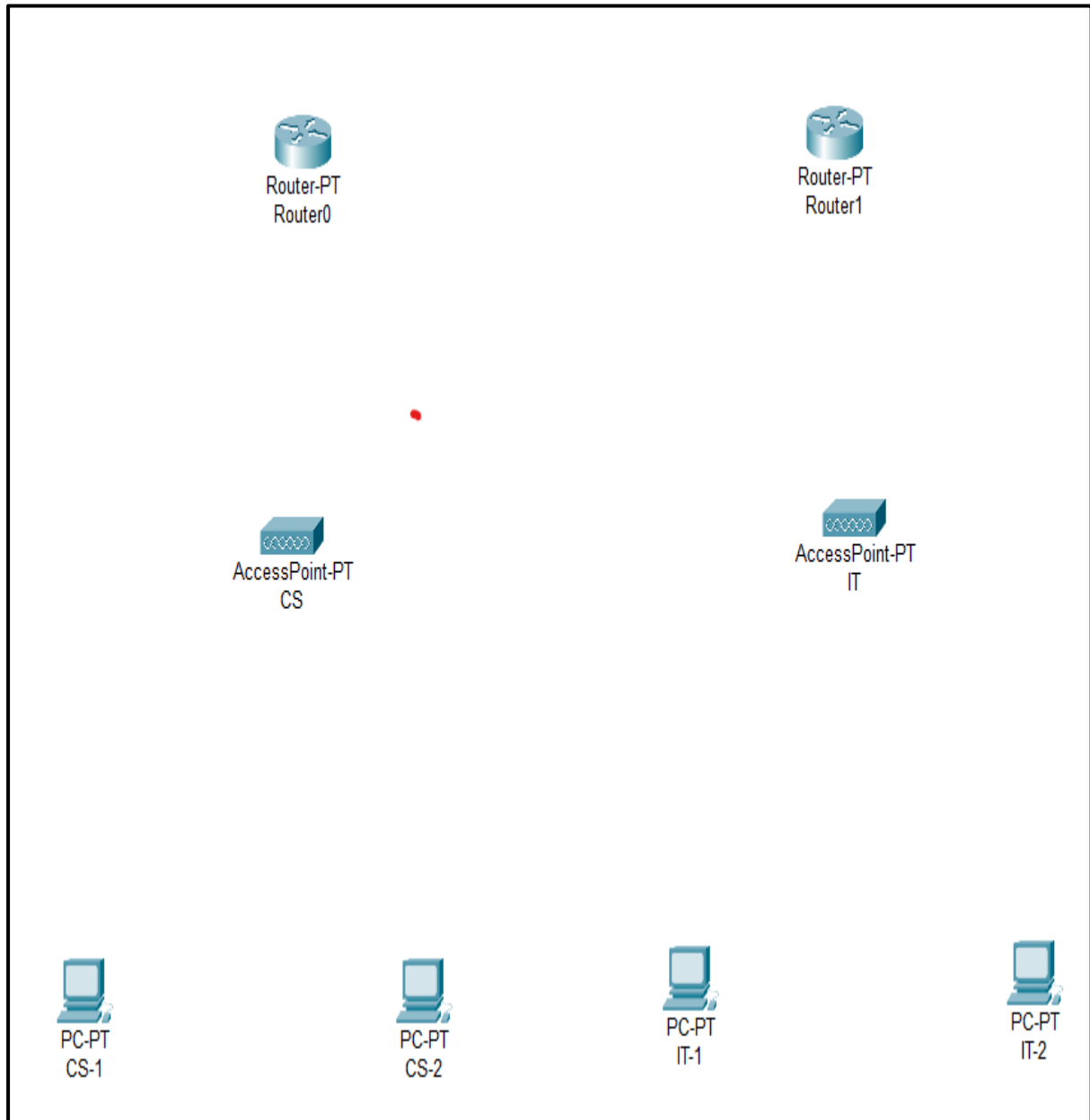


Practical No:
Aim: Configuring Basic AP Settings.

Step1: Take components like this and arrange in this manner.



Step 2: Click on CS > Config > Port1 > Change SSID to **CS** and Select Authentication as WPA2-PSK enter password as **Ciscopacket1**

The screenshot shows the configuration window for a device named 'CS'. The 'Config' tab is active, and 'Port 1' is selected under the 'INTERFACE' section. The 'Port Status' is 'On'. The 'SSID' is set to 'CS', the '2.4 GHz Channel' is '6', and the 'Coverage Range (meters)' is '140.00'. Under 'Authentication', 'WPA2-PSK' is selected. The 'PSK Pass Phrase' is 'Ciscopacket1', and the 'Encryption Type' is 'AES'. A 'Top' button is at the bottom left.

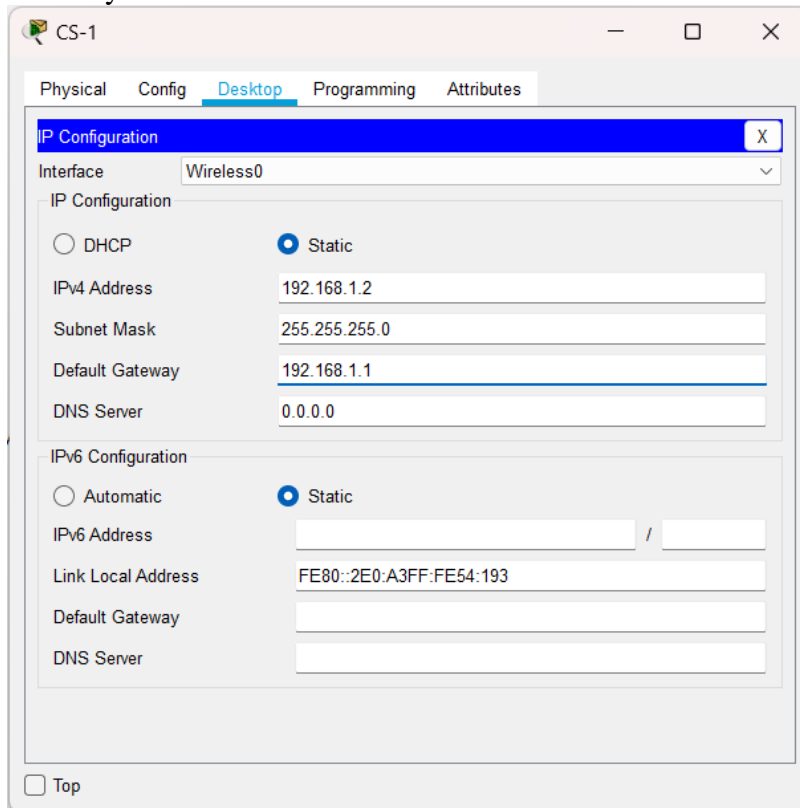
Port 1	
Port Status	<input checked="" type="checkbox"/> On
SSID	CS
2.4 GHz Channel	6
Coverage Range (meters)	140.00
Authentication	
<input type="radio"/> Disabled	<input type="radio"/> WEP
<input type="radio"/> WPA-PSK	<input checked="" type="radio"/> WPA2-PSK
WEP Key	
PSK Pass Phrase	Ciscopacket1
User ID	
Password	
Encryption Type	AES

Step 3: Click on IT > Config > Port1 > Change SSID to **IT** and Select Authentication as WPA2-PSK enter password as **Ciscopacket2**

The screenshot shows the configuration window for a device named 'IT'. The 'Config' tab is active, and 'Port 1' is selected under the 'INTERFACE' section. The 'Port Status' is 'On'. The 'SSID' is set to 'IT', the '2.4 GHz Channel' is '6', and the 'Coverage Range (meters)' is '140.00'. Under 'Authentication', 'WPA2-PSK' is selected. The 'PSK Pass Phrase' is 'Ciscopacket2', and the 'Encryption Type' is 'AES'. A 'Top' button is at the bottom left.

Port 1	
Port Status	<input checked="" type="checkbox"/> On
SSID	IT
2.4 GHz Channel	6
Coverage Range (meters)	140.00
Authentication	
<input type="radio"/> Disabled	<input type="radio"/> WEP
<input type="radio"/> WPA-PSK	<input checked="" type="radio"/> WPA2-PSK
WEP Key	
PSK Pass Phrase	Ciscopacket2
User ID	
Password	
Encryption Type	AES

Step 4: Click on CS-1 > Desktop > IP Configuration > Set IPv4 Address and Default Gateway.

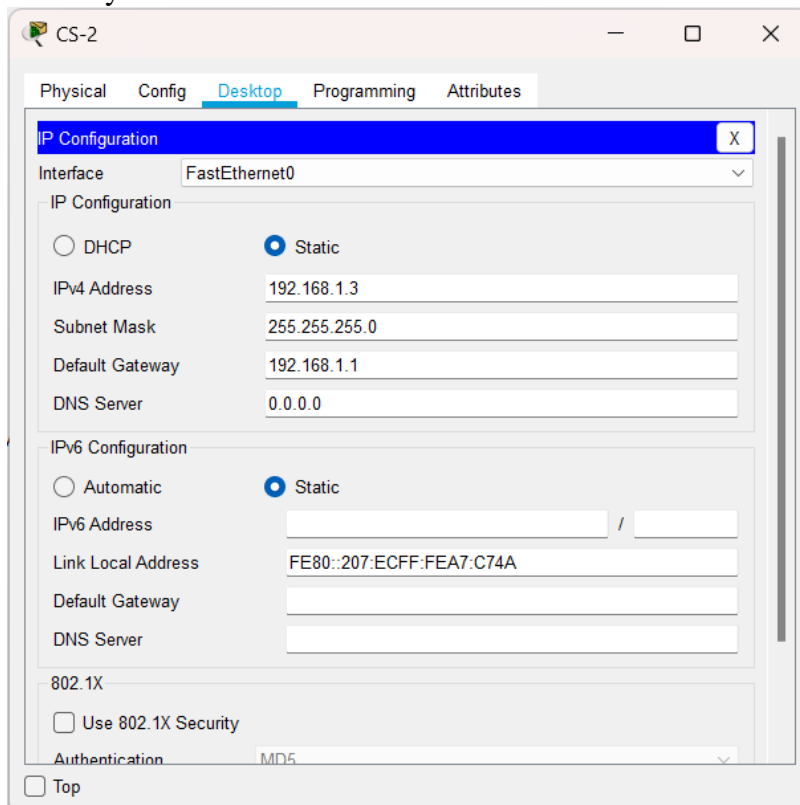


The screenshot shows the 'IP Configuration' window for 'CS-1'. The 'Desktop' tab is selected. The 'Interface' is 'Wireless0'. Under 'IP Configuration', 'Static' is selected. The IPv4 Address is '192.168.1.2', Subnet Mask is '255.255.255.0', Default Gateway is '192.168.1.1', and DNS Server is '0.0.0.0'. Under 'IPv6 Configuration', 'Static' is selected. The IPv6 Address is empty, Link Local Address is 'FE80::2E0:A3FF:FE54:193', Default Gateway is empty, and DNS Server is empty. A 'Top' button is at the bottom left.

IP Configuration	
Interface	Wireless0
IP Configuration	
<input type="radio"/> DHCP	<input checked="" type="radio"/> Static
IPv4 Address	192.168.1.2
Subnet Mask	255.255.255.0
Default Gateway	192.168.1.1
DNS Server	0.0.0.0
IPv6 Configuration	
<input type="radio"/> Automatic	<input checked="" type="radio"/> Static
IPv6 Address	
Link Local Address	FE80::2E0:A3FF:FE54:193
Default Gateway	
DNS Server	

☐ Top

Step 5: Click on CS-2 > Desktop > IP Configuration > Set IPv4 Address and Default Gateway.



The screenshot shows the 'IP Configuration' window for 'CS-2'. The 'Desktop' tab is selected. The 'Interface' is 'FastEthernet0'. Under 'IP Configuration', 'Static' is selected. The IPv4 Address is '192.168.1.3', Subnet Mask is '255.255.255.0', Default Gateway is '192.168.1.1', and DNS Server is '0.0.0.0'. Under 'IPv6 Configuration', 'Static' is selected. The IPv6 Address is empty, Link Local Address is 'FE80::207:ECFF:FEA7:C74A', Default Gateway is empty, and DNS Server is empty. There is an '802.1X' section with 'Use 802.1X Security' unchecked and 'Authentication' set to 'MD5'. A 'Top' button is at the bottom left.

IP Configuration	
Interface	FastEthernet0
IP Configuration	
<input type="radio"/> DHCP	<input checked="" type="radio"/> Static
IPv4 Address	192.168.1.3
Subnet Mask	255.255.255.0
Default Gateway	192.168.1.1
DNS Server	0.0.0.0
IPv6 Configuration	
<input type="radio"/> Automatic	<input checked="" type="radio"/> Static
IPv6 Address	
Link Local Address	FE80::207:ECFF:FEA7:C74A
Default Gateway	
DNS Server	
802.1X	
<input type="checkbox"/> Use 802.1X Security	
Authentication	MD5

☐ Top

Step 6: Click on IT-1 > Desktop > IP Configuration > Set IPv4 Address and Default Gateway.

IT-1

Physical Config **Desktop** Programming Attributes

IP Configuration [X]

Interface: FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address: 171.16.10.2

Subnet Mask: 255.255.0.0

Default Gateway: 171.16.10.1

DNS Server: 0.0.0.0

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address: /

Link Local Address: FE80::250:FFF:FEE5:8658

Default Gateway:

DNS Server:

802.1X

☐ Use 802.1X Security

Authentication: MD5

☐ Top

Step 7: Click on IT-2 > Desktop > IP Configuration > Set IPv4 Address and Default Gateway.

IT-2

Physical Config **Desktop** Programming Attributes

IP Configuration [X]

Interface: FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address: 171.16.10.3

Subnet Mask: 255.255.0.0

Default Gateway: 171.16.10.1

DNS Server: 0.0.0.0

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address: /

Link Local Address: FE80::20A:41FF:FE01:AA53

Default Gateway:

DNS Server:

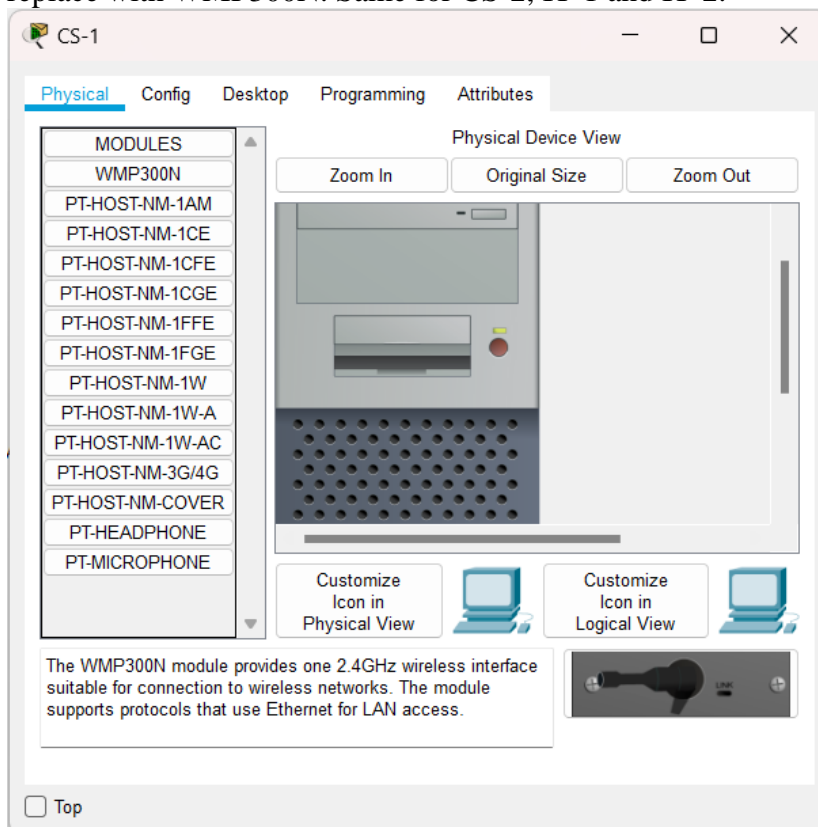
802.1X

☐ Use 802.1X Security

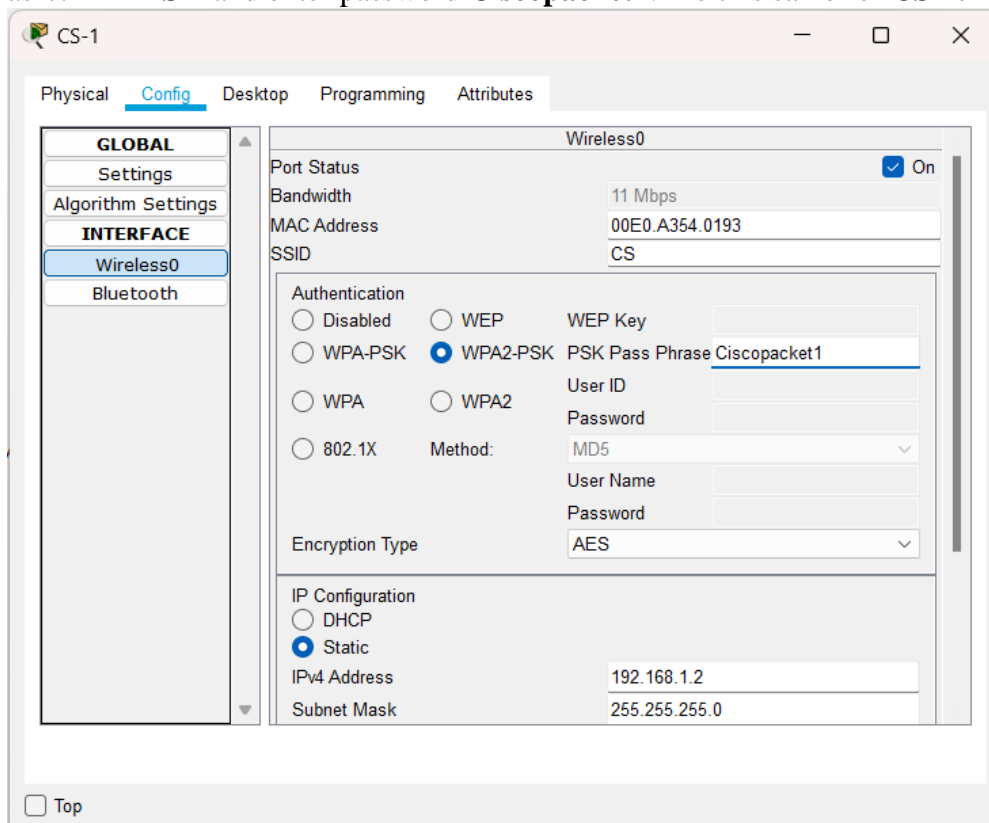
Authentication: MD5

☐ Top

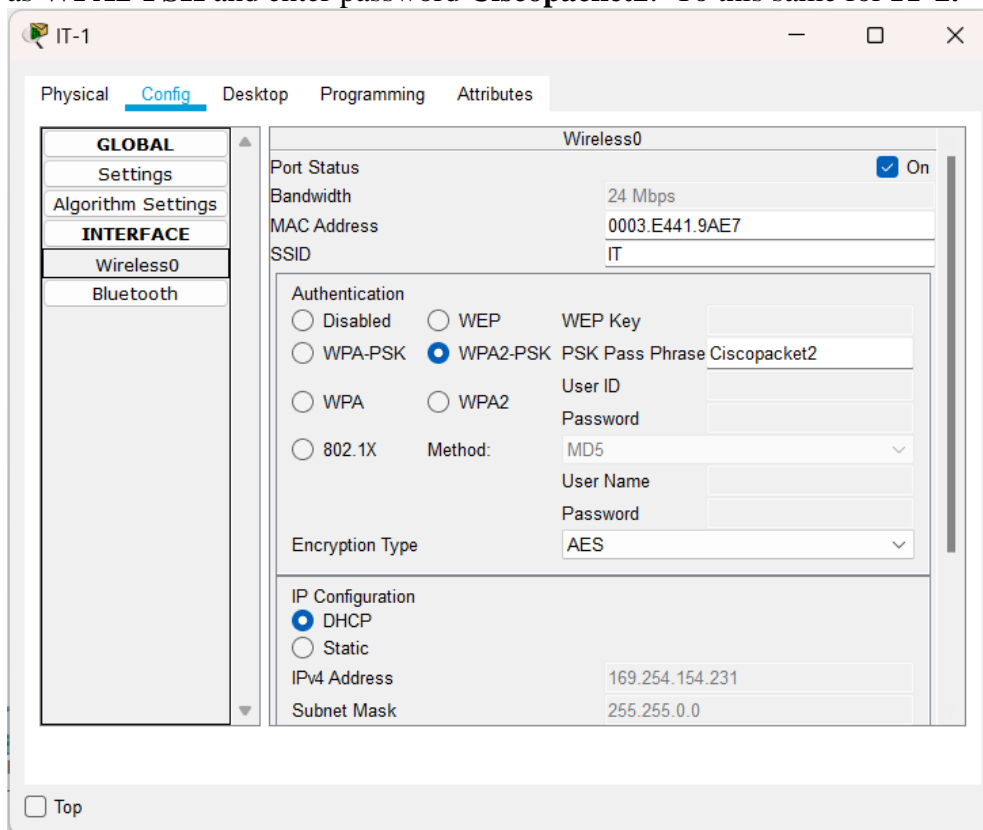
Step 8: Click on CS-1 > Physical > Turn OFF the PC > remove previous component and replace with WMP300N. Same for CS-2, IT-1 and IT-2.



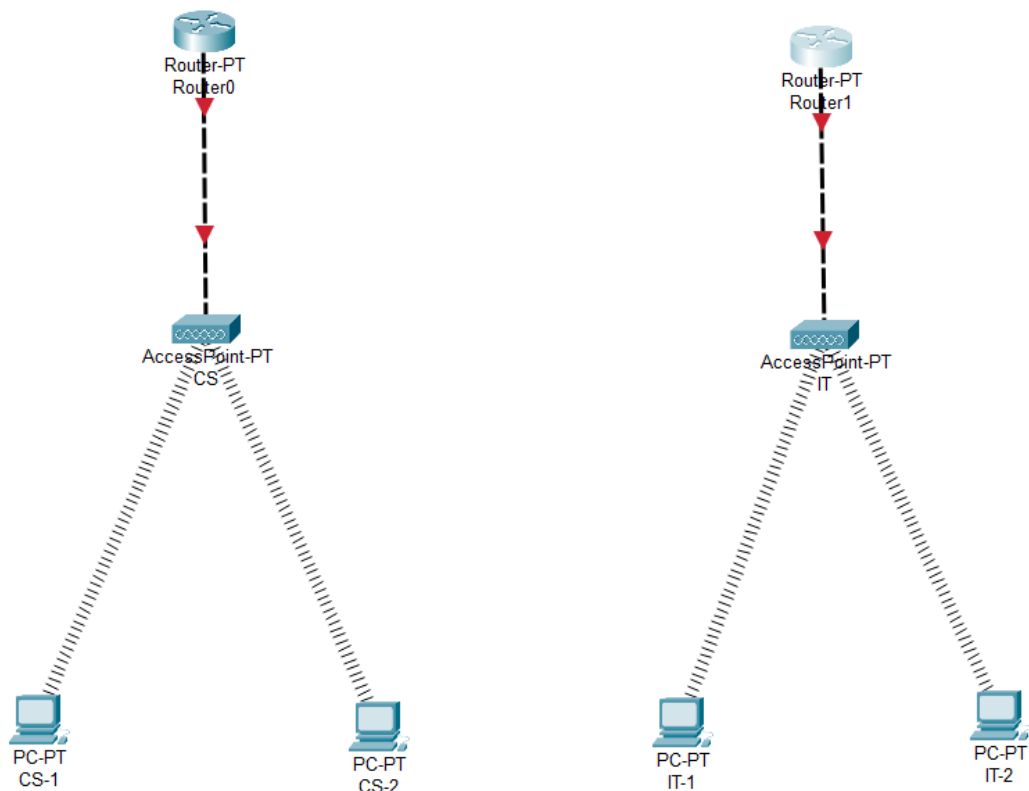
Step 9: Click on CS-1 > Config > wireless0 > Change SSID to **CS** and select Authentication as **WPA2-PSK** and enter password **Ciscopacket1**. To this same for **CS-2**.



Step 10: Click on IT-1 > Config > wireless0 > Change SSID to **IT** and select Authentication as **WPA2-PSK** and enter password **Ciscopacket2**. To this same for **IT-2**.



Step 11: Connect routers with Accesspoints-PT with Copper Cross Over



Step 12: Click on Router0 > Config > Fastethernet0/0 > Click on On > Enter IPv4 address as **192.168.10.1**

The screenshot shows the configuration window for Router0. The 'Config' tab is active, and the 'INTERFACE' section is expanded, with 'FastEthernet0/0' selected. The 'FastEthernet0/0' configuration panel shows the following settings:

- Port Status: ☒ On
- Bandwidth: ☐ 100 Mbps ☐ 10 Mbps ☒ Auto
- Duplex: ☐ Half Duplex ☐ Full Duplex ☒ Auto
- MAC Address: 000C.851A.E07D
- IP Configuration:
 - IPv4 Address: 192.168.10.1
 - Subnet Mask: 255.255.255.0
- Tx Ring Limit: 10

Below the configuration panel, the 'Equivalent IOS Commands' section displays the following commands:

```
Router(config-if)#no shutdown
Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0,
changed state to up
```

A 'Top' button is located at the bottom left of the window.

Step 12: Click on Router1 > Config > Fastethernet0/0 > Click on On > Enter IPv4 address as **171.16.10.1**

The screenshot shows the configuration window for Router1. The 'Config' tab is active, and the 'INTERFACE' section is expanded, with 'FastEthernet0/0' selected. The 'FastEthernet0/0' configuration panel shows the following settings:

- Port Status: ☒ On
- Bandwidth: ☐ 100 Mbps ☐ 10 Mbps ☒ Auto
- Duplex: ☐ Half Duplex ☐ Full Duplex ☒ Auto
- MAC Address: 0090.2B67.9458
- IP Configuration:
 - IPv4 Address: 171.16.10.1
 - Subnet Mask: 255.255.0.0
- Tx Ring Limit: 10

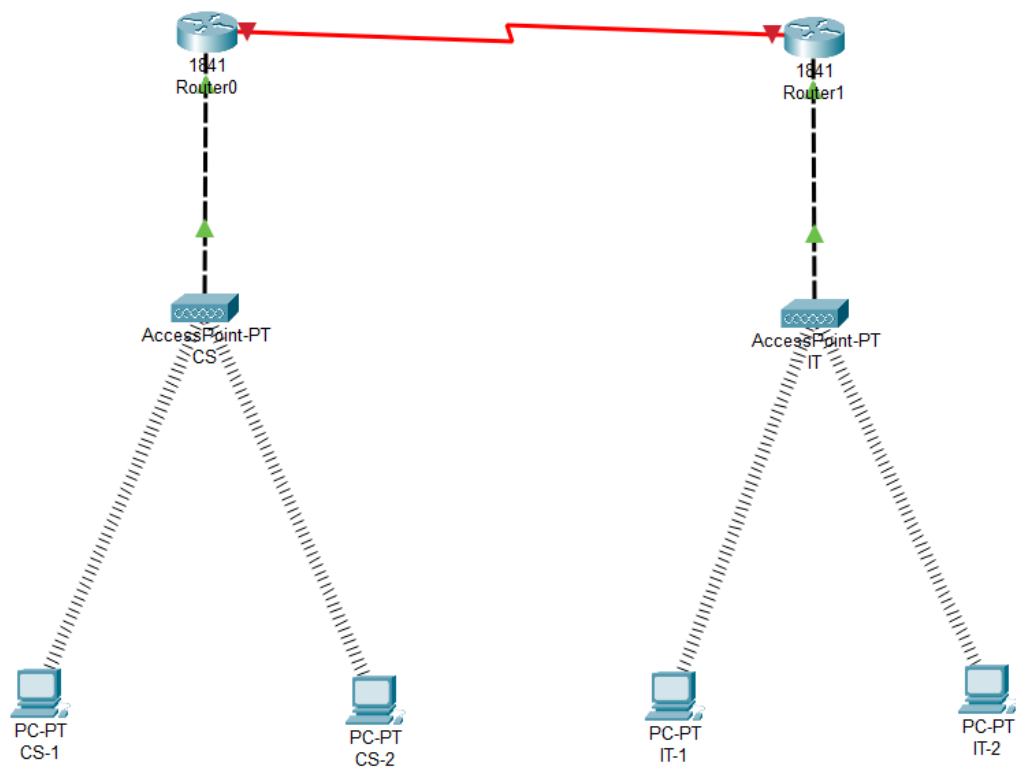
Below the configuration panel, the 'Equivalent IOS Commands' section displays the following commands:

```
Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

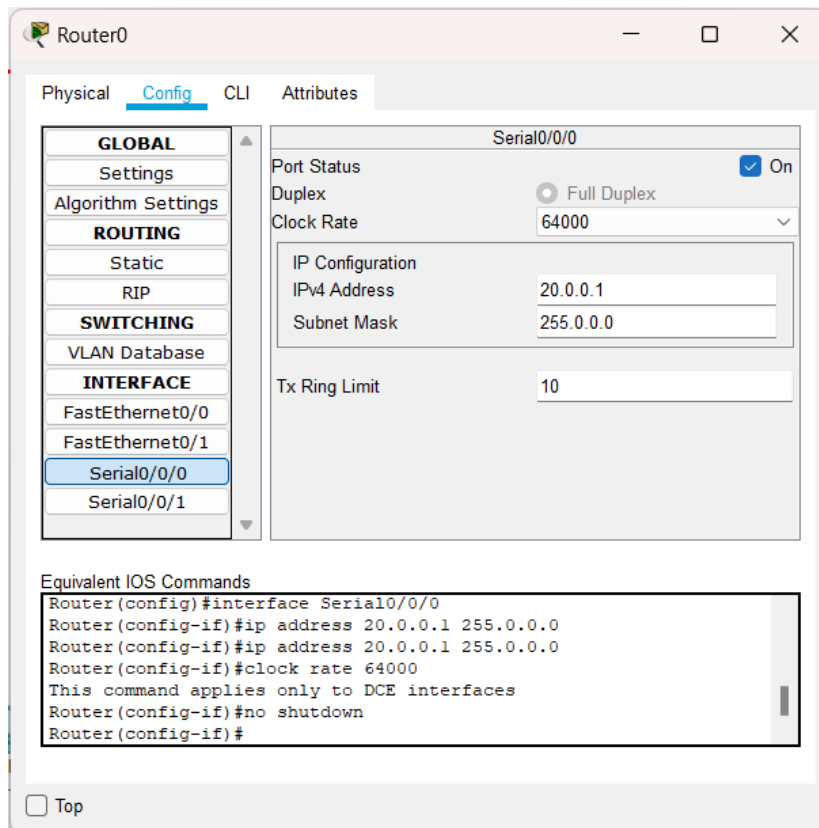
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0,
changed state to up
ip address 171.16.10.1 255.255.0.0
Router(config-if)#
```

A 'Top' button is located at the bottom left of the window.

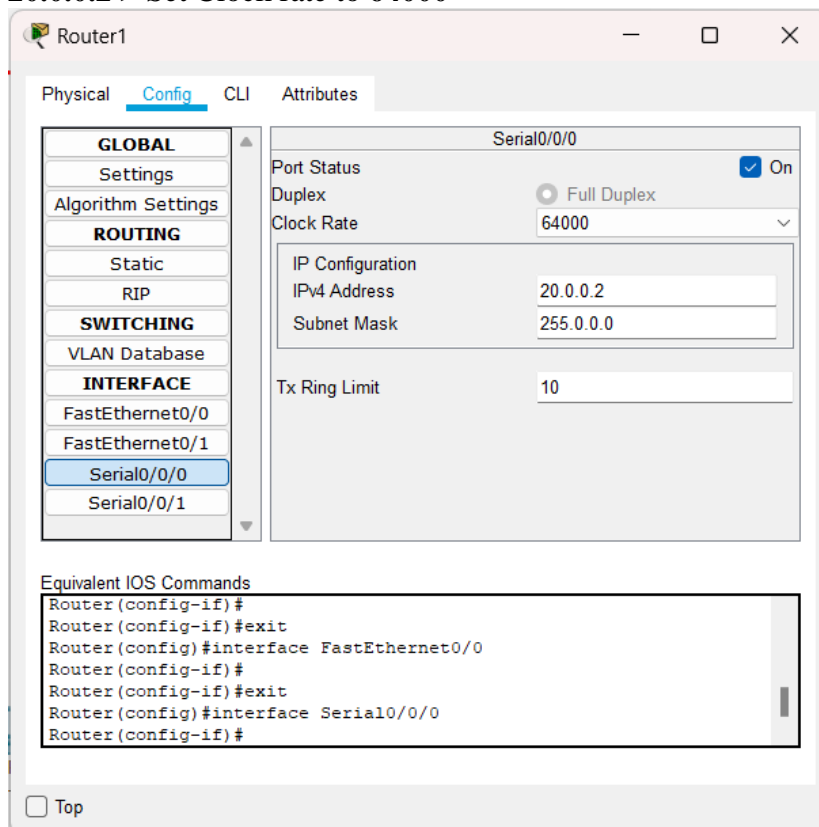
Step 13: Connect Router0 and Router1 using Serial DTE



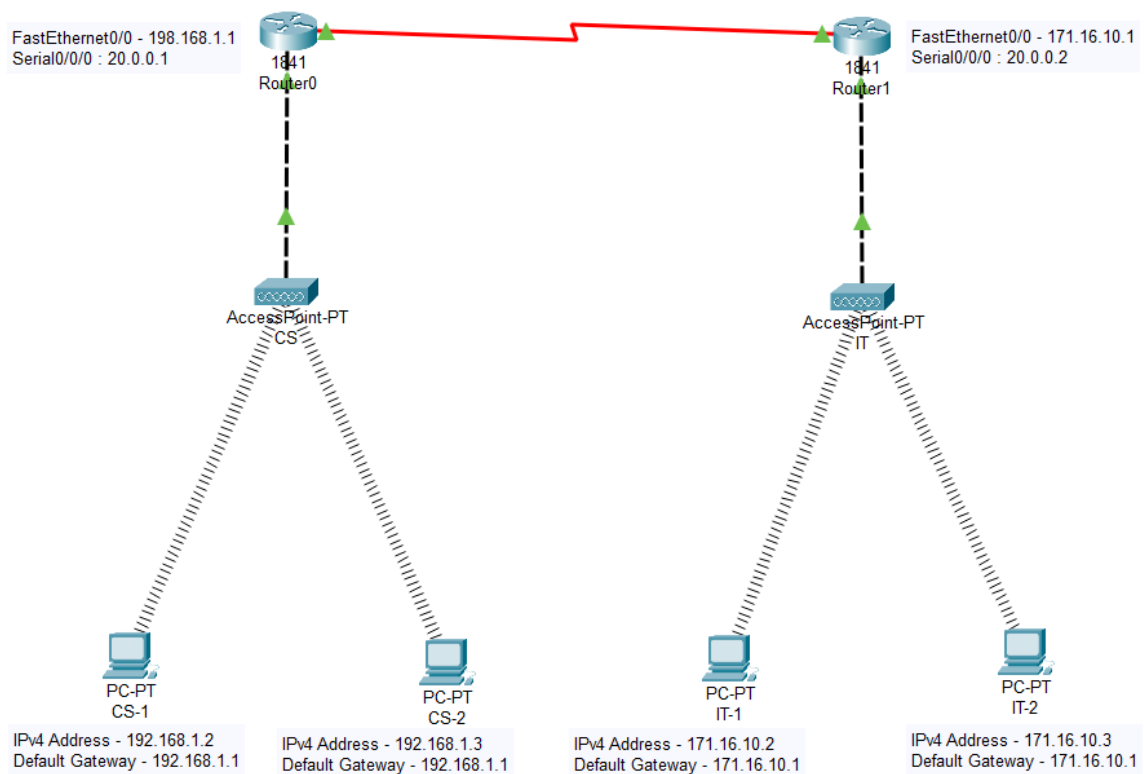
Step 14: Click on Router0 > Config > Serial0/0/0 > Click on On > Enter IPv4 address as **20.0.0.1** > Set Clock rate to **64000**



Step 15: Click on Router1 > Config > Serial0/0/0 > Click on On > Enter IPv4 address as **20.0.0.2** > Set Clock rate to **64000**



Step 16: After that your connection will look like this.



Step 17: Click on Router0 > Config > RIP > Add networks.

The screenshot shows the configuration window for Router0. The 'Config' tab is selected, and the 'RIP' option under the 'ROUTING' section is highlighted in the left sidebar. The 'RIP Routing' section on the right has a 'Network' input field and an 'Add' button. Below this, a table lists the configured networks:

Network Address
20.0.0.0
192.168.1.0

A 'Remove' button is located at the bottom right of the table. Below the table, the 'Equivalent IOS Commands' section displays the following commands:

```
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#router rip
Router(config-router)#
%SYS-5-CONFIG_I: Configured from console by console
network 20.0.0.0
Router(config-router)#network 192.168.1.0
Router(config-router)#
```

A 'Top' button is located at the bottom left of the window.

Step 18: Click on Router0 > Config > RIP > Add networks.

The screenshot shows the configuration window for Router1. The 'Config' tab is selected, and the 'RIP' option under the 'ROUTING' section is highlighted in the left sidebar. The 'RIP Routing' section on the right has a 'Network' input field and an 'Add' button. Below this, a table lists the configured networks:

Network Address
20.0.0.0
171.16.0.0

A 'Remove' button is located at the bottom right of the table. Below the table, the 'Equivalent IOS Commands' section displays the following commands:

```
Router(config-router)#
Router(config-router)#end
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#router rip
Router(config-router)#
%SYS-5-CONFIG_I: Configured from console by console
```

A 'Top' button is located at the bottom left of the window.