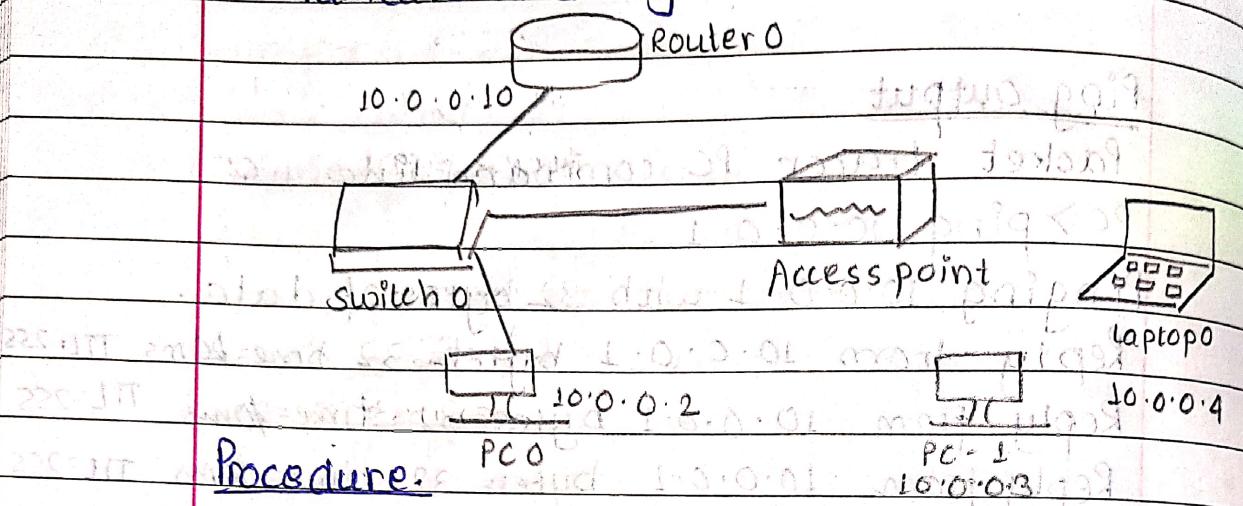


To construct a WLAN and make the nodes communicate wirelessly.

Aim : To construct a WLAN and make the nodes communicate wirelessly.

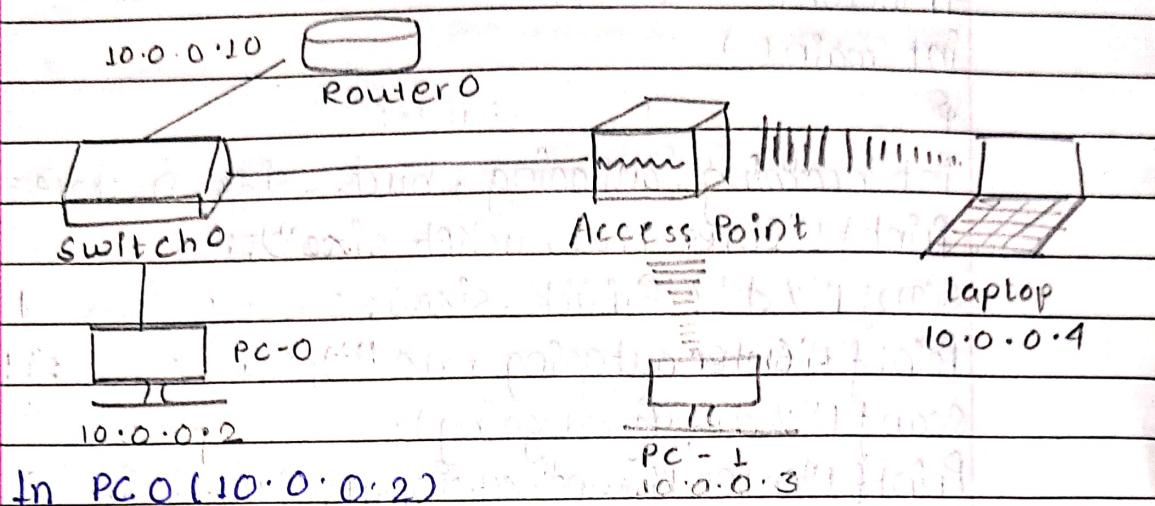


Procedure:

1. Construct above topology. Use access point - ppt connect that to router . Set the IP address of the PC connected with wire
2. Configure PC 3 and Router 1 as is normally done
3. Configure Access Point 1 - port 1 → SSID Name - any name (WLAN here)
4. Select WEP and give any 10 digit box Key - 1234567890
5. Configure PC 4 & laptop with wireless standards
6. Switch off the device . Drag the existing PT-HOST - NM - IAM to the component listed in the LHS . Drag WMP300N wireless interface to the empty port . switch on the device .
7. In the config tab a new wireless interface would have been added . Now configure SSID , WEP , WEP key , IP address and gateway (as normally done) to the device .
8. Ping from each device to every other device and see the results .

Result

Topology



In PC 0 (10.0.0.2)

Pc > ping 10.0.0.3

Pinging 10.0.0.3 with 32 bytes of data

Reply from 10.0.0.3 bytes = 32 time = 11 ms TTL=120

Reply from 10.0.0.3 bytes = 32 time = 12ms TTL=120

Reply from 10.0.0.3 bytes = 32 time = 6ms TTL=120

Reply from 10.0.0.3 bytes = 32 time = 0ms TTL=120

Ping statistics for 10.0.0.3

Packet(s): sent = 4, Received = 4, Lost = 0

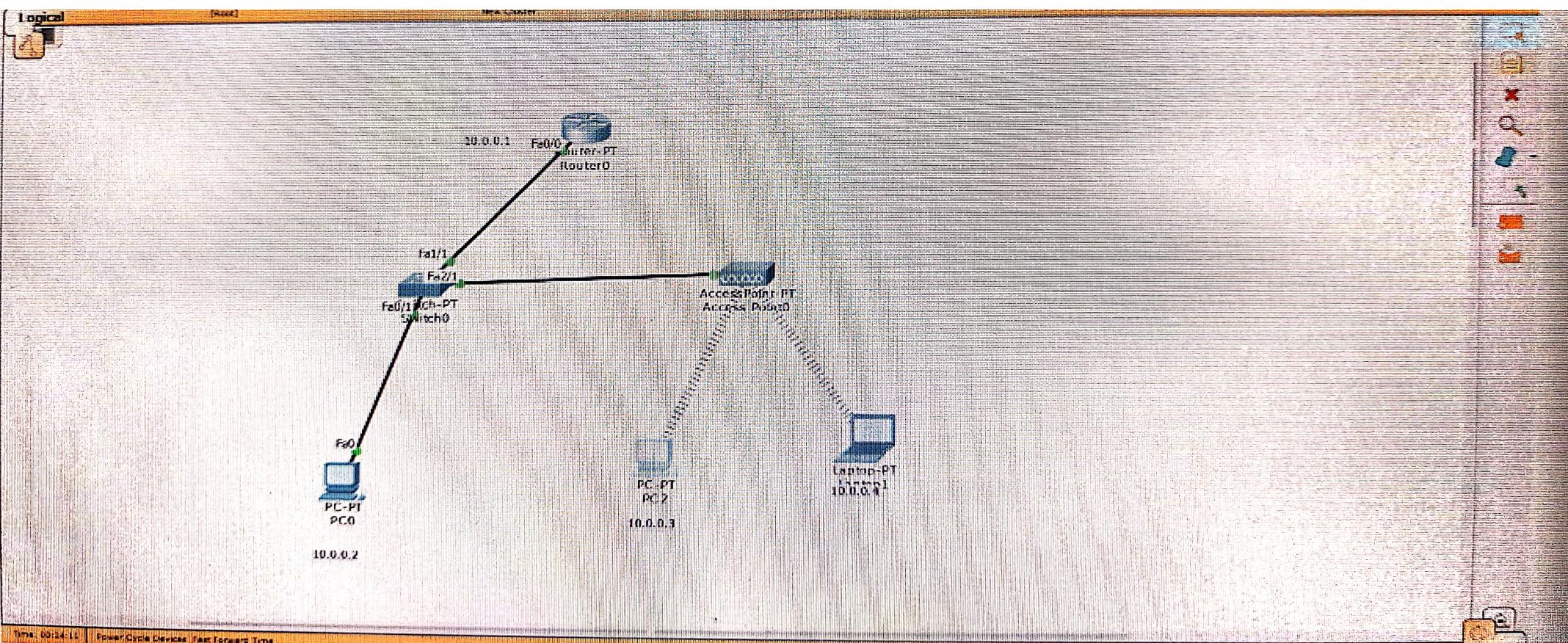
Approx round trip time in milliseconds

minimum = 6ms, Max = 21ms, Avg = 12 ms.

Observation

Wireless local area network (WLAN) is a group of wirelessly connected computers or other devices that form a network based on radio transmission rather than wire connections.

After the WLAN is set up, the logical connection appears in the topology from the access point



PC1

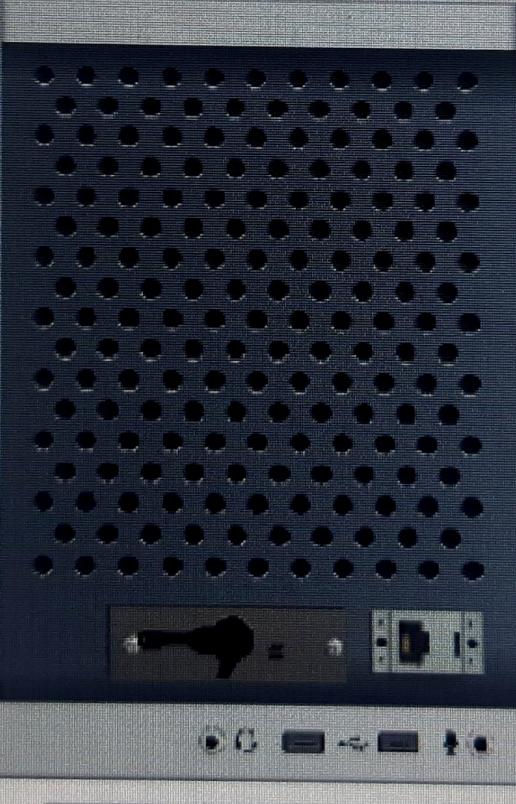
Physical Config Desktop Custom Interface

MODULES

- WMP300N
- PT-HOST-NM-1AM
- PT-HOST-NM-1CE
- PT-HOST-NM-1CFE
- PT-HOST-NM-1CGE
- PT-HOST-NM-1FFE
- PT-HOST-NM-1FGE
- PT-HOST-NM-1W
- PT-HOST-NM-1W-A
- PT-HOST-NM-3G/4G
- PT-HEADPHONE
- PT-MICROPHONE
- PT-CAMERA
- PT-USB-HARD-DRIVE

Physical Device View

Zoom In Original Size Zoom Out



Customize Icon in Physical View

Customize Icon in Logical View

The Linksys-WMP300N module provides one 2.4GHz wireless interface suitable for connection to wireless networks. The module supports protocols that use Ethernet for LAN access.

Physical Config Desktop Custom Interface

MODULES

WPC300N

PT-LAPTOP-NM-1AM

PT-LAPTOP-NM-1CE

PT-LAPTOP-NM-1CFE

PT-LAPTOP-NM-1CGE

PT-LAPTOP-NM-1FFE

PT-LAPTOP-NM-1FGE

PT-LAPTOP-NM-1W

PT-LAPTOP-NM-1W-A

PT-LAPTOP-NM-3G/4G

PT-HEADPHONE

PT-MICROPHONE

PT-CAMERA

PT-USB-HARD-DRIVE

Physical Device View

Zoom In

Original Size

Zoom Out



The Linksys-WPC300N module provides one 2.4GHz wireless interface suitable for connection to wireless networks. The module supports protocols that use Ethernet for LAN access.

Command Prompt

```
Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
```

```
PC>ping 10.0.0.3
```

```
Pinging 10.0.0.3 with 32 bytes of data:
```

```
Request timed out.
```

```
Ping statistics for 10.0.0.3:
```

```
Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
```

```
PC>ping 10.0.0.3
```

```
Pinging 10.0.0.3 with 32 bytes of data:
```

```
Reply from 10.0.0.3: bytes=32 time=21ms TTL=128
```

```
Reply from 10.0.0.3: bytes=32 time=7ms TTL=128
```

```
Reply from 10.0.0.3: bytes=32 time=9ms TTL=128
```

```
Reply from 10.0.0.3: bytes=32 time=10ms TTL=128
```

```
Ping statistics for 10.0.0.3:
```

```
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
```

```
Approximate round trip times in milli-seconds:
```

```
Minimum = 7ms, Maximum = 21ms, Average = 11ms
```

```
PC>
```