

LAB 11

To construct a WLAN and make the nodes communicate wirelessly

OBSERVATION:

52 must go
2.168.20.1

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

Topology:

Router
10.0.0.1

Switch

Access Point

PC-PT PC0
10.0.0.2

PC-PT PC1
10.0.0.3

Laptop-PT
10.0.0.4

Procedure:

- Place a router, switch, 2 PCs, 1 access point, and 1 laptop and connect them as shown in the above topology.
- Configure the router to IP 10.0.0.1 set IP and gateway for PC0 as normally done.
- Configure access point port 1 set SSID Name as WLAN, select WEP and set password 1234567890
- Switch off PC1 and laptop and replace ethernet port with WMP300N (wireless). Then turn them on and select WEP to construct them wirelessly.
- Configure according to appropriate IP and gateway.

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Result:

In CLI of 10.0.0.2

PC > ping 10.0.0.4

Pinging 10.0.0.4 with 32 bytes of data:

Reply from 10.0.0.4: bytes=32 time=19ms TTL=128

Reply from 10.0.0.4: bytes=32 time=9ms TTL=128

Reply from 10.0.0.4: bytes=32 time=7ms TTL=128

Reply from 10.0.0.4: bytes=32 time=8ms TTL=128

Ping statistics for 10.0.0.4

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

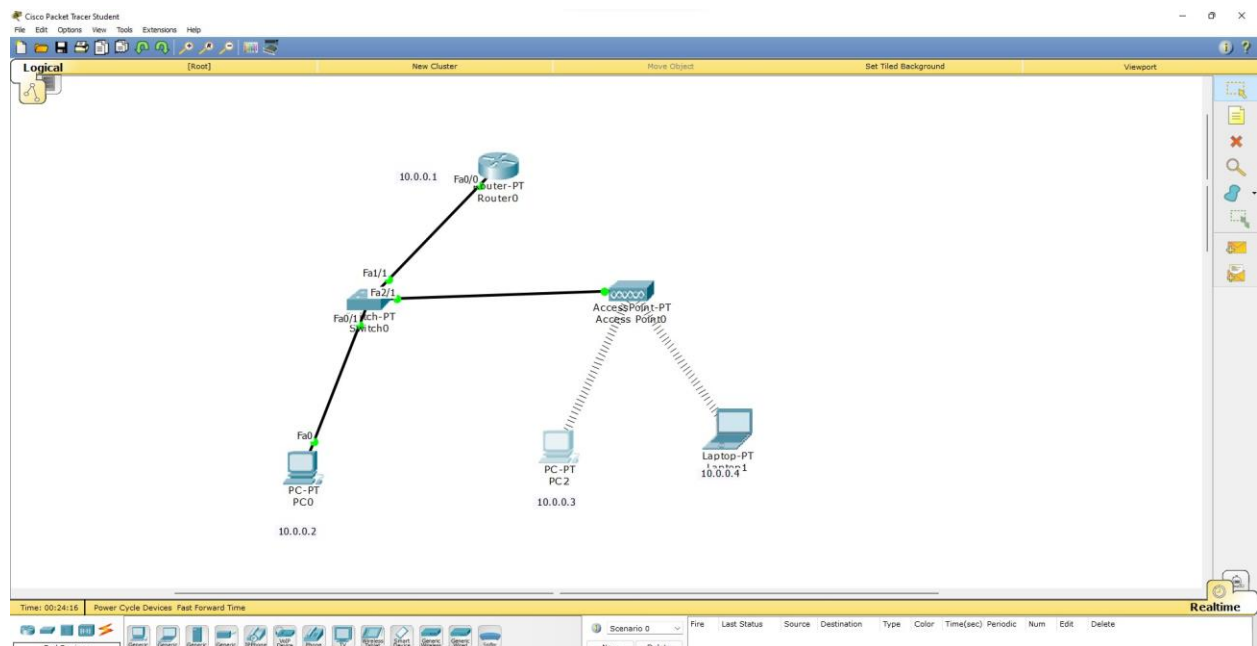
Approximate round-trip time in milliseconds

Minimum=7ms, Maximum=19ms, Average=10ms

• Observation:

- WLAN is wireless Local Area Network. It is a local network where devices within the network are able to communicate with each other wirelessly.
- In the given experiment, PC1 and the laptop are able to communicate wirelessly with each other and with PC0.
- WLAN consists of a single network. It operates in Layer 2 (Data Link layer).

TOPOLOGY:



PC1

Physical Config Desktop Custom Interface

Physical Device View

Zoom In Original Size Zoom Out

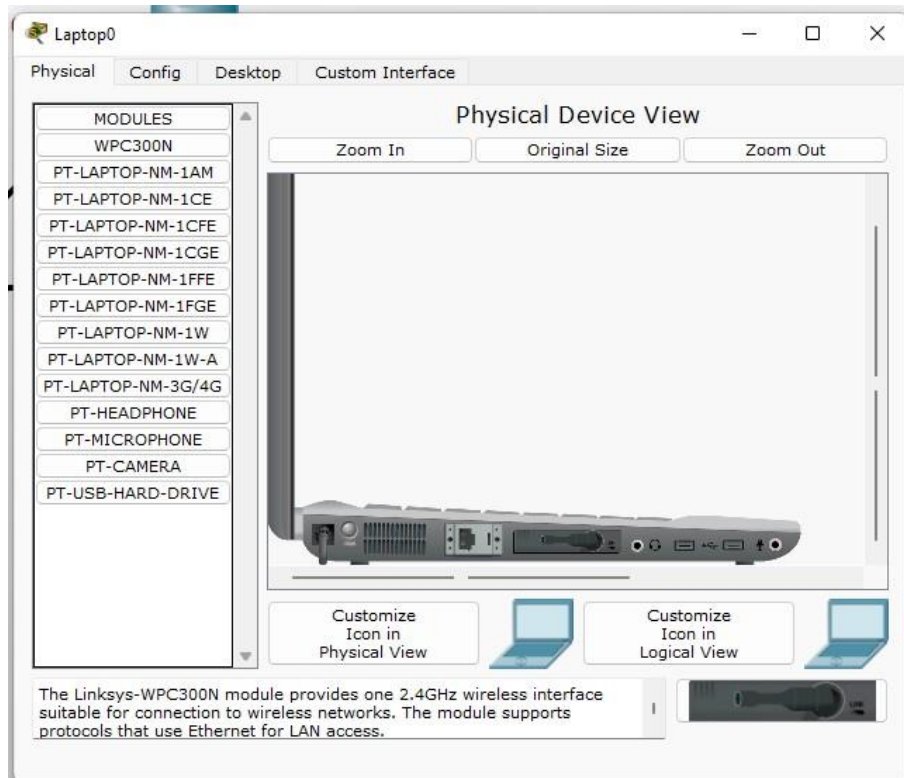
MODULES

- 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

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.



OUTPUT:

