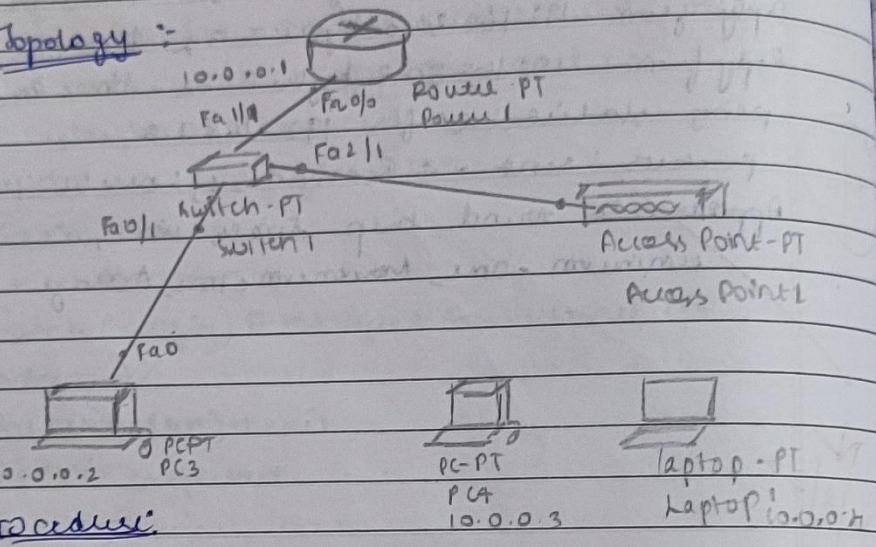
10/8/22

Experiment 10

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

Topology :



Procedure:

1) Select a switch, router, Accesspoint-PT, two PC's a laptop and drop them on the workspace. Construct the above topology. PC, accesspoint and router are connected to the switch using copper straight through connection.
2) Configure the connected PC and router as normally done.
3) Configure access point-port1 → SSID as WLAN.
4) Select WEP and enter any 10 digit hex key → i.e 1234567890.
5) To configure PC4 and laptop with wireless standards switch off the device. Drag existing PT-HOST-NM-1AM to the component listed

in the LHS. Drag WMP300N wireless interface to the empty port. Switch on the device.

*) PC A → Config → new wireless device interface would have been added. Configure SSID, WEP, WEP key, IP address and gateway to the device.

SSID → DLINK, authentication → select → WEP enter the same key → 1234567890.

IP address - 10.0.0.3. and Subnet mask → 255.0.0.0 will be.

to configure router:

Router>enable

Router#config t.

Router(config)# interface fastethernet 0/0

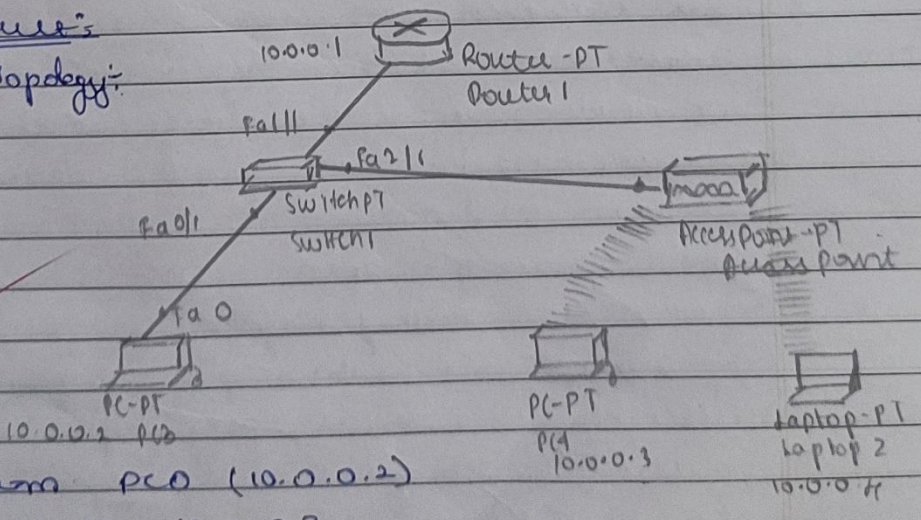
Router(config-if)# IP address 10.0.0.1 255.0.0.0.

Router(config-if)# no shut.

Router(config-if)# exit.

Result:

Topology:



from PC0 (10.0.0.2)

PC > ping 10.0.0.3.

pinging 10.0.0.3 with 32 bytes of data:

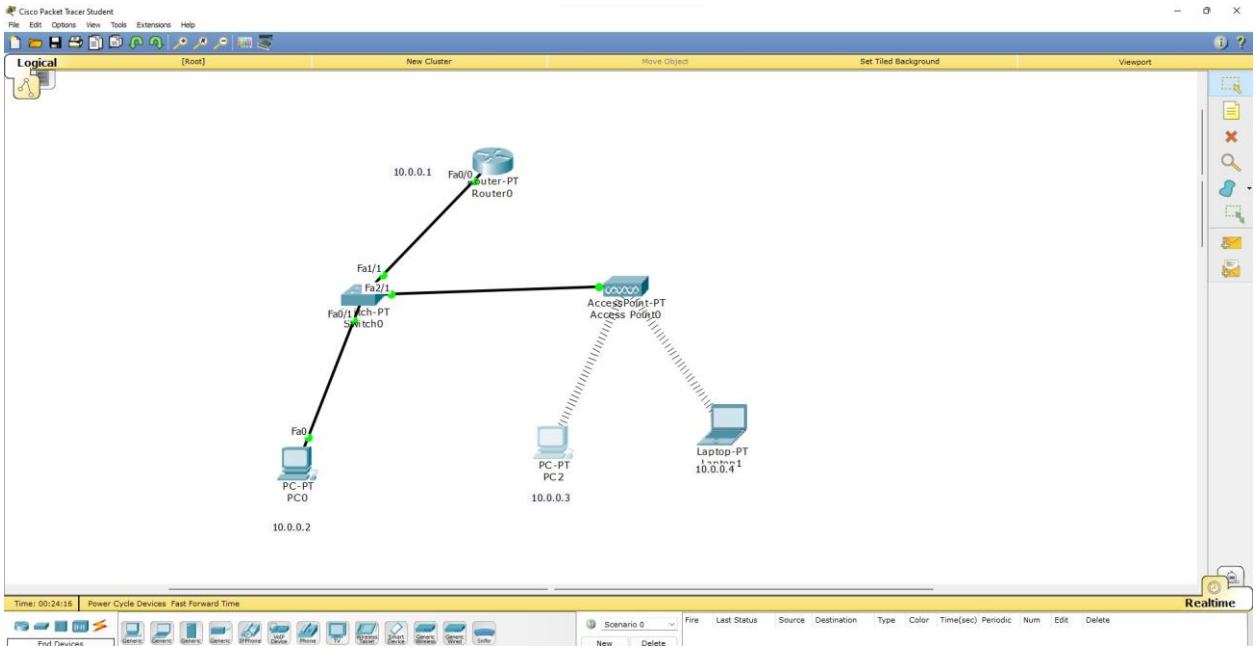
Reply from 10.0.0.3, bytes=32 time=2ms, TTL=128

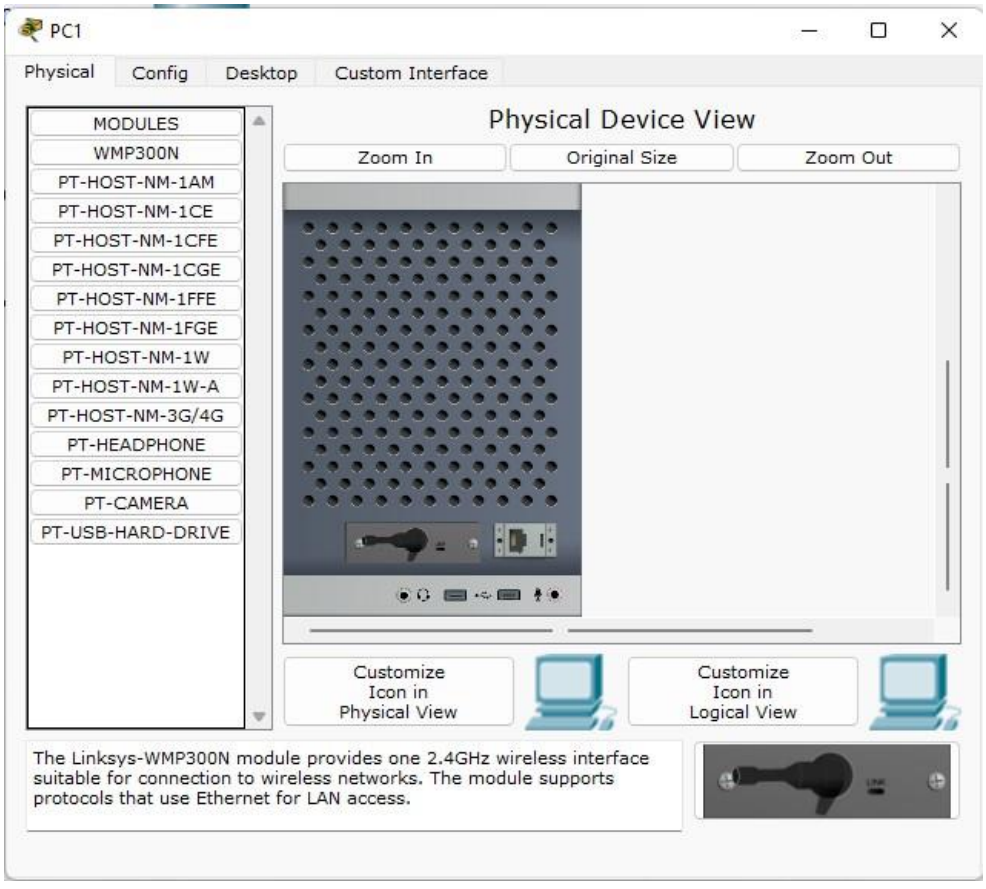
Reply from 10.0.0.3 bytes = 32 time=13ms TTL=
Reply from 10.0.0.3 bytes=32 time=6ms TTL=
Reply from 10.0.0.3 bytes=32 time=0ms TTL=
ping statistics for 10.0.0.3
packets: sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli seconds Minimum = 0ms, Maximum = 13ms,
Average = 4ms.

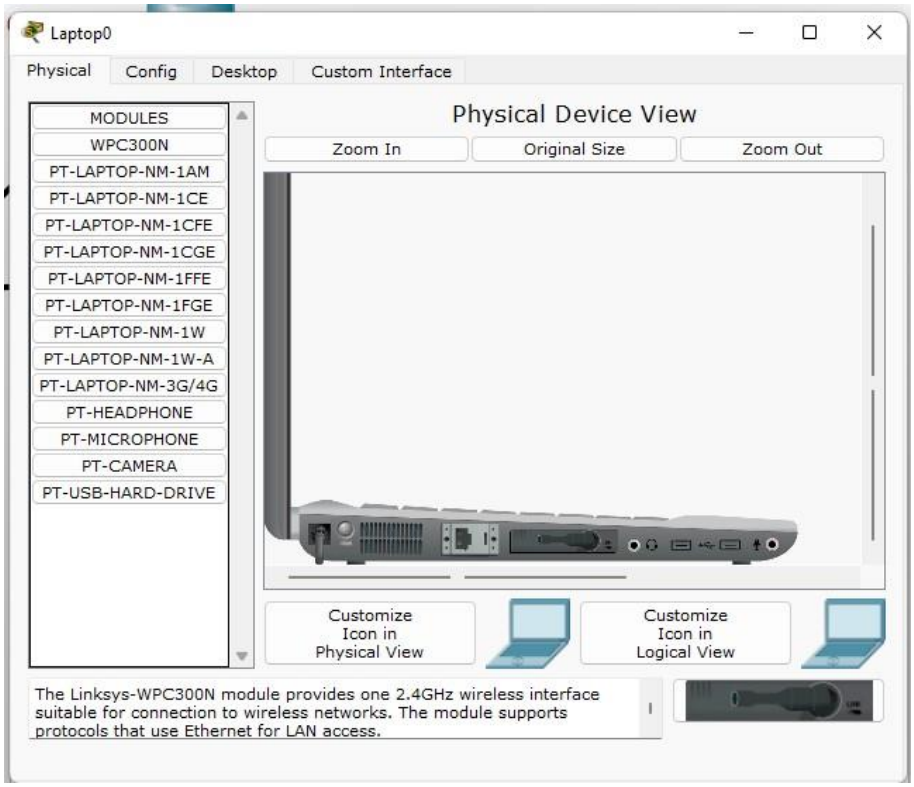
Observation:

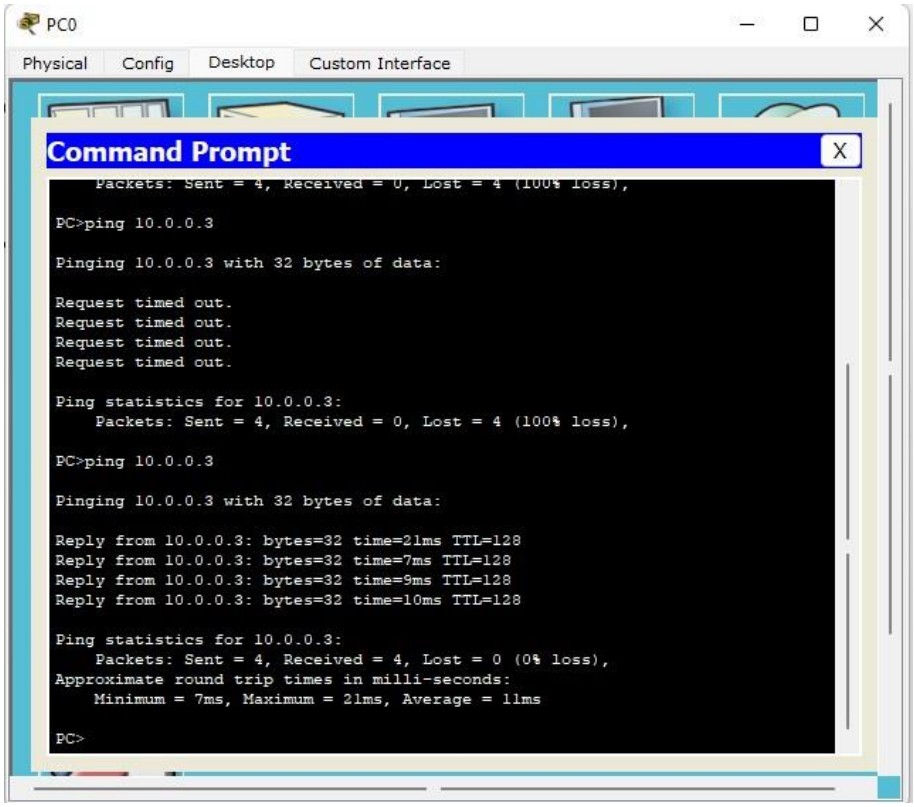
WLAN is a wireless computer network that links two or more devices using wireless communication to form a local area network.

10/8/23


Cisco Packet Tracer Student
Logical
10.0.0.1
Router-PT
Router0
Fa1/1
Fa2/1
Switch-PT
Switch0
Access Point-PT
Access Point0
Fa0
PC-PT
PC0
10.0.0.2
PC-PT
PC2
10.0.0.3
Laptop-PT
10.0.0.4
Realtime


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.


Laptop0
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
Customize Icon in Physical View
Customize Icon in Logical View
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.


PC0
Physical
Config
Desktop
Custom Interface
Command Prompt
X
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.
Request timed out.
Request timed out.
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>