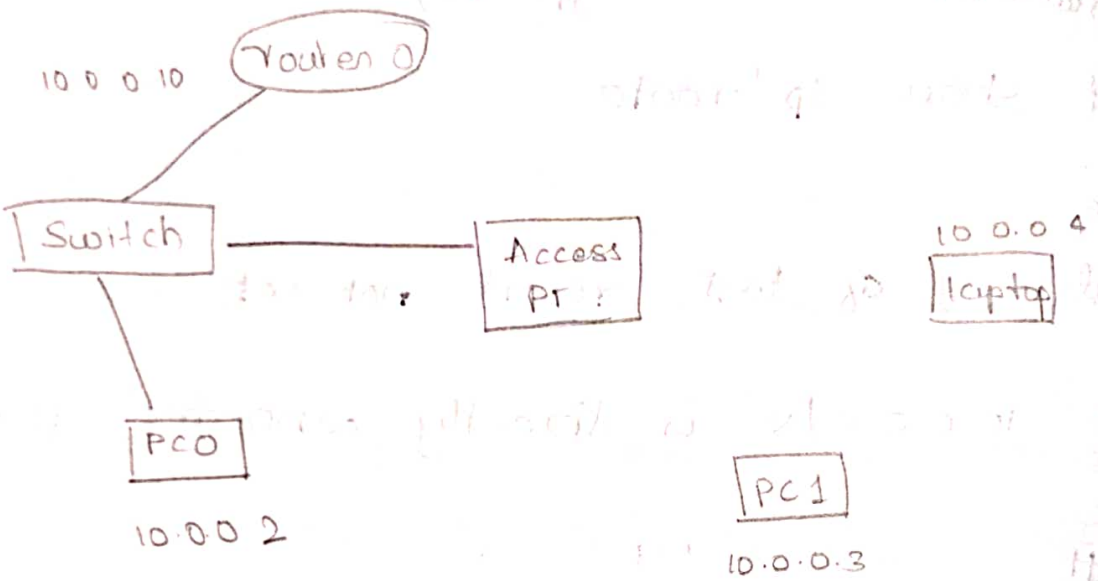
Lab 9

Aim : To connect a WLAN and make the nodes communicate wirelessly

Topology:



Procedure

1) Construct the above topology

2) Set the IP of PC connected with wire and configure router 0

3) Configure access-point 1 → port 1 → SSID name → WLAN

Select WEP and give 10 digit key (here 1234567890)

4) To configure PC 0 and laptop wirelessly, switch off the device

Drag the existing PT-HOST-NM-1AM to the components list in the LHS

Drag WMP300N wireless interface to the empty port and switch on the device.

5) Now, in the config tab, a new wireless interface would have been added.

Configure SSID, WEP, WEP key, IP address & gateway to the device

6) router > enable

config t

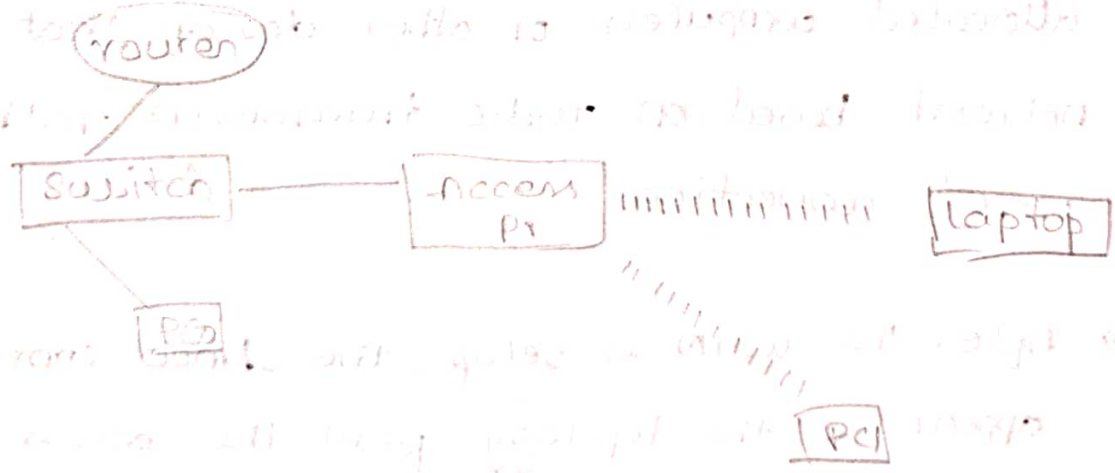
interface fastethernet 0/0

ip address 10.0.0.0 255.0.0.0

no shut

Result

Topology :



At PC 0

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 = 21 ms TTL = 12
Reply from 10.0.0.3 : bytes = 32 time = 13 ms TTL = 128
Reply from 10.0.0.3 : bytes = 32 time = 6 ms TTL = 128
Reply from 10.0.0.3 : bytes = 32 time = 0 ms TTL = 128

Ping statics for 10.0.0.3

Packets sent = 4, Received = 4, Lost = 0

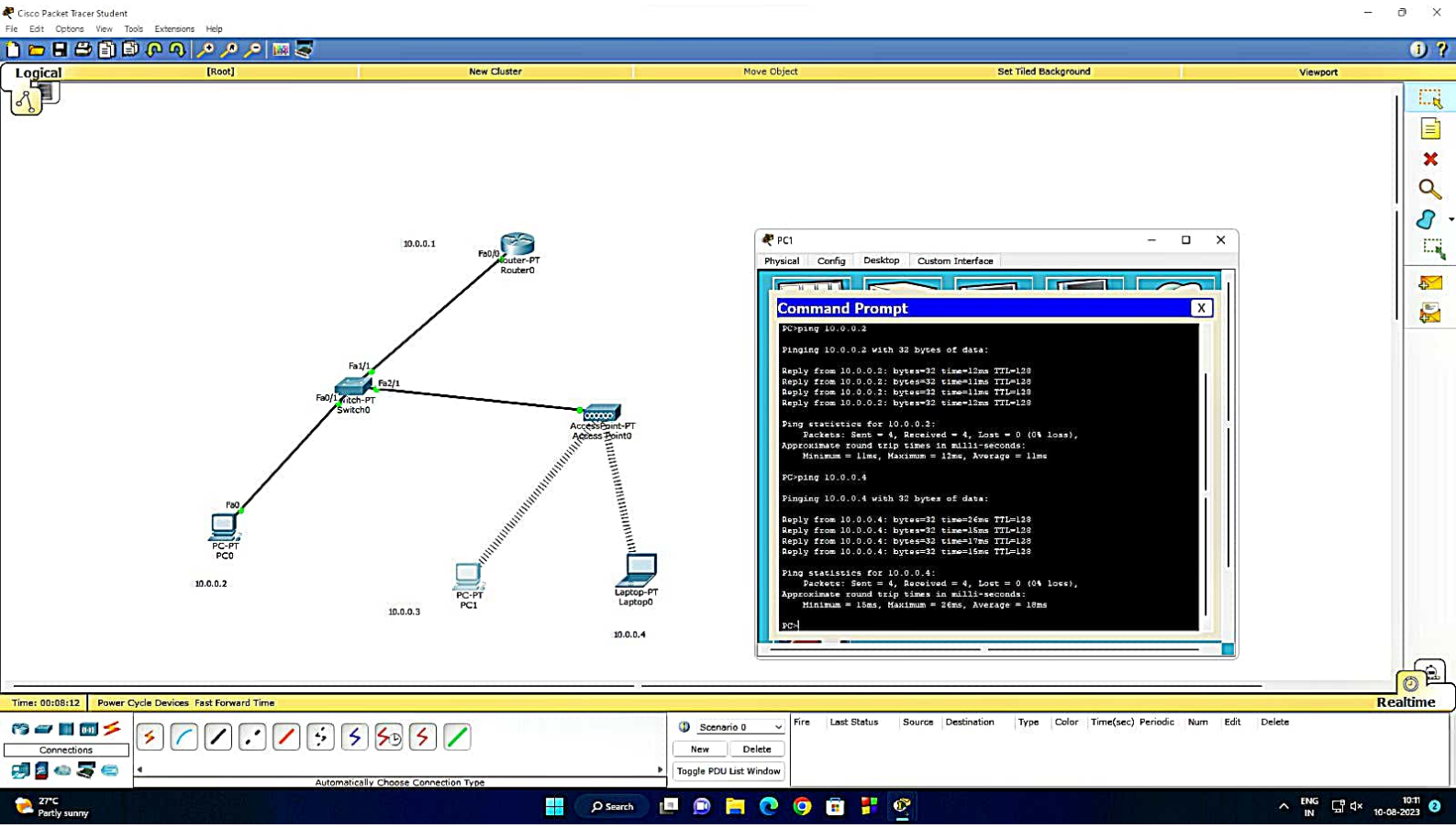
Approximate roundtrip time in millisecond

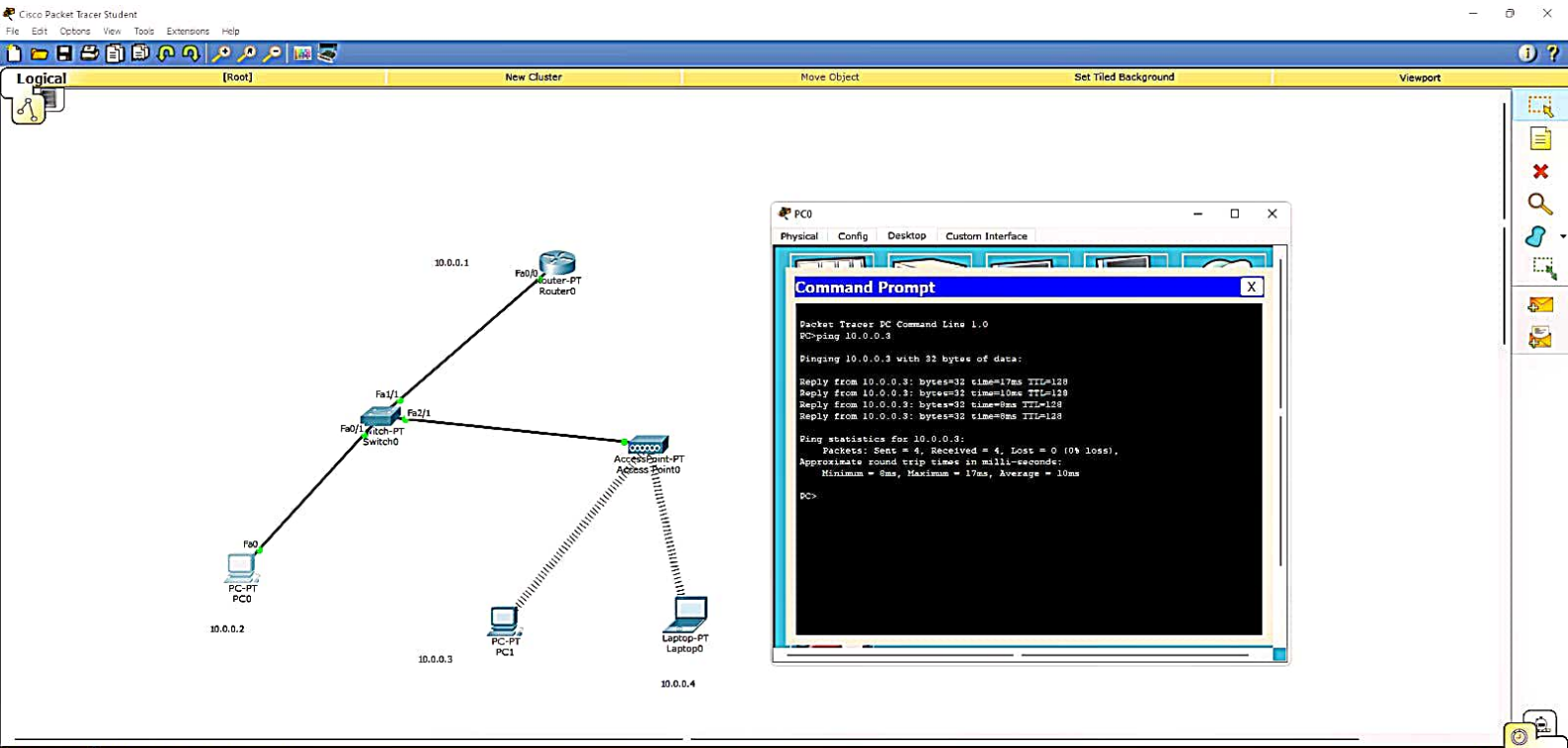
minimum = 6 ms, Maximum = 21 ms, Average =

Observation :

- Wireless local area network WLAN is a group of allocated computers or other devices that form a network based on radio transmission rather than wired connections.

- After the WLAN is setup, the lined connection appears in the topology from the access point.


Cisco Packet Tracer Student
File Edit Options View Tools Extensions Help
Logical
[Root]
New Cluster
Move Object
Set Tiled Background
Viewport
10.0.0.1
Router-PT
Router0
Fa0/0
Fa1/1
Fa2/1
Fa0/1
Switch-PT
Switch0
Access-Point-PT
Access Point0
Fa0
PC-PT
PC0
10.0.0.2
PC-PT
PC1
10.0.0.3
Laptop-PT
Laptop0
10.0.0.4
PC1
Physical
Config
Desktop
Custom Interface
Command Prompt
PC>ping 10.0.0.2
Pinging 10.0.0.2 with 32 bytes of data:
Reply from 10.0.0.2: bytes=32 time=12ms TTL=128
Reply from 10.0.0.2: bytes=32 time=11ms TTL=128
Reply from 10.0.0.2: bytes=32 time=11ms TTL=128
Reply from 10.0.0.2: bytes=32 time=12ms TTL=128
Ping statistics for 10.0.0.2:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 11ms, Maximum = 12ms, Average = 11ms
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=24ms TTL=128
Reply from 10.0.0.4: bytes=32 time=15ms TTL=128
Reply from 10.0.0.4: bytes=32 time=17ms TTL=128
Reply from 10.0.0.4: bytes=32 time=15ms TTL=128
Ping statistics for 10.0.0.4:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 15ms, Maximum = 24ms, Average = 18ms
PC>
Time: 00:08:12
Power Cycle Devices Fast Forward Time
Realtime
Connections
Automatically Choose Connection Type
Scenario 0
New
Delete
Toggle PDU List Window
Fire
Last Status
Source
Destination
Type
Color
Time(sec)
Periodic
Num
Edit
Delete
27°C
Partly sunny
Search
ENG
IN
10:11
10-08-2023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Router0
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Laptop-PT
Laptop0
10.0.0.4
PC0
Physical
Config
Desktop
Custom Interface
Command Prompt
X
Packet Tracer PC Command Line 1.0
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=17ms TTL=128
Reply from 10.0.0.3: bytes=32 time=10ms TTL=128
Reply from 10.0.0.3: bytes=32 time=8ms TTL=128
Reply from 10.0.0.3: bytes=32 time=8ms 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 = 8ms, Maximum = 17ms, Average = 10ms
PC>
Time: 00:07:18
Power Cycle Devices Fast Forward Time
Realtime
Connections
Automatically Choose Connection Type
Scenario 0
New
Delete
Toggle PDU List Window
Fire
Last Status
Source
Destination
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10:10
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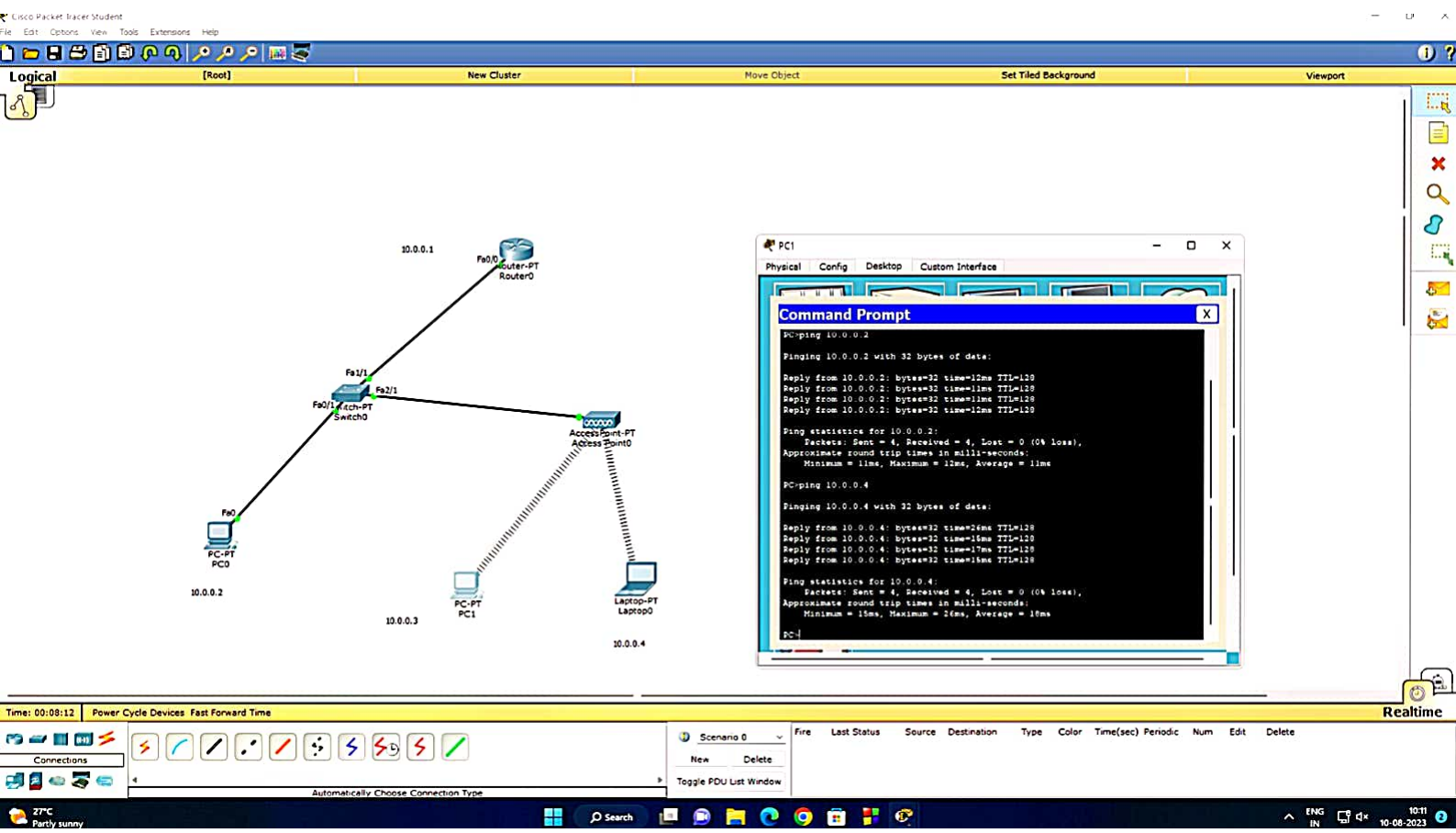
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Config
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Custom Interface
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Reply from 10.0.0.2: bytes=32 time=11ms TTL=128
Reply from 10.0.0.2: bytes=32 time=11ms TTL=128
Reply from 10.0.0.2: bytes=32 time=12ms TTL=128
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Approximate round trip times in milli-seconds:
Minimum = 11ms, Maximum = 12ms, Average = 11ms
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=26ms TTL=128
Reply from 10.0.0.4: bytes=32 time=15ms TTL=128
Reply from 10.0.0.4: bytes=32 time=17ms TTL=128
Reply from 10.0.0.4: bytes=32 time=15ms TTL=128
Ping statistics for 10.0.0.4:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 15ms, Maximum = 26ms, Average = 18ms
PC>
Time: 00:08:12
Power Cycle Devices Fast Forward Time
Realtime
Connections
Automatically Choose Connection Type
Scenario 0
New
Delete
Toggle PDU List Window
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Last Status
Source
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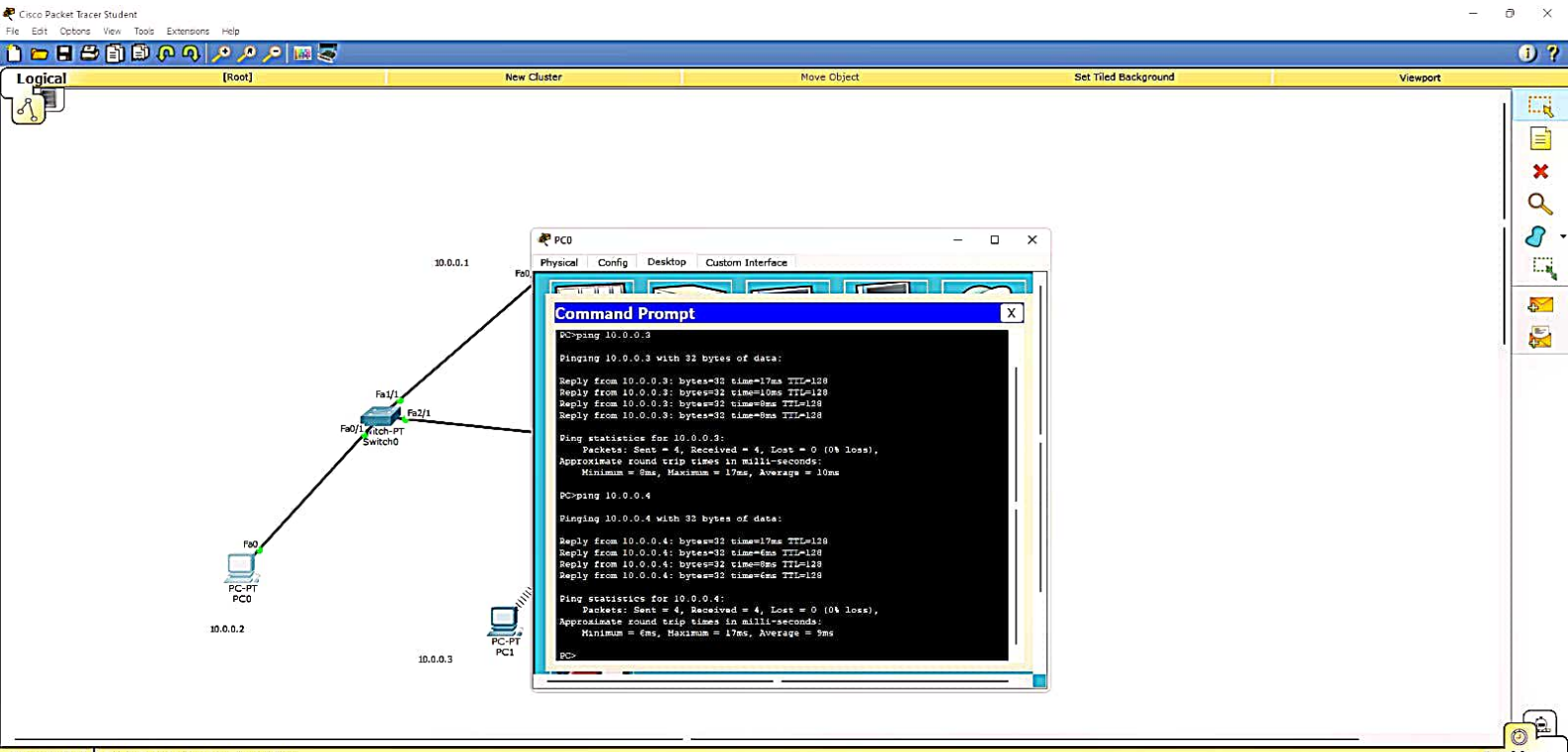
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Reply from 10.0.0.3: bytes=32 time=10ms TTL=128
Reply from 10.0.0.3: bytes=32 time=8ms TTL=128
Reply from 10.0.0.3: bytes=32 time=8ms TTL=128
Ping statistics for 10.0.0.3:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 8ms, Maximum = 17ms, Average = 10ms
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=17ms TTL=128
Reply from 10.0.0.4: bytes=32 time=6ms TTL=128
Reply from 10.0.0.4: bytes=32 time=8ms TTL=128
Reply from 10.0.0.4: bytes=32 time=6ms TTL=128
Ping statistics for 10.0.0.4:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 6ms, Maximum = 17ms, Average = 9ms
PC>
10.0.0.1
Fa0
Fa1/1
Fa2/1
Fa0/1
Switch-PT
Switch0
Fa0
PC-PT
PC0
10.0.0.2
PC-PT
PC1
10.0.0.3
Time: 00:07:40
Power Cycle Devices Fast Forward Time
Realtime
Connections
Automatically Choose Connection Type
Scenario 0
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Toggle PDU List Window
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