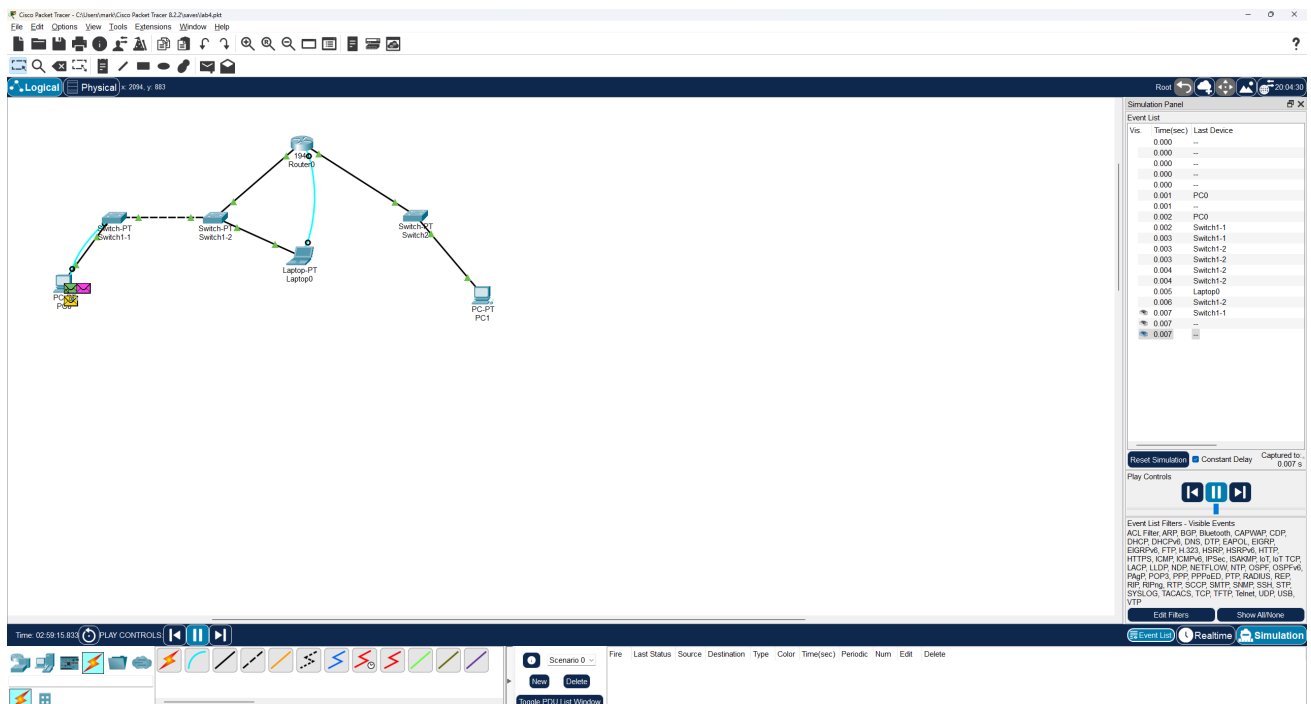


Cisco Packet Tracer - C__Users_mark_Cisco Packet Tracer 8.2.2_saves_lab4.pkt 5_26_2025 11_33_59 PM.png



Cisco Packet Tracer - C__Users_mark_Cisco Packet Tracer 8.2.2_saves_lab4.pkt 5_26_2025 11_34_26 PM.png

The screenshot displays the Cisco Packet Tracer 8.2.2 interface. The main workspace shows a network topology with the following components:

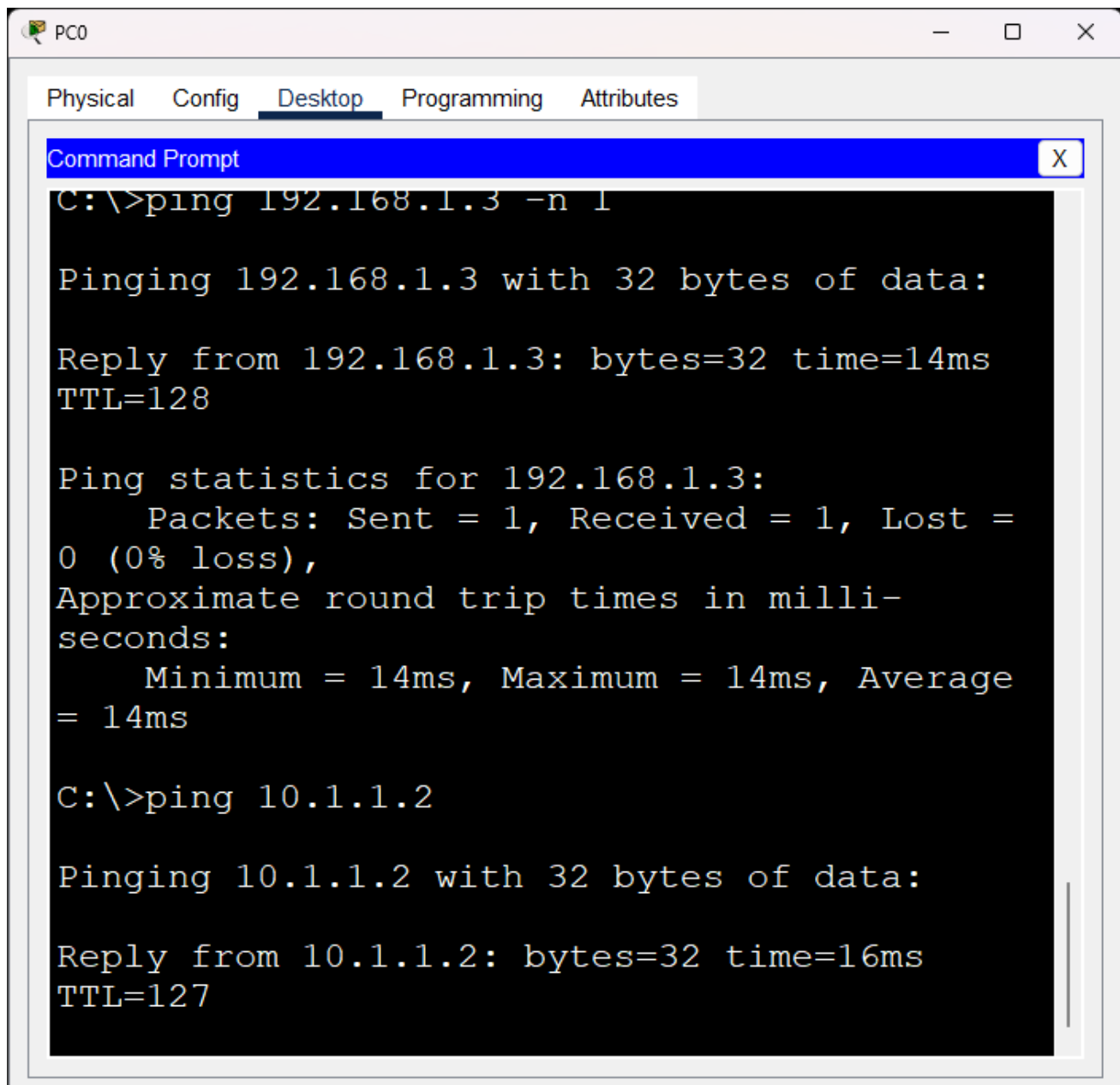
- Router0** (1940) connected to **Switch1-1** and **Switch1-2**.
- Switch1-1** connected to **PC-PT** and **Switch1-2**.
- Switch1-2** connected to **Laptop PT** and **PC1**.
- PC1** connected to **Switch1-2**.

The **Simulation Panel** on the right shows the **Event List** with the following columns: Vis, Time(sec), Last Device, At Device, and Type. The list contains 13 events, all of which are ICMP packets sent from PC0 to PC1 via various paths.

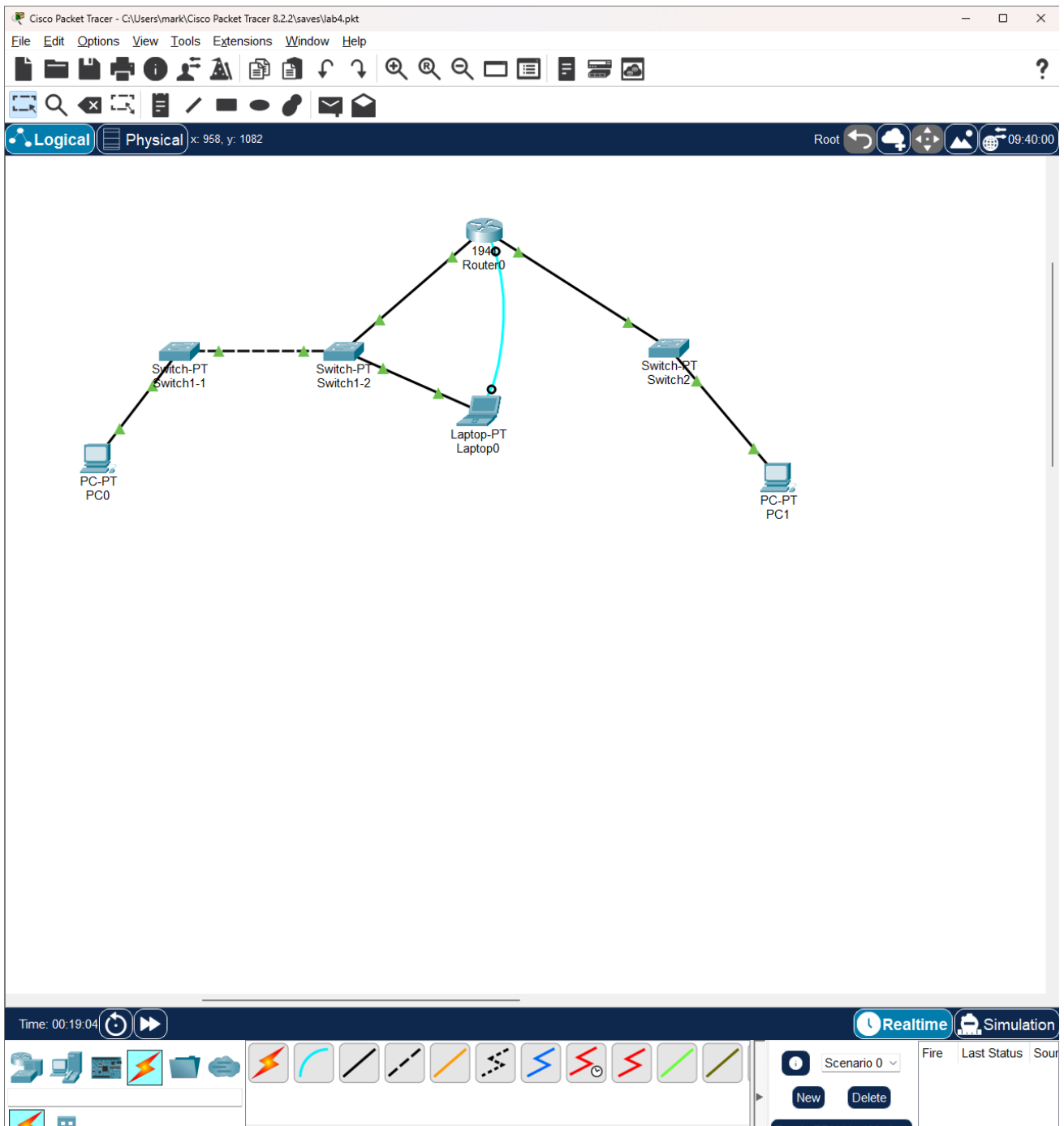
Vis	Time(sec)	Last Device	At Device	Type
0.000	...	PC0	PC0	ICMP
0.000	...	PC0	PC0	ICMP
0.000	...	PC0	PC0	ICMP
0.000	...	PC0	PC0	ICMP
0.001	...	PC0	Switch1-1	ICMP
0.001	...	PC0	PC0	ICMP
0.002	...	PC0	Switch1-1	ICMP
0.002	...	Switch1-1	Switch1-2	ICMP
0.003	...	Switch1-2	Router0	ICMP
0.003	...	Switch1-2	Laptop0	ICMP
0.004	...	Switch1-2	Router0	ICMP
0.004	...	Switch1-2	Laptop0	ICMP
0.005	...	Laptop0	Switch1-2	ICMP
0.006	...	Switch1-2	Switch1-1	ICMP
0.007	...	Switch1-1	PC0	ICMP
0.007	PC0	ICMP
0.008	...	PC0	Switch1-1	ICMP
0.008	...	PC0	PC0	ICMP
0.009	...	PC0	Switch1-1	ICMP
0.009	...	Switch1-1	Switch1-2	ICMP
0.010	...	Switch1-2	Laptop0	ICMP
0.010	...	Switch1-2	Laptop0	ICMP
0.011	...	Laptop0	Switch1-2	ICMP
0.011	...	Laptop0	Switch1-2	ICMP
0.012	...	Switch1-2	Switch1-1	ICMP
0.012	...	Switch1-2	Switch1-1	ICMP

The bottom of the interface shows the **PLAY CONTROLS** section with a time display of 02:58:15.838 and a **Scenario 0** dropdown menu. The **Simulation** button is highlighted.

**Cisco Packet Tracer - C__Users_mark_Cisco Packet Tracer
8.2.2_saves_lab4.pkt 5_26_2025 11_37_08 PM.png**



Cisco Packet Tracer - C__Users_mark_Cisco Packet Tracer 8.2.2_saves_lab4.pkt 5_26_2025 8_49_04 PM.png



Cisco Packet Tracer - C__Users_mark_Cisco Packet Tracer 8.2.2_saves_lab4.pkt 5_26_2025 8_49_25 PM.png

Laptop0

Physical Config **Desktop** Programming Attributes

IP Configuration [X]

Interface: FastEthernet0

IP Configuration

☒ DHCP ☐ Static DHCP request successful.

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

☐ Automatic ☒ Static

IPv6 Address: /

Link Local Address: FE80::260:3EFF:FE8B:478D

Default Gateway:

DNS Server:

802.1X

☐ Use 802.1X Security

Authentication: MD5

Username:

Password:

Cisco Packet Tracer - C__Users_mark_Cisco Packet Tracer 8.2.2_saves_lab4.pkt 5_26_2025 9_03_43 PM.png

```
Physical Config Desktop Programming Attributes
Command Prompt
C:\>ipconfig /all

FastEthernet0 Connection: (default port)
    Connection-specific DNS Suffix...: 
    Physical Address. ....: 0002.16E3.BC43
    Link-local IPv6 Address. ....: FE80::202:16FF:FEE3:BC43
    IPv6 Address. ....: 
    IPv4 Address. ....: 192.168.1.2
    Subnet Mask. ....: 255.255.255.0
    Default Gateway. ....: 
    DHCP Servers. ....: 192.168.1.1
    DHCPv6 IAID. ....: 192.168.1.1
    DHCPv6 Client DUID. ....: 00-01-00-01-D3-72-26-B6-00-02-16-E3-BC-43
    DNS Servers. ....: 
    0.0.0.0

Bluetooth Connection:
    Connection-specific DNS Suffix...: 
    Physical Address. ....: 0040.0B3C.382D
    Link-local IPv6 Address. ....: 

C:\>arp -a
No ARP Entries Found
C:\>ping 10.1.1.2

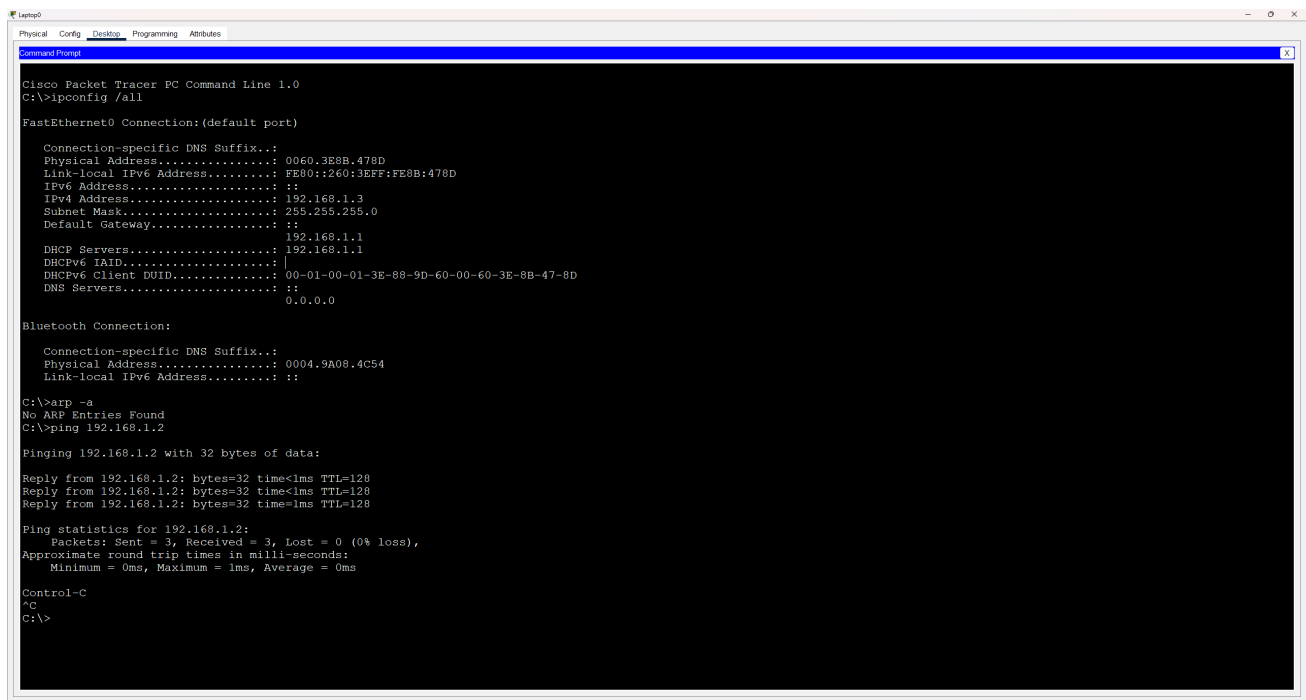
Pinging 10.1.1.2 with 32 bytes of data:
Request timed out.
Reply from 10.1.1.2: bytes=32 time=1ms TTL=127

Ping statistics for 10.1.1.2:
    Packets: Sent = 2, Received = 1, Lost = 1 (50% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 1ms, Average = 1ms

Control-C
^C
C:\>ping 10.1.1.2

Pinging 10.1.1.2 with 32 bytes of data:
Reply from 10.1.1.2: bytes=32 time<1ms TTL=127
Reply from 10.1.1.2: bytes=32 time=4ms TTL=127
Reply from 10.1.1.2: bytes=32 time<1ms TTL=127
Reply from 10.1.1.2: bytes=32 time=1ms TTL=127
```

Cisco Packet Tracer - C__Users_mark_Cisco Packet Tracer 8.2.2_saves_lab4.pkt 5_26_2025 9_05_19 PM.png



```
Cisco Packet Tracer PC Command Line 1.0
C:\>ipconfig /all

FastEthernet0 Connection:(default port)

    Connection-specific DNS Suffix...: 
    Physical Address. ....: 0060.3E8B.478D
    Link-local IPv6 Address. ....: FE80::2603:EFF:FE8B:478D
    IPv6 Address. ....: ::
    IPv4 Address. ....: 192.168.1.3
    Subnet Mask. ....: 255.255.255.0
    Default Gateway. ....: ::
    DHCP Servers. ....: 192.168.1.1
    DHCPv6 IAID. ....: 192.168.1.1
    DHCPv6 Client DUID. ....: 00-01-00-01-3E-88-9D-60-00-60-3E-8B-47-8D
    DNS Servers. ....: ::
    0.0.0.0

Bluetooth Connection:

    Connection-specific DNS Suffix...: 
    Physical Address. ....: 0004.9A08.4C54
    Link-local IPv6 Address. ....: ::

C:\>arp -a
No ARP Entries Found
C:\>ping 192.168.1.2

Pinging 192.168.1.2 with 32 bytes of data:

Reply from 192.168.1.2: bytes=32 time<1ms TTL=128
Reply from 192.168.1.2: bytes=32 time<1ms TTL=128
Reply from 192.168.1.2: bytes=32 time=1ms TTL=128

Ping statistics for 192.168.1.2:
    Packets: Sent = 3, Received = 3, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

Control-C
^C
C:\>
```

Cisco Packet Tracer - C__Users_mark_Cisco Packet Tracer 8.2.2_saves_lab4.pkt 5_26_2025 9_07_51 PM.png

```
Physical  Config  Desktop  Programming  Attributes
Terminal
IOS (tm) PT3000 Software (PT3000-16q4l2-M), Version 12.1(22)EA4, RELEASE SOFTWARE (fc1)
Copyright (c) 1986-2006 by cisco Systems, Inc.
Compiled Fri 12-May-06 17:19 by pt_team

Cisco WS-CSwitch-PT (RC32300) processor (revision C0) with 21039K bytes of memory.
Processor board ID FHK061020WC
Running Standard Image
6 FastEthernet/IEEE 802.3 interface(s)

63488K bytes of flash-simulated non-volatile configuration memory.
Base ethernet MAC Address: 00E0.B006.2964
Motherboard assembly number: 73-5781-09
Power supply part number: 34-0965-01
Motherboard serial number: FOC061004S2
Power supply serial number: DAB0609127D
Model revision number: C0
Motherboard revision number: A0
Model number: WS-CSwitch-PT
System serial number: FHK061020WC

Cisco Internetwork Operating System Software
IOS (tm) PT3000 Software (PT3000-16q4l2-M), Version 12.1(22)EA4, RELEASE SOFTWARE (fc1)
Copyright (c) 1986-2006 by cisco Systems, Inc.
Compiled Fri 12-May-06 17:19 by pt_team

Press RETURN to get started!

%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up
%LINK-5-CHANGED: Interface FastEthernet1/1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/1, changed state to up

Switch>show mac address-table
-----
Mac Address Table
-----
Vlan    Mac Address      Type      Ports
----    -
1       0001.42dc.2979   DYNAMIC   Fa0/1
1       0002.16e3.bc43   DYNAMIC   Fa1/1
1       0060.3e8b.478d   DYNAMIC   Fa0/1
1       0090.2b77.ba01   DYNAMIC   Fa0/1
Switch>
```


Cisco Router and LAN Configuration Lab - NotebookLM — Mozilla Firefox 5_26_2025 11_36_41 PM.png

PDU Information at Device: PC1

OSI Model

Inbound PDU Details

Outbound PDU Details

At Device: PC1
Source: PC0
Destination: 10.1.1.2

In Layers

Layer7

Layer6

Layer5

Layer4

Layer 3: IP Header Src. IP: 192.168.1.2, Dest. IP: 10.1.1.2 ICMP Message Type: 8

Layer 2: Ethernet II Header 0090.2B77.BA02 >> 0090.2BB0.38B2

Layer 1: Port FastEthernet0

Out Layers

Layer7

Layer6

Layer5

Layer4

Layer 3: IP Header Src. IP: 10.1.1.2, Dest. IP: 192.168.1.2 ICMP Message Type: 0

Layer 2: Ethernet II Header 0090.2BB0.38B2 >> 0090.2B77.BA02

Layer 1: Port(s): FastEthernet0

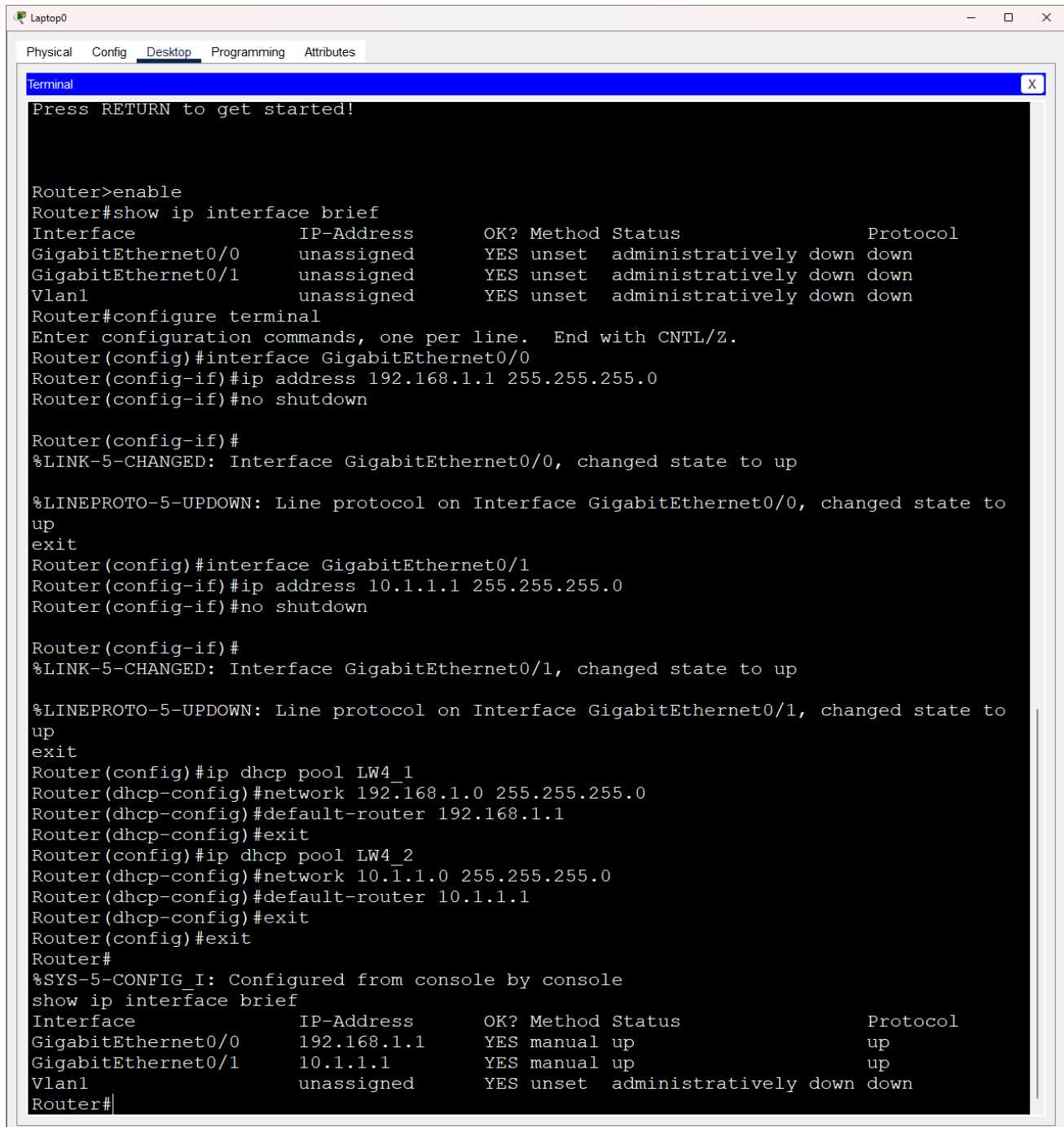
1. FastEthernet0 receives the frame.

Challenge Me

<< Previous Layer

Next Layer >>

Laptop0 5_26_2025 8_44_17 PM.png



The screenshot shows a terminal window titled 'Terminal' with a blue header bar. The window is part of a larger application with tabs for 'Physical', 'Config', 'Desktop', 'Programming', and 'Attributes'. The terminal displays the following commands and output:

```
Press RETURN to get started!

Router>enable
Router#show ip interface brief
Interface                IP-Address      OK? Method Status          Protocol
GigabitEthernet0/0       unassigned      YES unset  administratively down  down
GigabitEthernet0/1       unassigned      YES unset  administratively down  down
Vlan1                    unassigned      YES unset  administratively down  down
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface GigabitEthernet0/0
Router(config-if)#ip address 192.168.1.1 255.255.255.0
Router(config-if)#no shutdown

Router(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0, changed state to up
exit
Router(config)#interface GigabitEthernet0/1
Router(config-if)#ip address 10.1.1.1 255.255.255.0
Router(config-if)#no shutdown

Router(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1, changed state to up
exit
Router(config)#ip dhcp pool LW4_1
Router(dhcp-config)#network 192.168.1.0 255.255.255.0
Router(dhcp-config)#default-router 192.168.1.1
Router(dhcp-config)#exit
Router(config)#ip dhcp pool LW4_2
Router(dhcp-config)#network 10.1.1.0 255.255.255.0
Router(dhcp-config)#default-router 10.1.1.1
Router(dhcp-config)#exit
Router(config)#exit
Router#
%SYS-5-CONFIG_I: Configured from console by console
show ip interface brief
Interface                IP-Address      OK? Method Status          Protocol
GigabitEthernet0/0       192.168.1.1     YES manual up              up
GigabitEthernet0/1       10.1.1.1        YES manual up              up
Vlan1                    unassigned      YES unset  administratively down  down
Router#
```

PC1 5_26_2025 9_06_09 PM.png

```
PC1
Physical Config Desktop Programming Attributes
Command Prompt

Cisco Packet Tracer PC Command Line 1.0
C:\>ipconfig /all

FastEthernet0 Connection:(default port)

    Connection-specific DNS Suffix...: 
    Physical Address...: 0090.2BB0.38B2
    Link-local IPv6 Address...: FE80::290:2BFF:FE80:38B2
    IPv6 Address...: ::
    IPv4 Address...: 10.1.1.2
    Subnet Mask...: 255.255.255.0
    Default Gateway...: ::
    DHCP Servers...: 10.1.1.1
    DHCPv6 IAID...: 
    DHCPv6 Client DUID...: 00-01-00-01-C8-AD-6A-06-00-90-2B-B0-38-B2
    DNS Servers...: ::
    DNS Servers...: 0.0.0.0

Bluetooth Connection:

    Connection-specific DNS Suffix...: 
    Physical Address...: 0030.F20D.E844
    Link-local IPv6 Address...: ::

C:\>arp -a
Invalid Command.

C:\>arp -a
No ARP Entries Found
C:\>ping 192.168.1.3

Pinging 192.168.1.3 with 32 bytes of data:

Request timed out.
Reply from 192.168.1.3: bytes=32 time=1ms TTL=127
Reply from 192.168.1.3: bytes=32 time=1ms TTL=127
Reply from 192.168.1.3: bytes=32 time<1ms TTL=127

Ping statistics for 192.168.1.3:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\>
C:\>
```

Screenshot 2025-05-26 210822.png

```
C:\>arp -a
```

Internet Address	Physical Address	Type
192.168.1.1	0090.2b77.ba01	dynamic
192.168.1.3	0060.3e8b.478d	dynamic