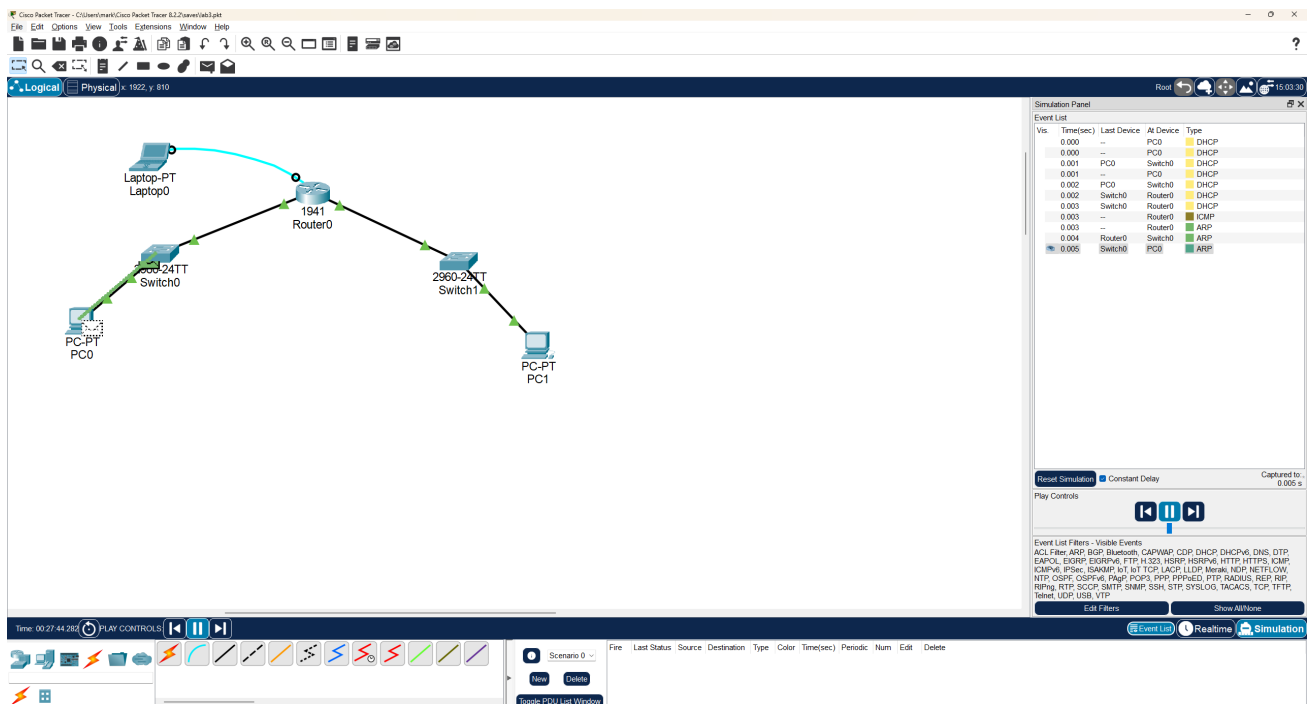# Cisco Packet Tracer - C__Users_mark_Cisco Packet Tracer 8.2.2_saves_lab3.pkt 5_24_2025 6_36_32 PM.png

Cisco Packet Tracer - C__Users_mark_Cisco Packet Tracer 8.2.2_saves_lab3.pkt 5_24_2025 6_37_30 PM.png

PC0 — □ ✕

Physical | Config | Desktop | Programming | Attributes

IP Configuration ✕

Interface: FastEthernet0

IP Configuration
- ● DHCP   ○ Static   DHCP request successful.
- IPv4 Address: 192.168.1.11
- 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::260:5CFF:FEA1:DD55
- Default Gateway: _____
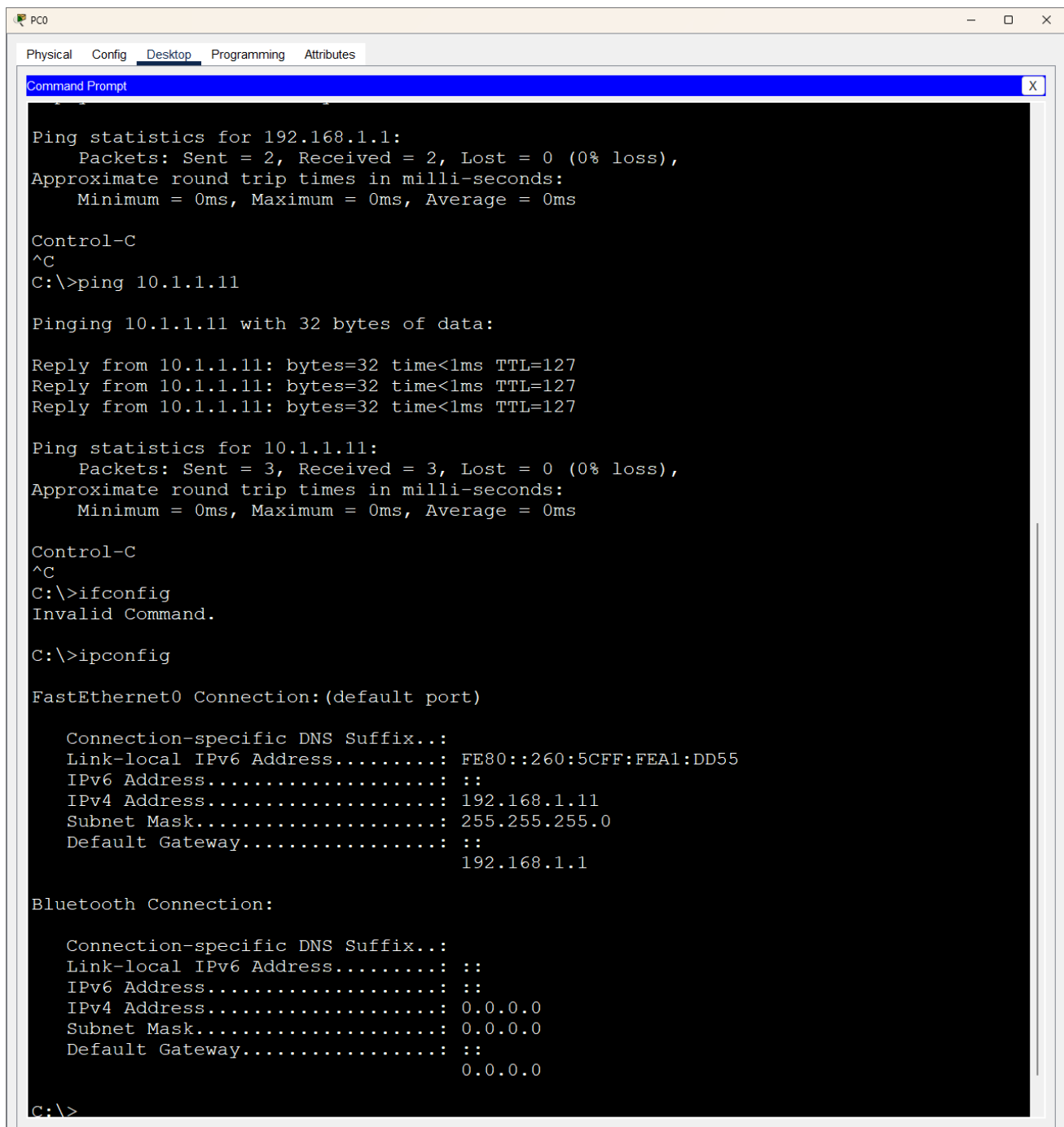- DNS Server: _____

802.1X
- ☐ Use 802.1X Security
- Authentication: MD5
- Username: _____
- Password: _____

Cisco Packet Tracer - C__Users_mark_Cisco Packet Tracer 8.2.2_saves_lab3.pkt 5_24_2025 6_41_20 PM.png

PC0

Physical | Config | Desktop | Programming | Attributes

Command Prompt   X

```
Ping statistics for 192.168.1.1:
    Packets: Sent = 2, Received = 2, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

Control-C
^C
C:\>ping 10.1.1.11

Pinging 10.1.1.11 with 32 bytes of data:

Reply from 10.1.1.11: bytes=32 time<1ms TTL=127
Reply from 10.1.1.11: bytes=32 time<1ms TTL=127
Reply from 10.1.1.11: bytes=32 time<1ms TTL=127

Ping statistics for 10.1.1.11:
    Packets: Sent = 3, Received = 3, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

Control-C
^C
C:\>ifconfig
Invalid Command.

C:\>ipconfig

FastEthernet0 Connection:(default port)

    Connection-specific DNS Suffix..:
    Link-local IPv6 Address.........: FE80::260:5CFF:FEA1:DD55
    IPv6 Address....................: ::
    IPv4 Address....................: 192.168.1.11
    Subnet Mask.....................: 255.255.255.0
    Default Gateway.................: ::
                                      192.168.1.1

Bluetooth Connection:

    Connection-specific DNS Suffix..:
    Link-local IPv6 Address.........: ::
    IPv6 Address....................: ::
    IPv4 Address....................: 0.0.0.0
    Subnet Mask.....................: 0.0.0.0
    Default Gateway.................: ::
                                      0.0.0.0

C:\>
```
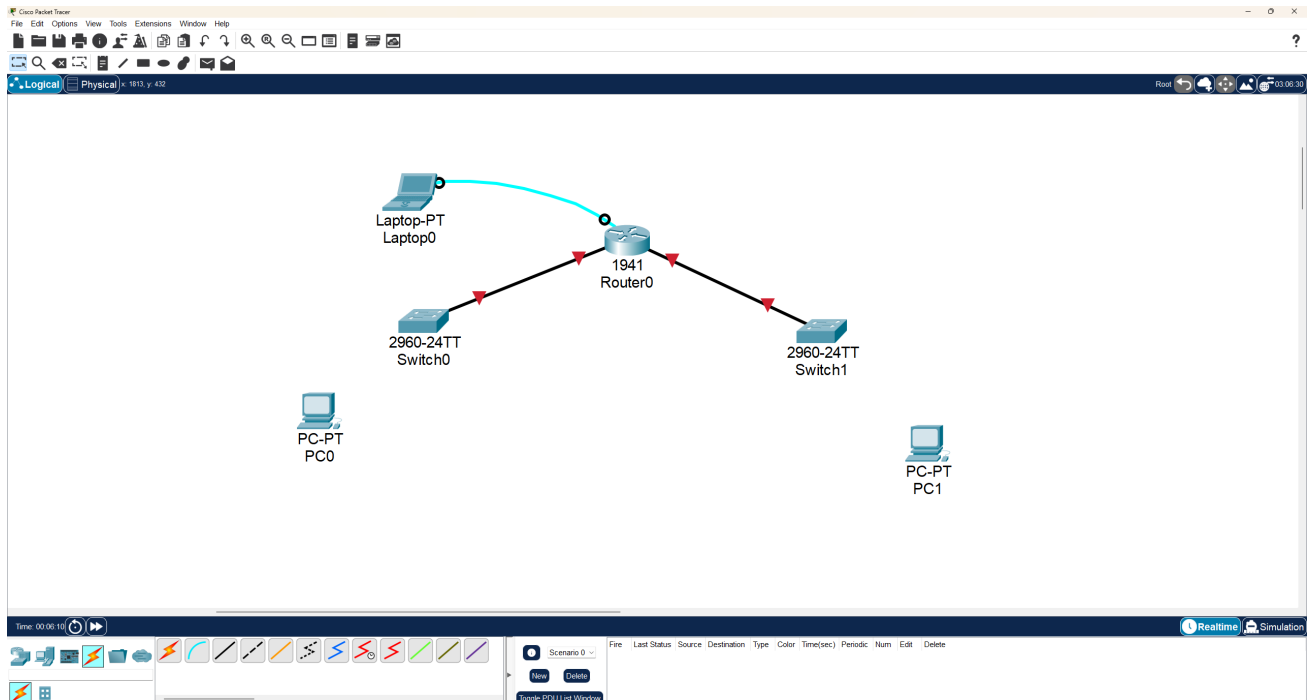
Cisco Packet Tracer 5_24_2025 6_12_37 PM.png

Cisco Router and LAN Configuration Lab - NotebookLM — Mozilla Firefox 5_24_2025 6_32_57 PM.png

Laptop0 5_24_2025 6_19_01 PM.png

Laptop0 5_24_2025 6_26_18 PM.png

```
Laptop0                                                                      —  □  ✕
Physical  Config  Desktop  Programming  Attributes

Terminal                                                                            X

Gateway of last resort is not set


Router#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#hostname R1
R1(config)#interface GigabitEthernet0/0
R1(config-if)#ip address 192.168.1.1 255.255.255.0
R1(config-if)#no shutdown

R1(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
R1(config)#interface GigabitEthernet0/1
R1(config-if)#ip address 10.1.1.1 255.255.255.0
R1(config-if)#no shutdown

R1(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
R1(config)#ip dhcp pool LW3_1
R1(dhcp-config)#network 192.168.1.0 255.255.255.0
R1(dhcp-config)#default-router 192.168.1.1
R1(dhcp-config)#exit
R1(config)#ip dhcp excluded-address 192.168.1.1 192.168.1.10
R1(config)#ip dhcp pool LW3_2
R1(dhcp-config)#.
                 ^
% Invalid input detected at '^' marker.

R1(dhcp-config)#
R1(dhcp-config)#network 10.1.1.0 255.255.255.0
R1(dhcp-config)#default-router 10.1.1.1
R1(dhcp-config)#exit
R1(config)#ip dhcp excluded-address 10.1.1.1 10.1.1.10
R1(config)#^Z
R1#
%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
R1#
```

Laptop0 5_24_2025 6_29_20 PM.png

PC0   —   □   ✕

Physical   Config   Desktop   Programming   Attributes

IP Configuration   X

Interface	FastEthernet0	⌄

IP Configuration

○ DHCP   ○ Static   DHCP request successful.

IPv4 Address	192.168.1.11
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::260:5CFF:FEA1:DD55
Default Gateway	
DNS Server	

802.1X

☐ Use 802.1X Security

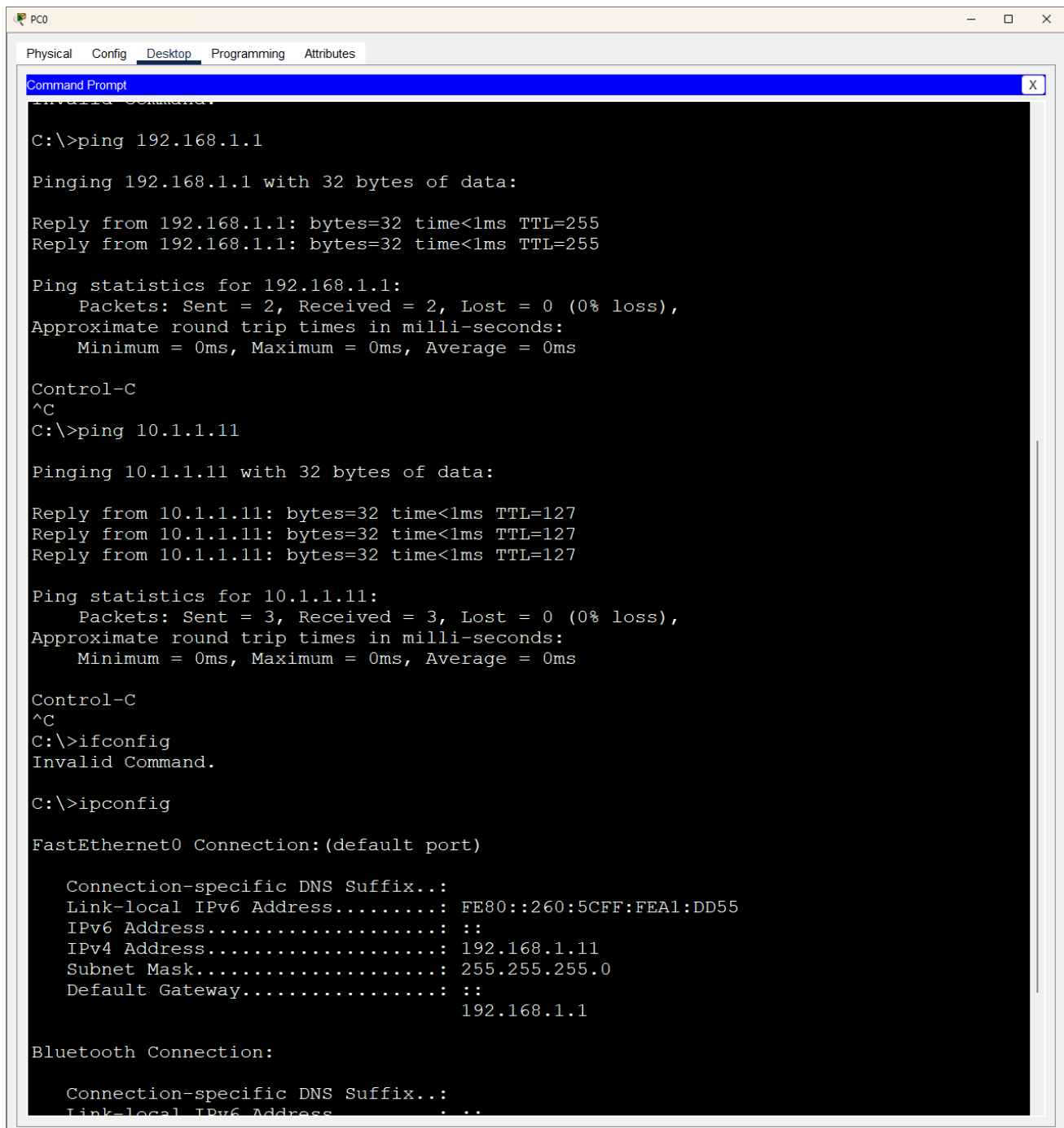|	
Authentication	MD5 ⌄
Username	
Password	

PC0 5_24_2025 6_36_21 PM.png
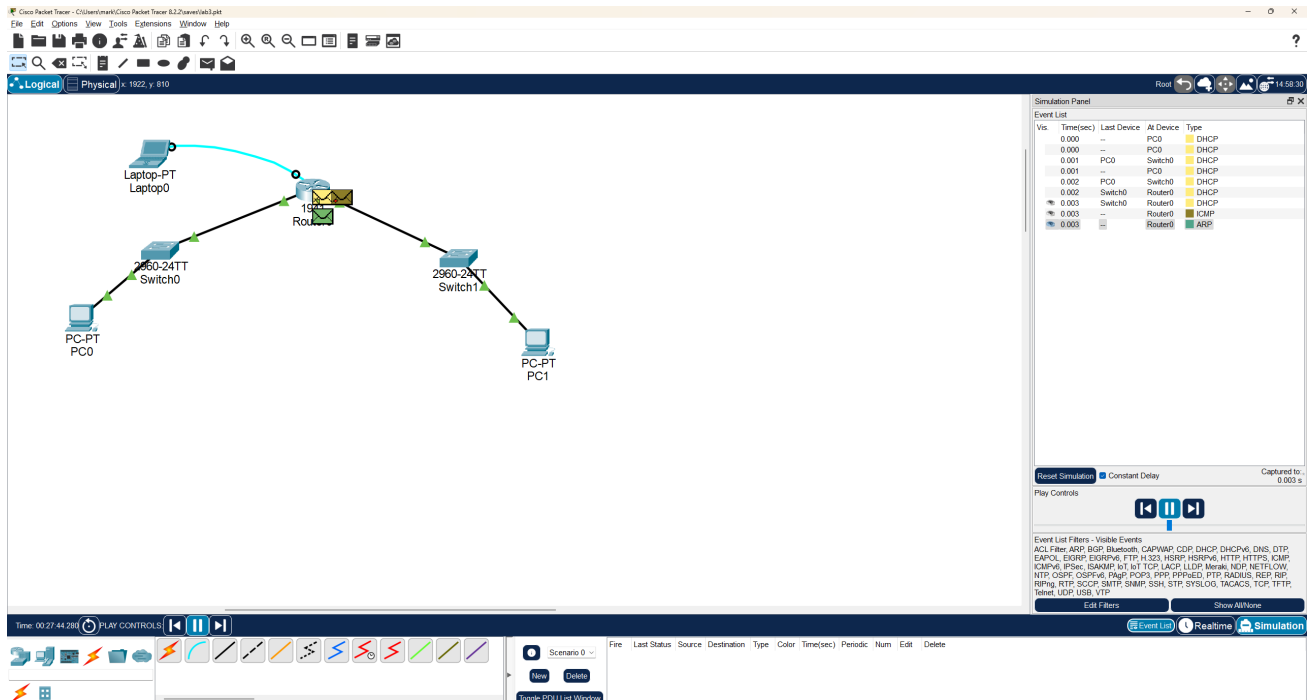
PC0 5_24_2025 6_41_39 PM.png

PC0

Physical | Config | Desktop | Programming | Attributes

Command Prompt

```
C:\>ping 192.168.1.1

Pinging 192.168.1.1 with 32 bytes of data:

Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255

Ping statistics for 192.168.1.1:
    Packets: Sent = 2, Received = 2, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

Control-C
^C
C:\>ping 10.1.1.11

Pinging 10.1.1.11 with 32 bytes of data:

Reply from 10.1.1.11: bytes=32 time<1ms TTL=127
Reply from 10.1.1.11: bytes=32 time<1ms TTL=127
Reply from 10.1.1.11: bytes=32 time<1ms TTL=127

Ping statistics for 10.1.1.11:
    Packets: Sent = 3, Received = 3, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

Control-C
^C
C:\>ifconfig
Invalid Command.

C:\>ipconfig

FastEthernet0 Connection:(default port)

    Connection-specific DNS Suffix..:
    Link-local IPv6 Address.........: FE80::260:5CFF:FEA1:DD55
    IPv6 Address....................: ::
    IPv4 Address....................: 192.168.1.11
    Subnet Mask.....................: 255.255.255.0
    Default Gateway.................: ::
                                      192.168.1.1

Bluetooth Connection:

    Connection-specific DNS Suffix..:
    Link-local IPv6 Address         : ::
```

PC0 5_24_2025 6_43_57 PM.png

Physical   Config   Desktop   Programming   Attributes

Terminal   X

```
R1>ping 192.168.1.11

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.1.11, timeout is 2
seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/0/1
ms

R1>ping 10.1.1.11

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 10.1.1.11, timeout is 2
seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/0/1
ms

R1>show ip route
Codes: L - local, C - connected, S - static, R - RIP, M - mobile,
B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter
area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external
type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E -
EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia -
IS-IS inter area
       * - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route

Gateway of last resort is not set

     10.0.0.0/8 is variably subnetted, 2 subnets, 2 masks
C       10.1.1.0/24 is directly connected, GigabitEthernet0/1
L       10.1.1.1/32 is directly connected, GigabitEthernet0/1
     192.168.1.0/24 is variably subnetted, 2 subnets, 2 masks
C       192.168.1.0/24 is directly connected, GigabitEthernet0/0
L       192.168.1.1/32 is directly connected, GigabitEthernet0/0

R1>
```

PC1 5_24_2025 6_29_34 PM.png

PC1 ⬜ □ ✕

Physical   Config   Desktop   Programming   Attributes

IP Configuration X

Interface   FastEthernet0

IP Configuration

🔘 DHCP   ○ Static   DHCP request successful.

IPv4 Address   10.1.1.11

Subnet Mask   255.255.255.0

Default Gateway 10.1.1.1

DNS Server   0.0.0.0

IPv6 Configuration

○ Automatic   🔘 Static

IPv6 Address   /

Link Local Address   FE80::201:43FF:FE3D:51DC

Default Gateway

DNS Server

802.1X

☐ Use 802.1X Security

Authentication   MD5

Username

Password