

## **Lab 10**

To understand the operation of TELNET by accessing the router in server room from a PC in IT office

## Topology:



## PC - 1 Configuration:

10.0.0.2

Physical Config Desktop Custom Interface

**GLOBAL**

Settings

Algorithm Settings

**INTERFACE**

FastEthernet0

**FastEthernet0**

Port Status ☒ On

Bandwidth ☒ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex ☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address 0002.1696.033C

IP Configuration

☐ DHCP

☒ Static

IP Address 10.0.0.2

Subnet Mask 255.0.0.0

IPv6 Configuration

☐ DHCP

☐ Auto Config

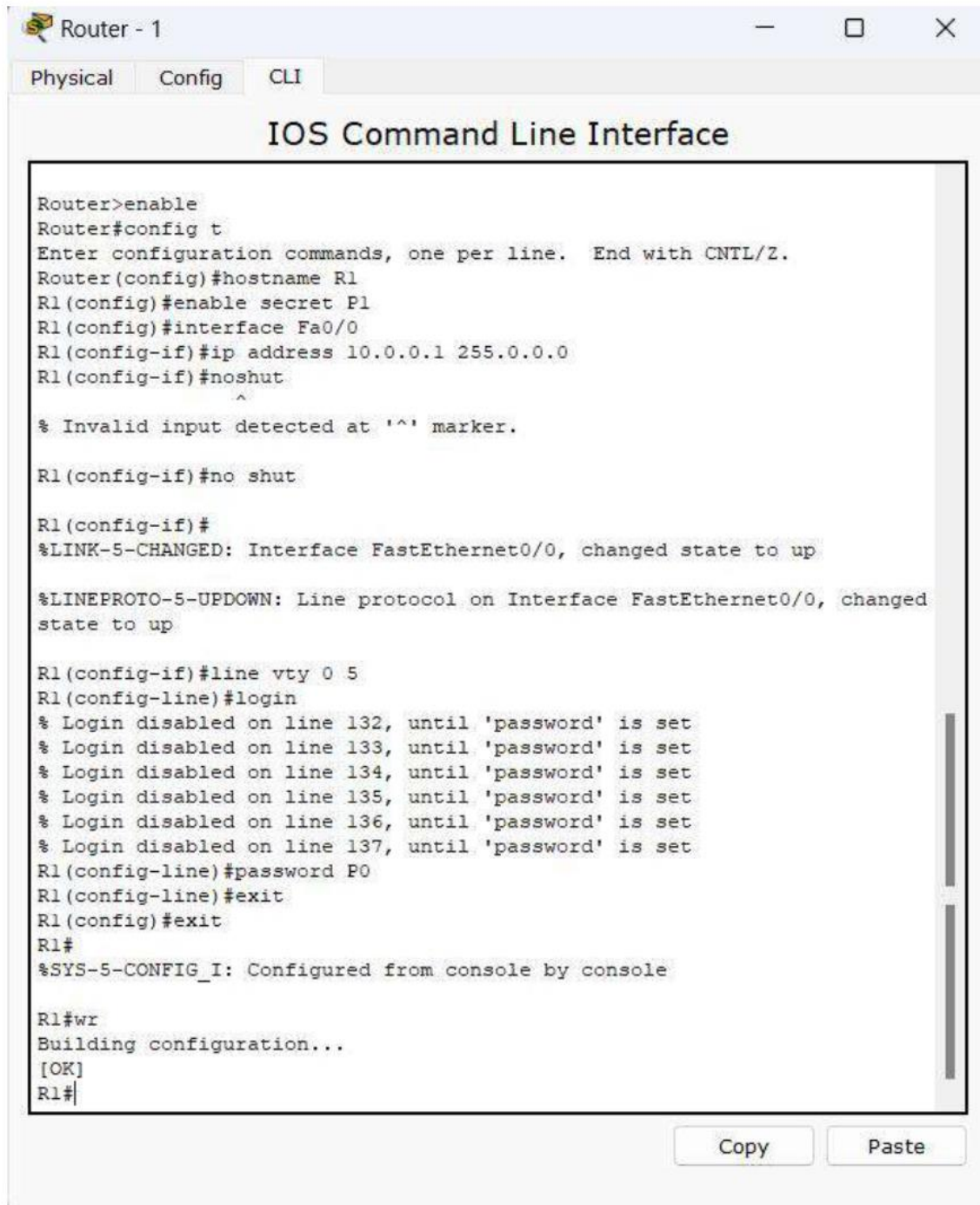
☒ Static

IPv6 Address /

Link Local Address: E80::202:16FF:FE96:33C



## Router - 1 Configuration:



The screenshot shows a window titled "Router - 1" with three tabs: "Physical", "Config", and "CLI". The "CLI" tab is active, displaying the "IOS Command Line Interface". The interface shows a series of commands entered at the prompt "Router>" and "R1(config-...)", along with their corresponding outputs. The commands include enabling the router, entering configuration mode, setting the hostname to "R1", enabling secret passwords, configuring the FastEthernet0/0 interface with IP address 10.0.0.1 and 255.0.0.0, and setting the line vty 0 5 with login and password P0. The interface also shows status messages like "%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up" and "%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up". The configuration is saved with the command "R1#wr", resulting in "Building configuration..." and "[OK]".

```
Router>enable
Router#config t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#hostname R1
R1(config)#enable secret P1
R1(config)#interface Fa0/0
R1(config-if)#ip address 10.0.0.1 255.0.0.0
R1(config-if)#no shut
R1(config-if)#no shut
^
% Invalid input detected at '^' marker.

R1(config-if)#no shut

R1(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

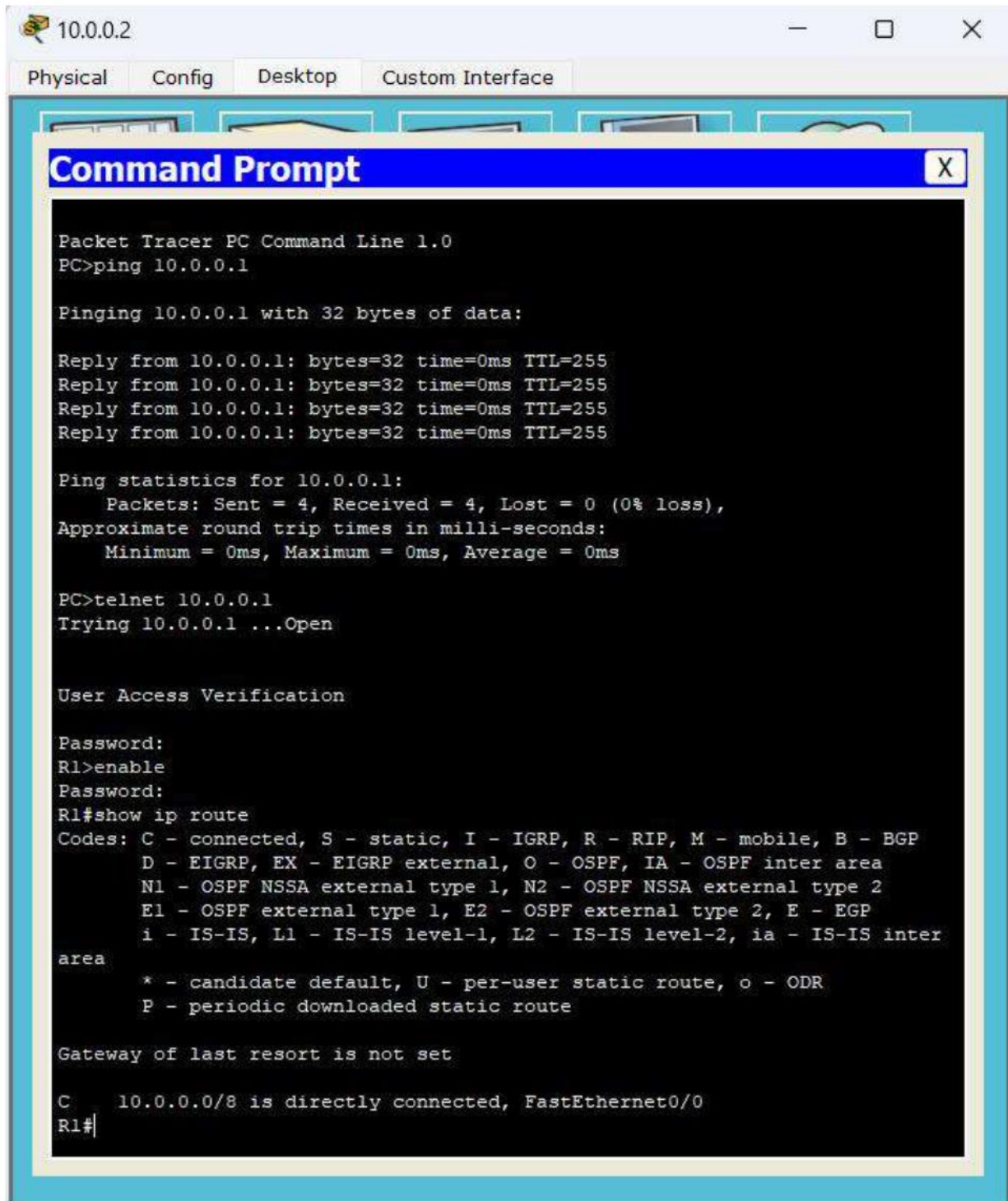
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed
state to up

R1(config-if)#line vty 0 5
R1(config-line)#login
% Login disabled on line 132, until 'password' is set
% Login disabled on line 133, until 'password' is set
% Login disabled on line 134, until 'password' is set
% Login disabled on line 135, until 'password' is set
% Login disabled on line 136, until 'password' is set
% Login disabled on line 137, until 'password' is set
R1(config-line)#password P0
R1(config-line)#exit
R1(config)#exit
R1#
%SYS-5-CONFIG_I: Configured from console by console

R1#wr
Building configuration...
[OK]
R1#
```

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## PC - 1 (Command Prompt):



The screenshot shows the Packet Tracer PC Command Line interface for PC 10.0.0.2. The window has tabs for Physical, Config, Desktop, and Custom Interface. The Desktop tab is active, showing a Command Prompt window. The Command Prompt displays the results of a ping and a telnet command.

```
Packet Tracer PC Command Line 1.0
PC>ping 10.0.0.1

Pinging 10.0.0.1 with 32 bytes of data:

Reply from 10.0.0.1: bytes=32 time=0ms TTL=255
Reply from 10.0.0.1: bytes=32 time=0ms TTL=255
Reply from 10.0.0.1: bytes=32 time=0ms TTL=255
Reply from 10.0.0.1: bytes=32 time=0ms TTL=255

Ping statistics for 10.0.0.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

PC>telnet 10.0.0.1
Trying 10.0.0.1 ...Open

User Access Verification

Password:
R1>enable
Password:
R1#show ip route
Codes: C - connected, S - static, I - IGRP, 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

C    10.0.0.0/8 is directly connected, FastEthernet0/0
R1#
```

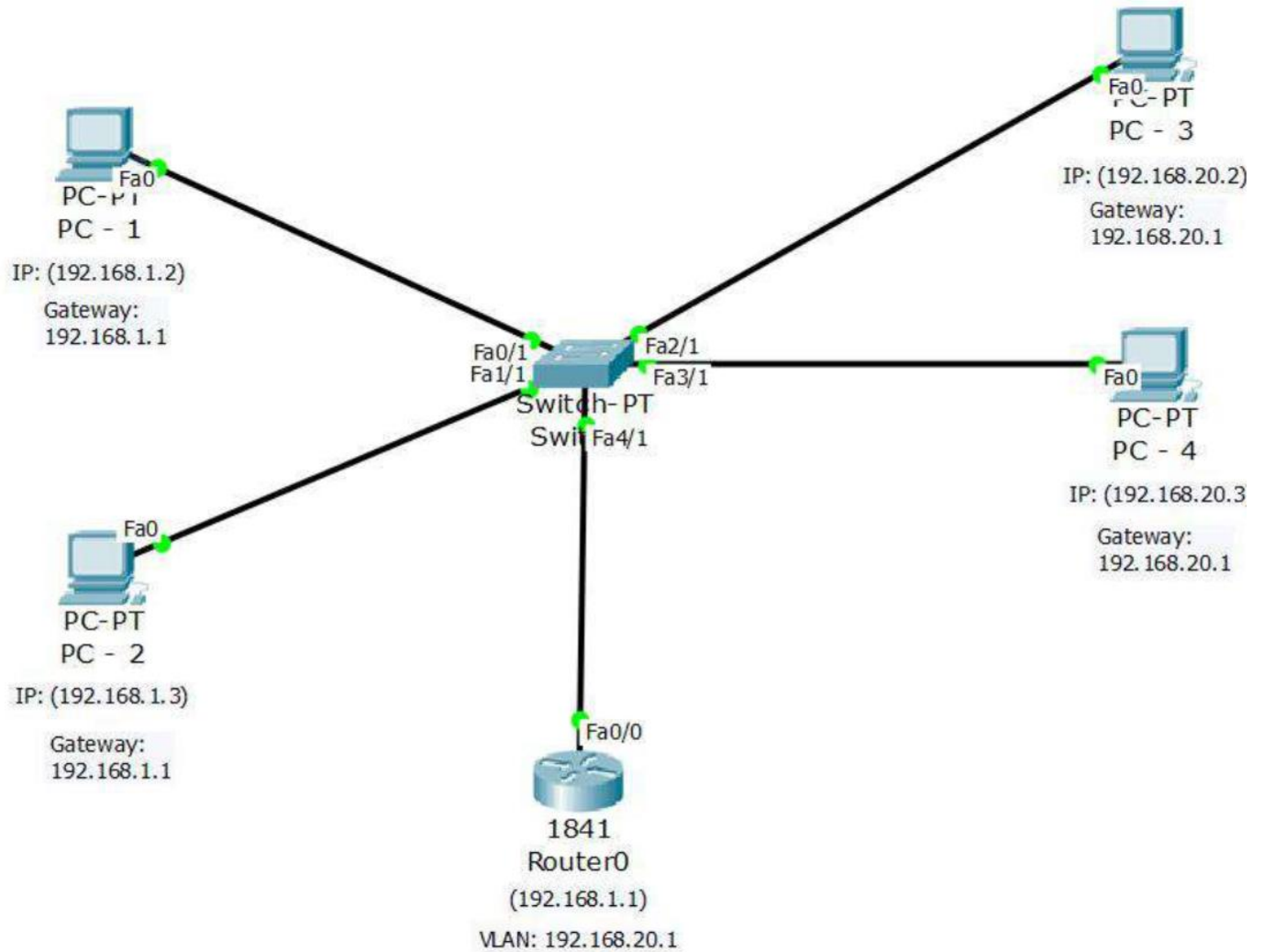
Password for User Access Verification is: **P0**

Password for enable is: **P1**

## Lab 11

To construct a VLAN and make the PC's communicate among a VLAN

### Topology:



## PC - 1 Configuration:

The screenshot shows the 'Global Settings' window for 'PC - 1'. The left sidebar has tabs for 'GLOBAL', 'Settings', 'Algorithm Settings', 'INTERFACE', and 'FastEthernet0'. The 'Global Settings' panel contains the following fields:

- Display Name:** PC - 1
- Gateway/DNS:**
  - ☐ DHCP
  - ☒ Static
  - Gateway:** 192.168.1.1
  - DNS Server:** (empty)
- Gateway/DNS Ipv6:**
  - ☐ DHCP
  - ☐ Auto Config
  - ☒ Static
  - IPv6 Gateway:** (empty)
  - IPv6 DNS Server:** (empty)

The screenshot shows the 'FastEthernet0' configuration window for 'PC - 1'. The left sidebar has tabs for 'GLOBAL', 'Settings', 'Algorithm Settings', 'INTERFACE', and 'FastEthernet0'. The 'FastEthernet0' panel contains the following fields:

- Port Status:** ☒ On
- Bandwidth:** ☐ 100 Mbps ☐ 10 Mbps ☒ Auto
- Duplex:** ☐ Half Duplex ☒ Full Duplex ☒ Auto
- MAC Address:** 000B.BED7.D861
- IP Configuration:**
  - ☐ DHCP
  - ☒ Static
  - IP Address:** 192.168.1.2
  - Subnet Mask:** 255.255.255.0
- IPv6 Configuration:**
  - ☐ DHCP
  - ☐ Auto Config
  - ☒ Static
  - IPv6 Address:** (empty) / (empty)
  - Link Local Address:** 0::20B:BEFF:FED7:D861



## PC - 2 Configuration:

The screenshot shows the 'Global Settings' window for 'PC - 2'. The left sidebar has a tree view with 'GLOBAL' expanded, containing 'Settings' and 'Algorithm Settings'. Under 'INTERFACE', 'FastEthernet0' is selected. The main panel is titled 'Global Settings' and contains two sections: 'Gateway/DNS' and 'Gateway/DNS Ipv6'. In 'Gateway/DNS', 'Static' is selected, with 'Gateway' set to '192.168.1.1' and 'DNS Server' empty. In 'Gateway/DNS Ipv6', 'Static' is also selected, with 'IPv6 Gateway' and 'IPv6 DNS Server' both empty.

PC - 2

Physical Config Desktop Custom Interface

**GLOBAL**

Settings

Algorithm Settings

**INTERFACE**

FastEthernet0

**Global Settings**

Display Name PC - 2

**Gateway/DNS**

☐ DHCP

☒ Static

Gateway 192.168.1.1

DNS Server

**Gateway/DNS Ipv6**

☐ DHCP

☐ Auto Config

☒ Static

IPv6 Gateway

IPv6 DNS Server

The screenshot shows the 'FastEthernet0' configuration window for 'PC - 2'. The left sidebar is the same as the previous window. The main panel is titled 'FastEthernet0' and contains several settings: 'Port Status' is checked 'On'; 'Bandwidth' is set to '100 Mbps'; 'Duplex' is set to 'Full Duplex'; 'MAC Address' is '0060.706B.CD7C'. Under 'IP Configuration', 'Static' is selected, with 'IP Address' set to '192.168.1.3' and 'Subnet Mask' set to '255.255.255.0'. Under 'IPv6 Configuration', 'Static' is selected, with 'IPv6 Address' empty and 'Link Local Address' set to 'fe80::260:70ff:fe6b:cd7c'.

PC - 2

Physical Config Desktop Custom Interface

**GLOBAL**

Settings

Algorithm Settings

**INTERFACE**

FastEthernet0

**FastEthernet0**

Port Status ☒ On

Bandwidth ☒ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex ☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address 0060.706B.CD7C

**IP Configuration**

☐ DHCP

☒ Static

IP Address 192.168.1.3

Subnet Mask 255.255.255.0

**IPv6 Configuration**

☐ DHCP

☐ Auto Config

☒ Static

IPv6 Address /

Link Local Address: fe80::260:70ff:fe6b:cd7c



## PC - 3 Configuration:

The screenshot shows the 'Global Settings' window for PC - 3. The left sidebar has 'GLOBAL' selected, with sub-items 'Settings', 'Algorithm Settings', 'INTERFACE', and 'FastEthernet0'. The main panel is titled 'Global Settings' and contains the following fields:

- Display Name: PC - 3
- Gateway/DNS:
  - ☐ DHCP
  - ☒ Static
  - Gateway: 192.168.20.1
  - DNS Server: (empty)
- Gateway/DNS Ipv6:
  - ☐ DHCP
  - ☐ Auto Config
  - ☒ Static
  - IPv6 Gateway: (empty)
  - IPv6 DNS Server: (empty)

The screenshot shows the 'FastEthernet0' configuration window for PC - 3. The left sidebar has 'INTERFACE' selected, with sub-items 'FastEthernet0'. The main panel is titled 'FastEthernet0' and contains the following fields:

- Port Status: ☒ On
- Bandwidth: ☒ 100 Mbps ☐ 10 Mbps ☒ Auto
- Duplex: ☐ Half Duplex ☒ Full Duplex ☒ Auto
- MAC Address: 0060.47A2.776B
- IP Configuration:
  - ☐ DHCP
  - ☒ Static
  - IP Address: 192.168.20.2
  - Subnet Mask: 255.255.255.0
- IPv6 Configuration:
  - ☐ DHCP
  - ☐ Auto Config
  - ☒ Static
  - IPv6 Address: (empty) / (empty)
  - Link Local Address: 30::260:47FF:FEA2:776B

## PC - 4 Configuration:

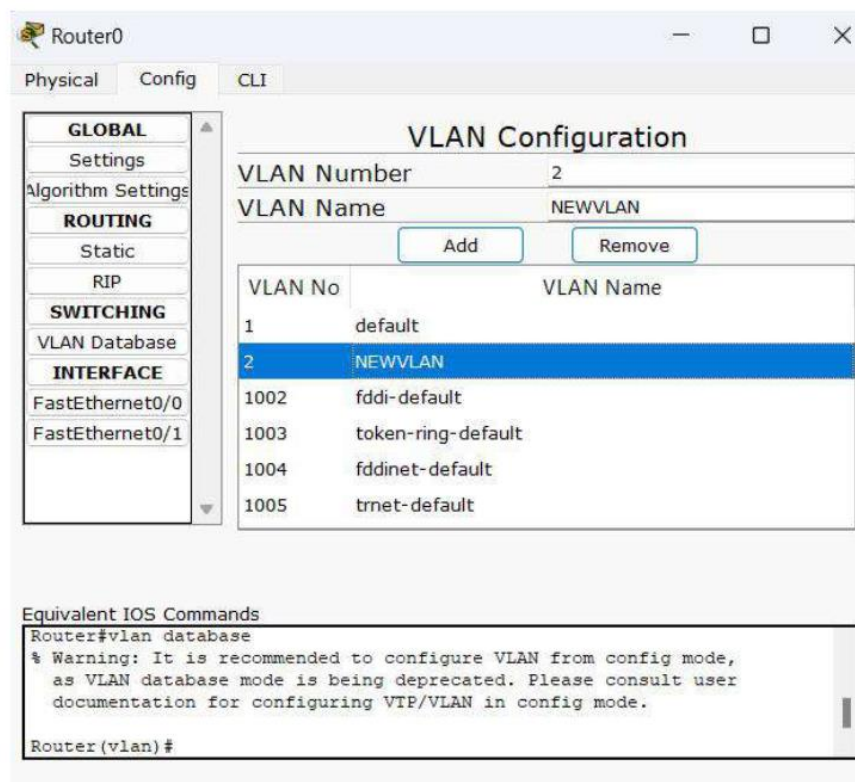
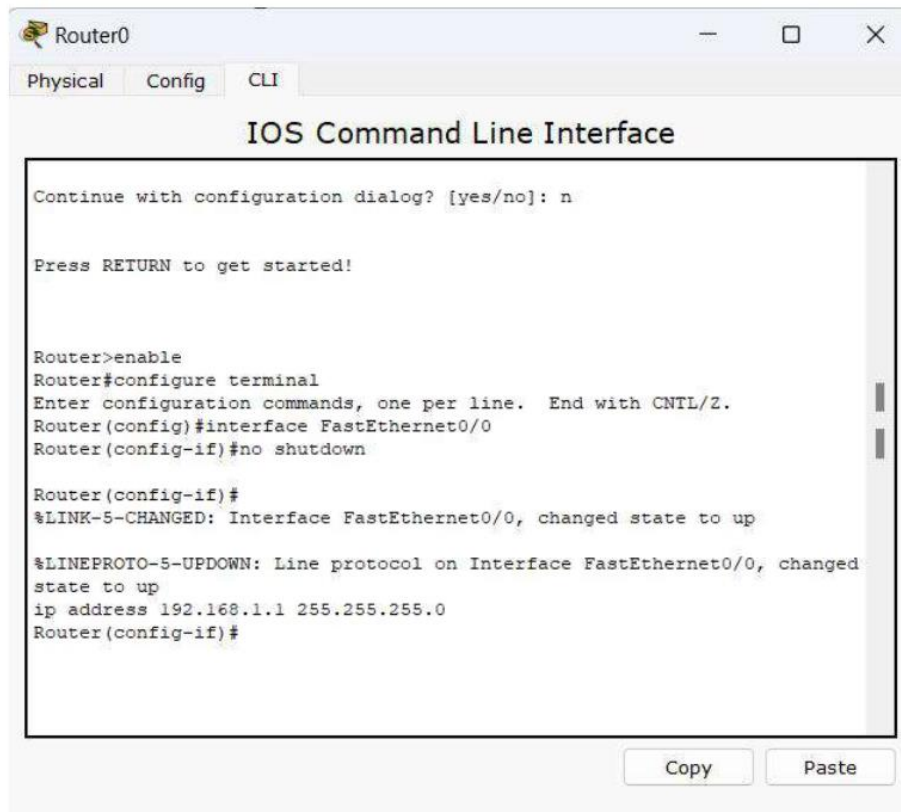
The screenshot shows the 'Global Settings' window for 'PC - 4'. The left sidebar has tabs for 'GLOBAL' (selected), 'Settings', 'Algorithm Settings', 'INTERFACE', and 'FastEthernet0'. The main area is titled 'Global Settings' and contains the following fields:

- Display Name:** PC - 4
- Gateway/DNS:**
  - ☐ DHCP
  - ☒ Static
  - Gateway:** 192.168.20.1
  - DNS Server:** (empty)
- Gateway/DNS Ipv6:**
  - ☐ DHCP
  - ☐ Auto Config
  - ☒ Static
  - IPv6 Gateway:** (empty)
  - IPv6 DNS Server:** (empty)

The screenshot shows the 'FastEthernet0' configuration window for 'PC - 4'. The left sidebar has tabs for 'GLOBAL', 'Settings', 'Algorithm Settings', 'INTERFACE' (selected), and 'FastEthernet0'. The main area is titled 'FastEthernet0' and contains the following fields:

- Port Status:** ☒ On
- Bandwidth:** ☒ 100 Mbps ☐ 10 Mbps ☒ Auto
- Duplex:** ☐ Half Duplex ☒ Full Duplex ☒ Auto
- MAC Address:** 00D0.D342.D8C4
- IP Configuration:**
  - ☐ DHCP
  - ☒ Static
  - IP Address:** 192.168.20.3
  - Subnet Mask:** 255.255.255.0
- IPv6 Configuration:**
  - ☐ DHCP
  - ☐ Auto Config
  - ☒ Static
  - IPv6 Address:** (empty) / (empty)
  - Link Local Address:** 0::2D0:D3FF:FE42:D8C4

## Router - 1 Configuration:



Router0

Physical Config CLI

### IOS Command Line Interface

```
Router>enable
Router#vlan database
% Warning: It is recommended to configure VLAN from config mode,
as VLAN database mode is being deprecated. Please consult user
documentation for configuring VIP/VLAN in config mode.

Router(vlan)#vlan 2 name NEWVLAN
VLAN 2 modified:
  Name: NEWVLAN
Router(vlan)#
Router(vlan)#exit
APPLY completed.
Exiting....
Router#config t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface Fa0/0.1
Router(config-subif)#
%LINK-5-CHANGED: Interface FastEthernet0/0.1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0.1,
changed state to up

Router(config-subif)#encapsulation dot1q 2
Router(config-subif)#ip address 192.168.20.1 255.255.255.0
```

Copy Paste

Router0

Physical Config CLI

### IOS Command Line Interface

```
Router(config-subif)#no shut
^
% Invalid input detected at '^' marker.

Router(config-subif)#exit
Router(config)#exit
Router#
%SYS-5-CONFIG_I: Configured from console by console

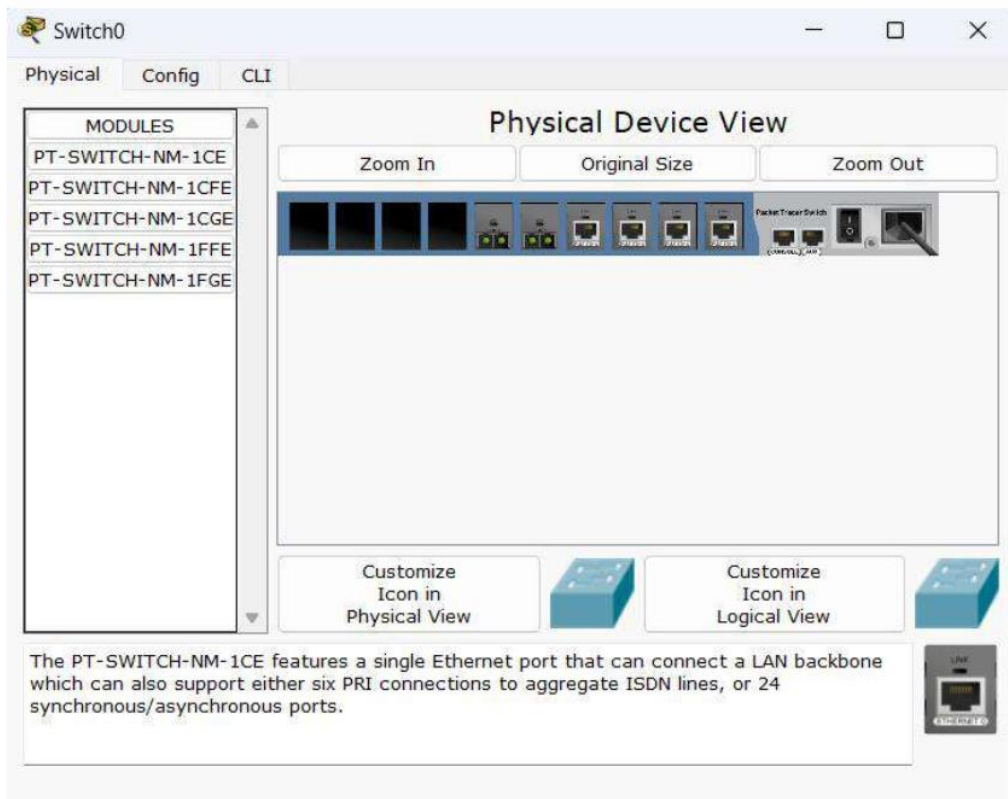
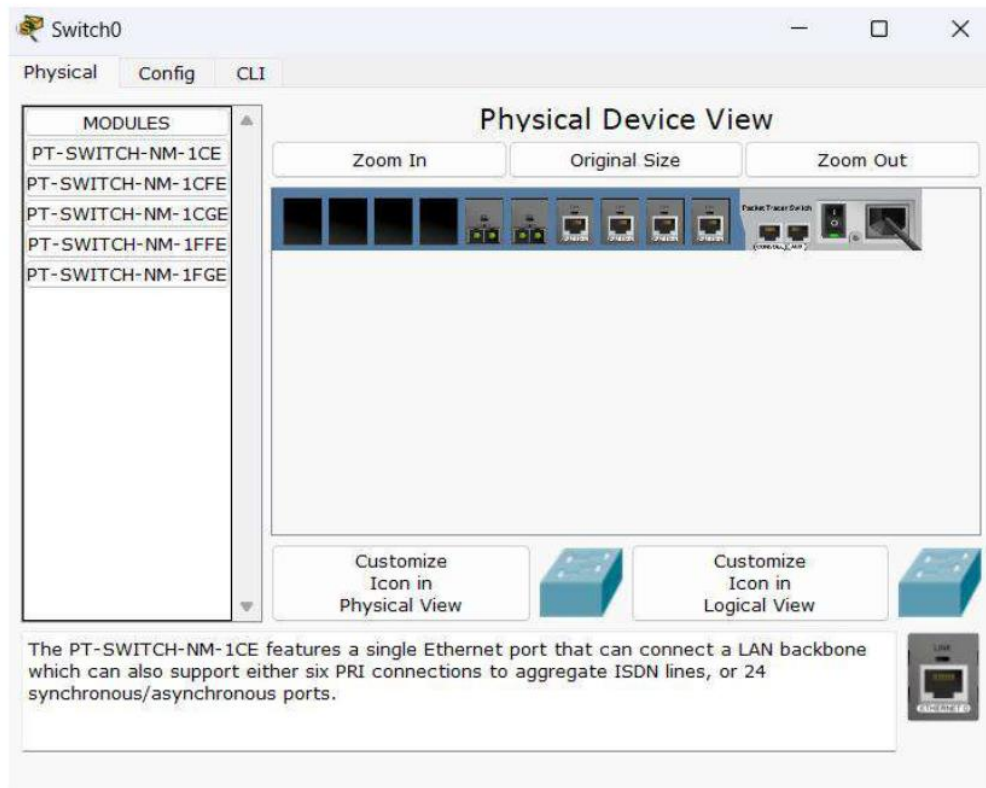
Router#show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       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

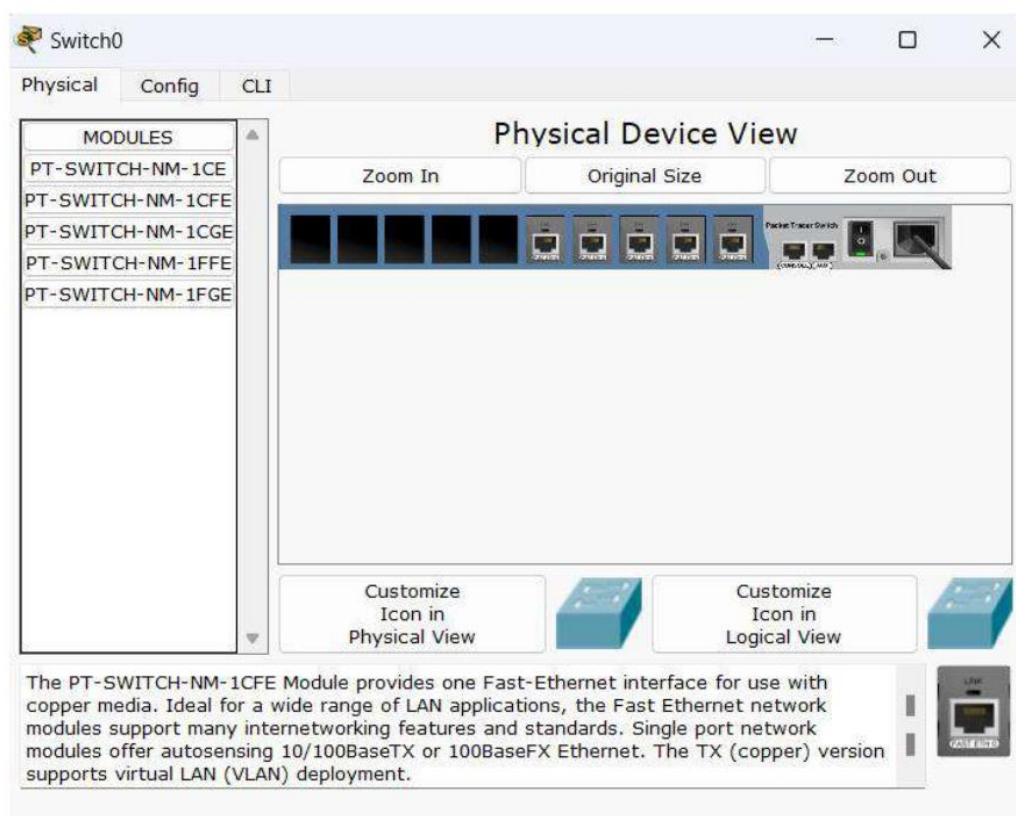
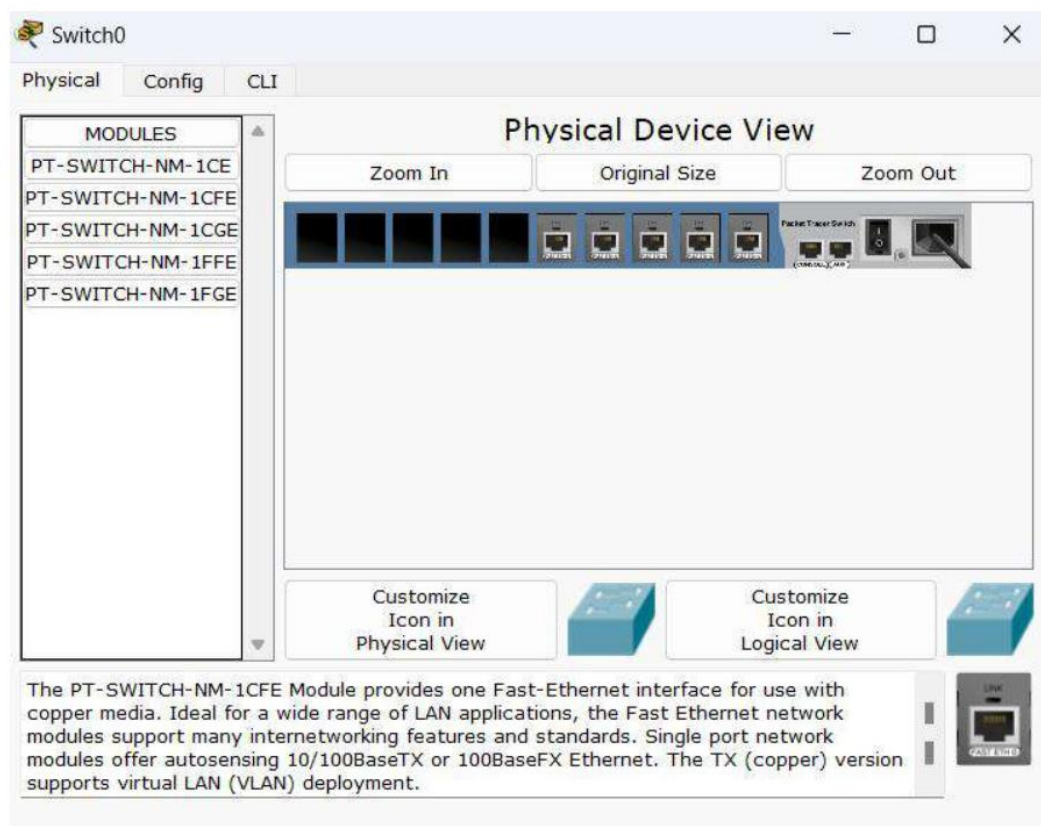
C    192.168.1.0/24 is directly connected, FastEthernet0/0
C    192.168.20.0/24 is directly connected, FastEthernet0/0.1
Router#
```

Copy Paste

## Switch - 1 Configuration:









Switch0

PhysicalConfigCLI

GLOBAL

Settings

Algorithm Settings

SWITCH

VLAN Database

INTERFACE

FastEthernet0/1

FastEthernet1/1

FastEthernet2/1

FastEthernet3/1

FastEthernet4/1

FastEthernet4/1

Port Status ☒ On

Bandwidth ☐ 100 Mbps ☐ 10 Mbps ☒ Auto


Duplex ☐ Half Duplex ☒ Full Duplex ☒ Auto

Trunk  VLAN

Tx Ring Limit

Equivalent IOS Commands

```
Switch(config)#interface FastEthernet2/1
Switch(config-if)#
Switch(config-if)#exit
Switch(config)#interface FastEthernet3/1
Switch(config-if)#
Switch(config-if)#exit
Switch(config)#interface FastEthernet4/1
Switch(config-if)#
```

 Switch0

PhysicalConfigCLI

### IOS Command Line Interface

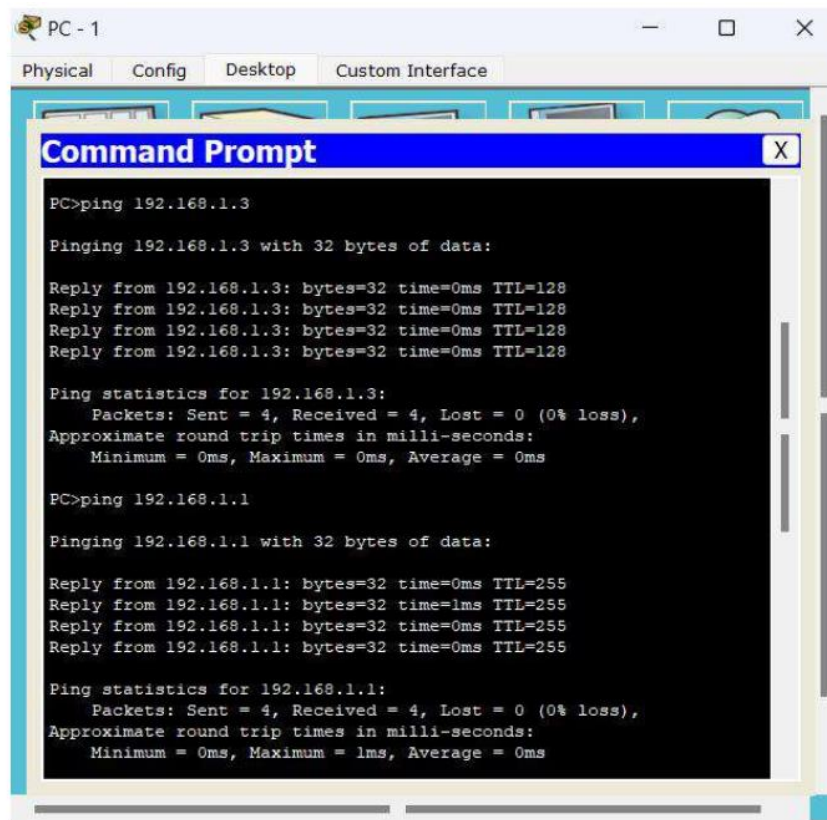
```
Switch>enable
Switch#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#vlan 2
Switch(config-vlan)#name NEWVLAN
Switch(config-vlan)#exit
Switch(config)#
Switch(config)#interface FastEthernet4/1
Switch(config-if)#
Switch(config-if)#switchport mode trunk

Switch(config-if)#
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet4/1, changed
state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet4/1, changed
state to up

Switch(config-if)#exit
Switch(config)#interface FastEthernet2/1
Switch(config-if)#
Switch(config-if)#
Switch(config-if)#switchport access vlan 2
Switch(config-if)#
Switch(config-if)#exit
Switch(config)#interface FastEthernet3/1
Switch(config-if)#
Switch(config-if)#
Switch(config-if)#switchport access vlan 2
Switch(config-if)#
Switch(config-if)#exit
Switch(config)#
```

CopyPaste



PC - 1

Physical Config Desktop Custom Interface

### Command Prompt

```
PC>ping 192.168.1.3

Pinging 192.168.1.3 with 32 bytes of data:

Reply from 192.168.1.3: bytes=32 time=0ms TTL=128
Reply from 192.168.1.3: bytes=32 time=0ms TTL=128
Reply from 192.168.1.3: bytes=32 time=0ms TTL=128
Reply from 192.168.1.3: bytes=32 time=0ms TTL=128

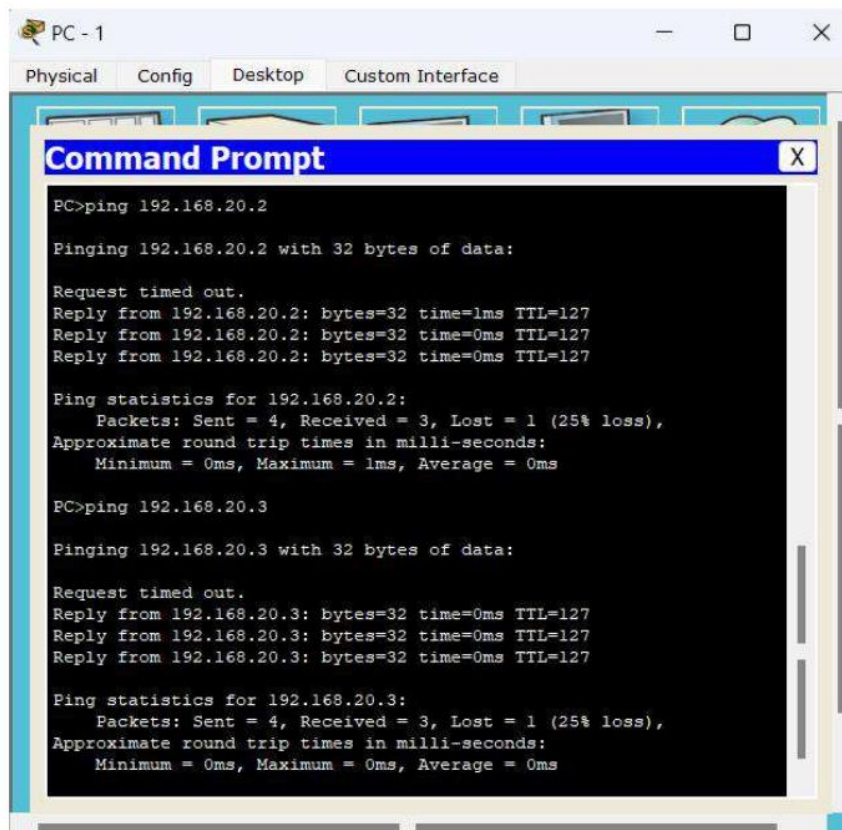
Ping statistics for 192.168.1.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

PC>ping 192.168.1.1

Pinging 192.168.1.1 with 32 bytes of data:

Reply from 192.168.1.1: bytes=32 time=0ms TTL=255
Reply from 192.168.1.1: bytes=32 time=1ms TTL=255
Reply from 192.168.1.1: bytes=32 time=0ms TTL=255
Reply from 192.168.1.1: bytes=32 time=0ms TTL=255

Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms
```



PC - 1

Physical Config Desktop Custom Interface

### Command Prompt

```
PC>ping 192.168.20.2

Pinging 192.168.20.2 with 32 bytes of data:

Request timed out.
Reply from 192.168.20.2: bytes=32 time=1ms TTL=127
Reply from 192.168.20.2: bytes=32 time=0ms TTL=127
Reply from 192.168.20.2: bytes=32 time=0ms TTL=127

Ping statistics for 192.168.20.2:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

PC>ping 192.168.20.3

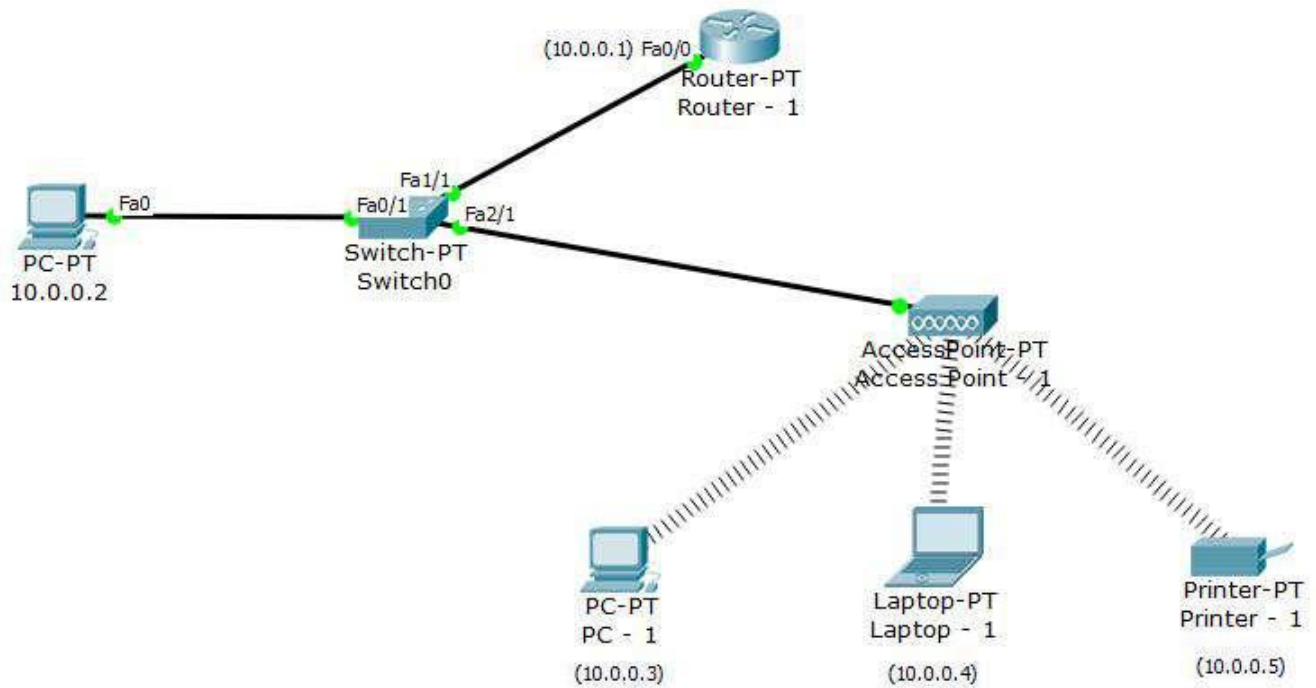
Pinging 192.168.20.3 with 32 bytes of data:

Request timed out.
Reply from 192.168.20.3: bytes=32 time=0ms TTL=127
Reply from 192.168.20.3: bytes=32 time=0ms TTL=127
Reply from 192.168.20.3: bytes=32 time=0ms TTL=127

Ping statistics for 192.168.20.3:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

## Lab 12

To construct a WLAN and make the nodes communicate wirelessly.



## Access Point - 1 Configuration:

Access Point - 1

Physical Config

**GLOBAL**

Settings

**INTERFACE**

Port 0

Port 1

**Port 0**

Port Status ☒ On

Bandwidth ☒ 100 Mbps ☐ 10 Mbps ☐ Auto

Duplex ☒ Half Duplex ☐ Full Duplex ☐ Auto

Access Point - 1

Physical Config

**GLOBAL**

Settings

**INTERFACE**

Port 0

Port 1

**Port 1**

Port Status ☒ On

SSID WLAN

Channel 6

Authentication

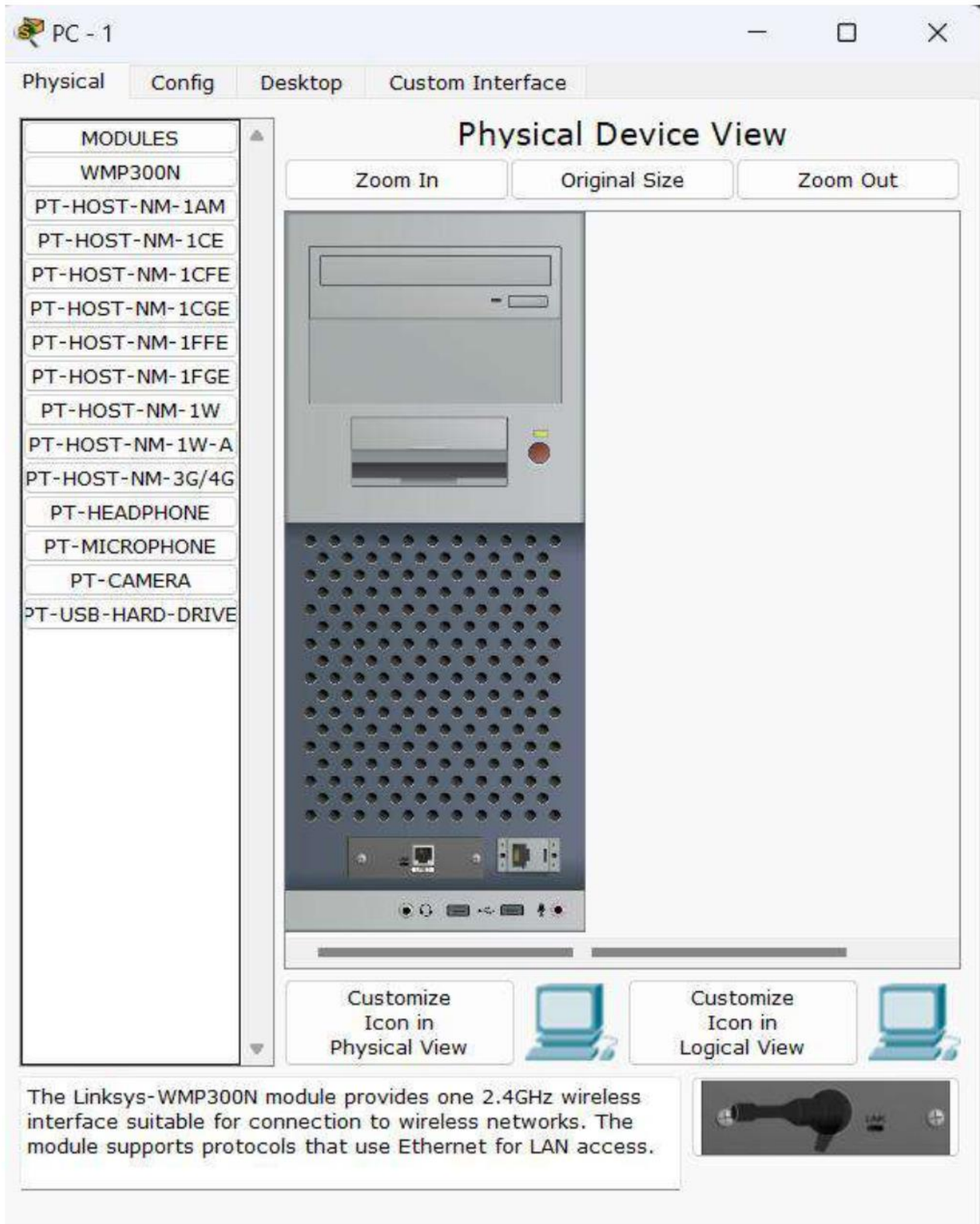
☐ Disabled ☒ WEP WEP Key 1234567890

☐ WPA-PSK ☐ WPA2-PSK PSK Pass Phrase

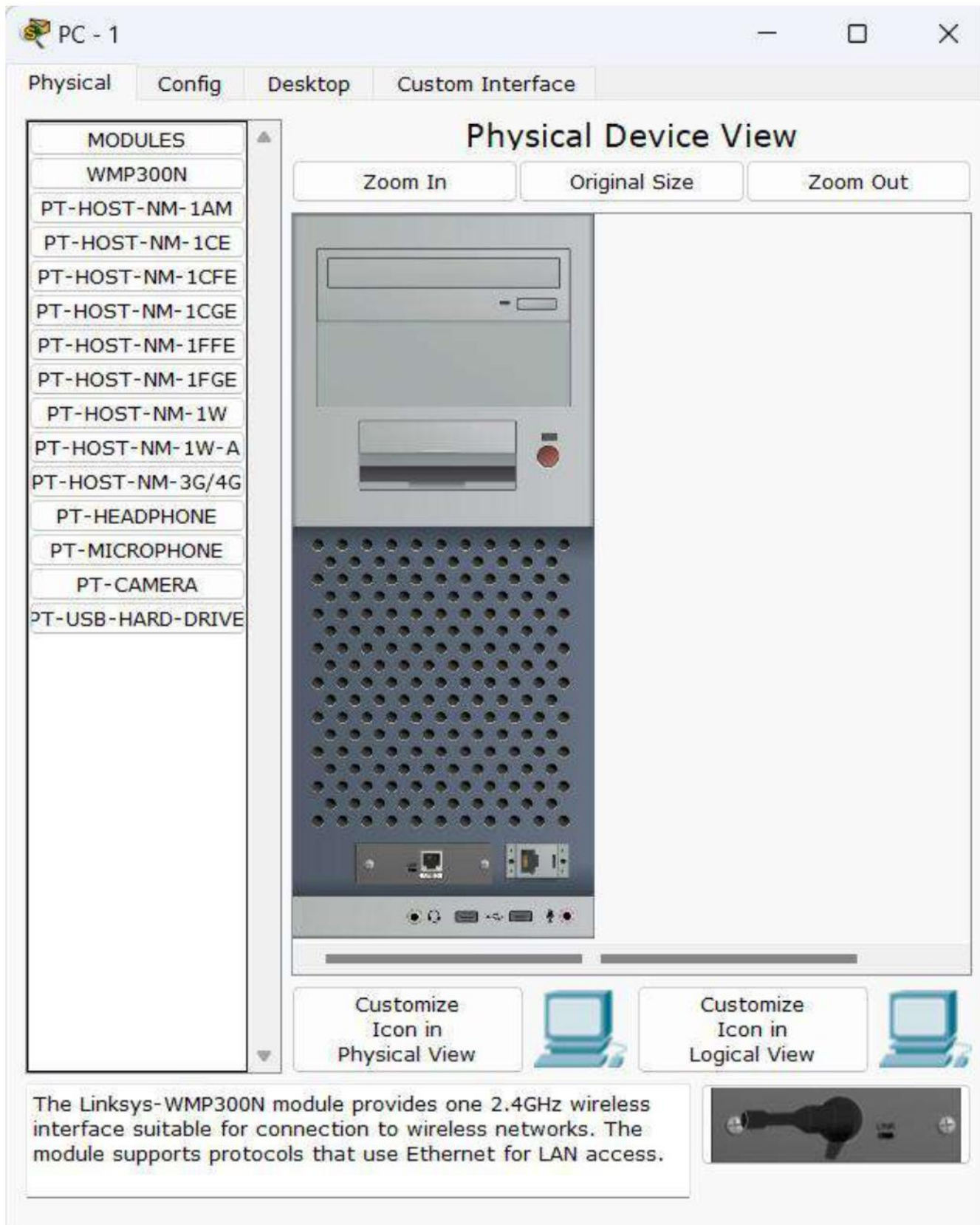
Encryption Type 40/64-Bits (10 Hex digits)



## PC - 1 Configuration:







PC - 1

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

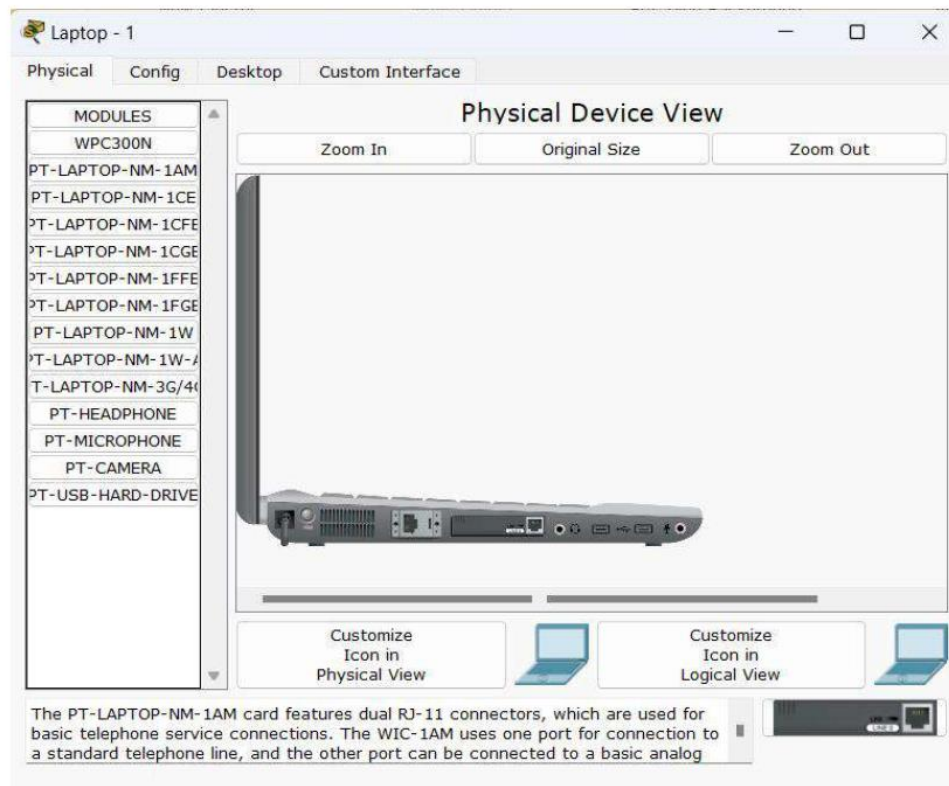
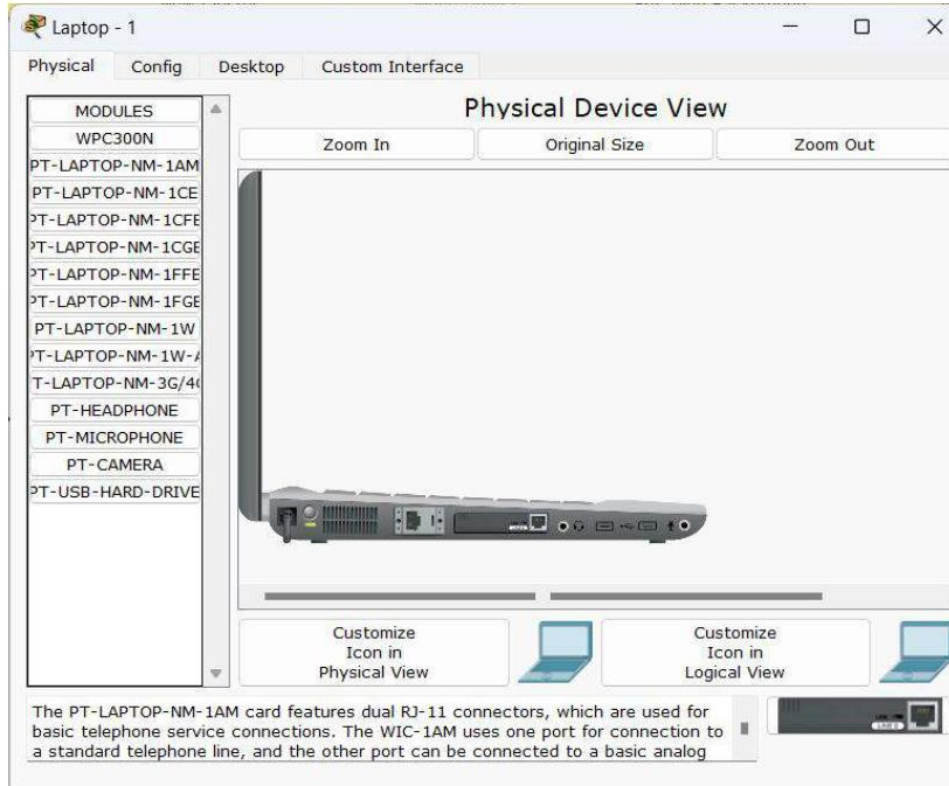
Customize Icon in Physical View

Customize Icon in Logical View

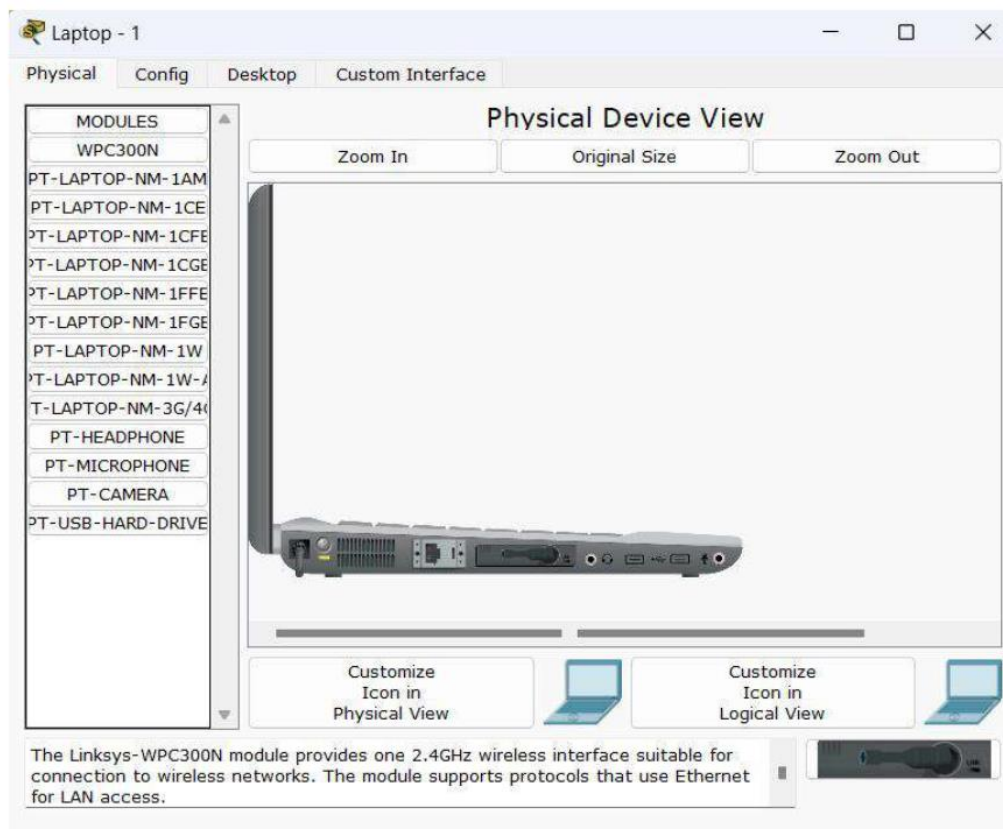
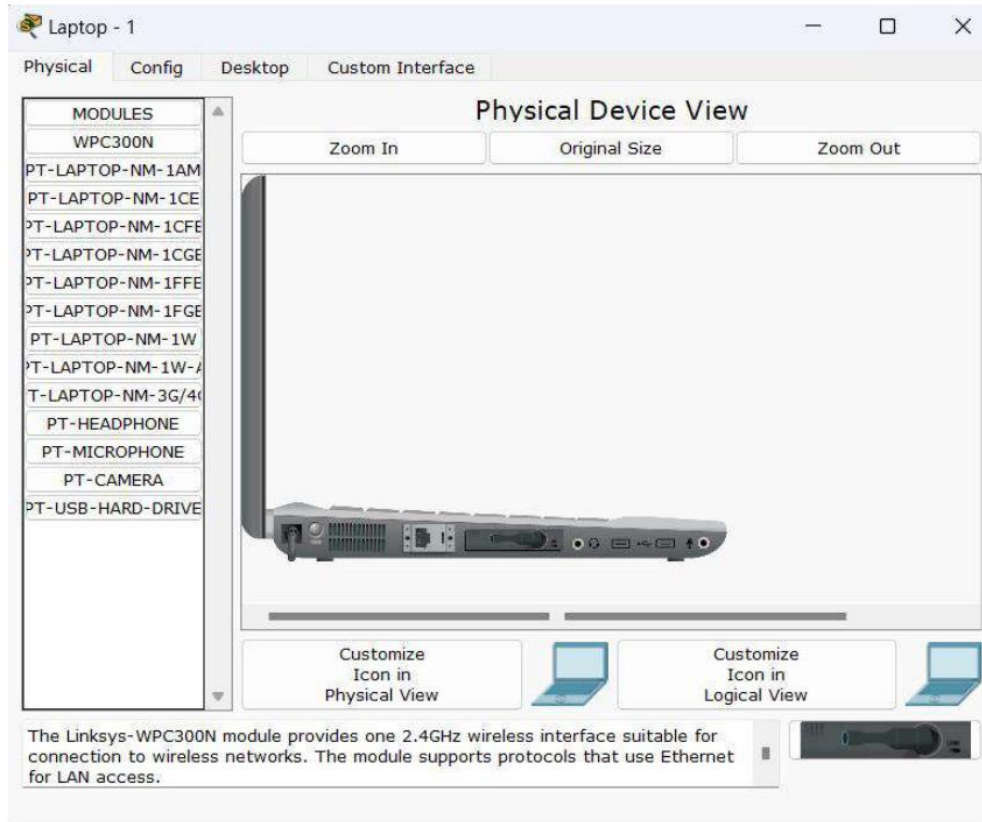
The Linksys-WMP300N module provides one 2.4GHz wireless interface suitable for connection to wireless networks. The module supports protocols that use Ethernet for LAN access.

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## Laptop - 1 Configuration:







Laptop - 1

PhysicalConfigDesktopCustom Interface

GLOBAL

Settings

Algorithm Settings

INTERFACE

Wireless0

Wireless0

Port Status

On

Bandwidth

11 Mbps

MAC Address

0001.97C7.3DDE

SSID

WLAN

Authentication

Disabled

WPA-PSK

WPA

WEP

WPA2-PSK

WPA2

WEP Key

1234567890

PSK Pass Phrase

User ID

Password

Encryption Type

40/64-Bits (10 Hex digits)

IP Configuration

DHCP

Static

IP Address

10.0.0.4

Subnet Mask

255.0.0.0

IPv6 Configuration

DHCP

Auto Config

Static

IPv6 Address

/

Link Local Address: 

FE80::201:97FF:FEC7:3DDE

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## Printer - 1 Configuration:

The screenshot shows a configuration window titled "Printer - 1" with two tabs: "Physical" and "Config". The "Physical" tab is active, displaying a "Physical Device View".

On the left, a "MODULES" list contains the following items:

- WMP300N
- 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

The main area shows a 3D model of the printer hardware. Above the model are three buttons: "Zoom In", "Original Size", and "Zoom Out". Below the model are two buttons: "Customize Icon in Physical View" and "Customize Icon in Logical View".

At the bottom, a text box states: "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." To the right of this text is a small image of the WMP300N module.



Printer - 1

Physical Config

MODULES

WMP300N

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

Physical Device View

Zoom In

Original Size


Zoom Out



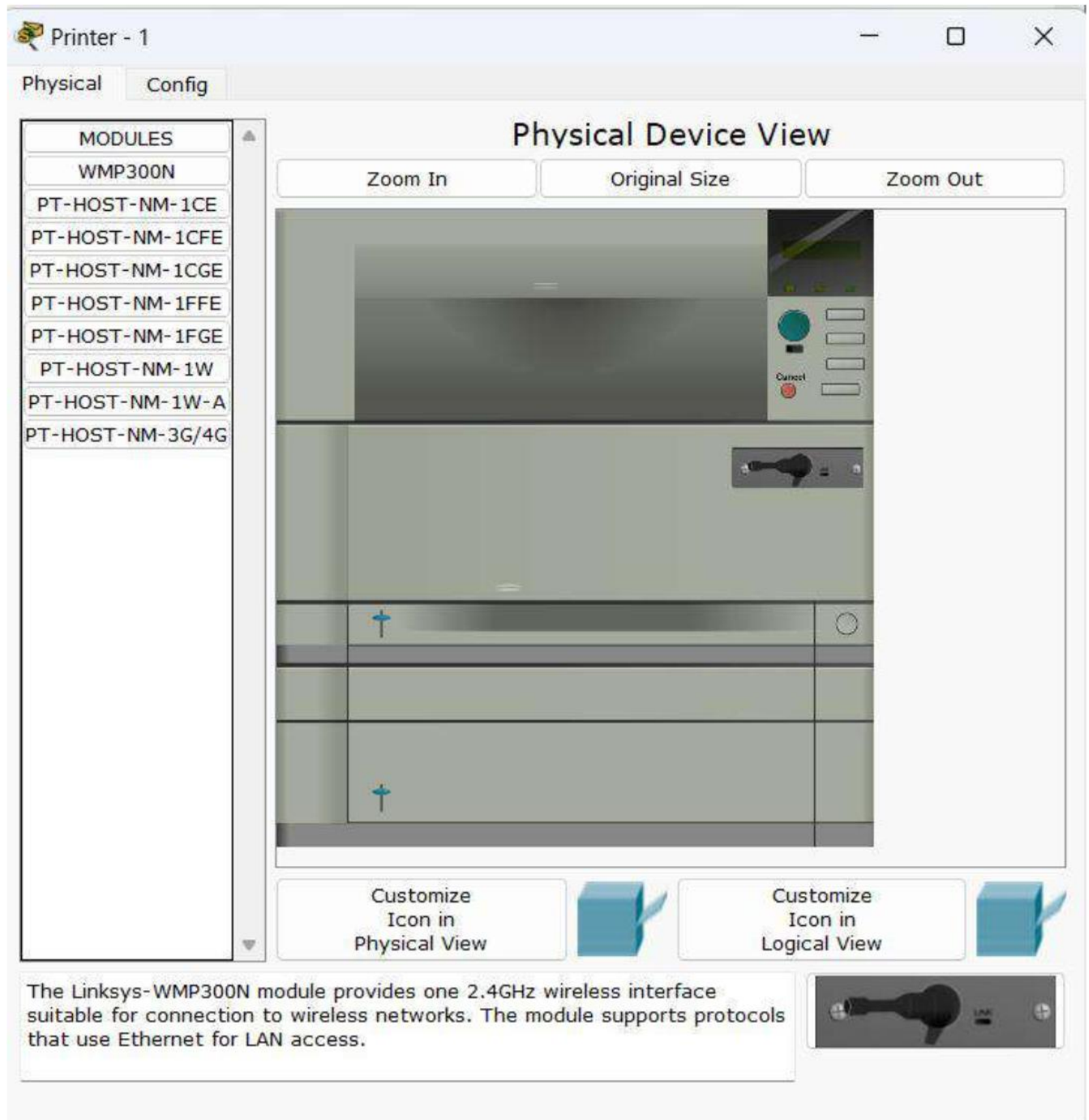
Customize Icon in Physical View

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.



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Printer - 1

Physical Config

**GLOBAL**

Settings

**INTERFACE**

Wireless0

**Wireless0**

Port Status ☒ On

Bandwidth 11 Mbps

MAC Address 0009.7C22.8143

SSID WLAN

Authentication

☐ Disabled ☒ WEP WEP Key 1234567890

☐ WPA-PSK ☐ WPA2-PSK PSK Pass Phrase

☐ WPA ☐ WPA2 User ID

Password

Encryption Type 40/64-Bits (10 Hex digits)

IP Configuration

☐ DHCP

☒ Static

IP Address 10.0.0.5

Subnet Mask 255.0.0.0

IPv6 Configuration

☐ DHCP

☐ Auto Config

Printer - 1

Physical Config

**GLOBAL**

Settings

**INTERFACE**

Wireless0

Authentication

☐ Disabled ☒ WEP WEP Key 1234567890

☐ WPA-PSK ☐ WPA2-PSK PSK Pass Phrase

☐ WPA ☐ WPA2 User ID

Password

Encryption Type 40/64-Bits (10 Hex digits)

IP Configuration

☐ DHCP

☒ Static

IP Address 10.0.0.5

Subnet Mask 255.0.0.0

IPv6 Configuration

☐ DHCP

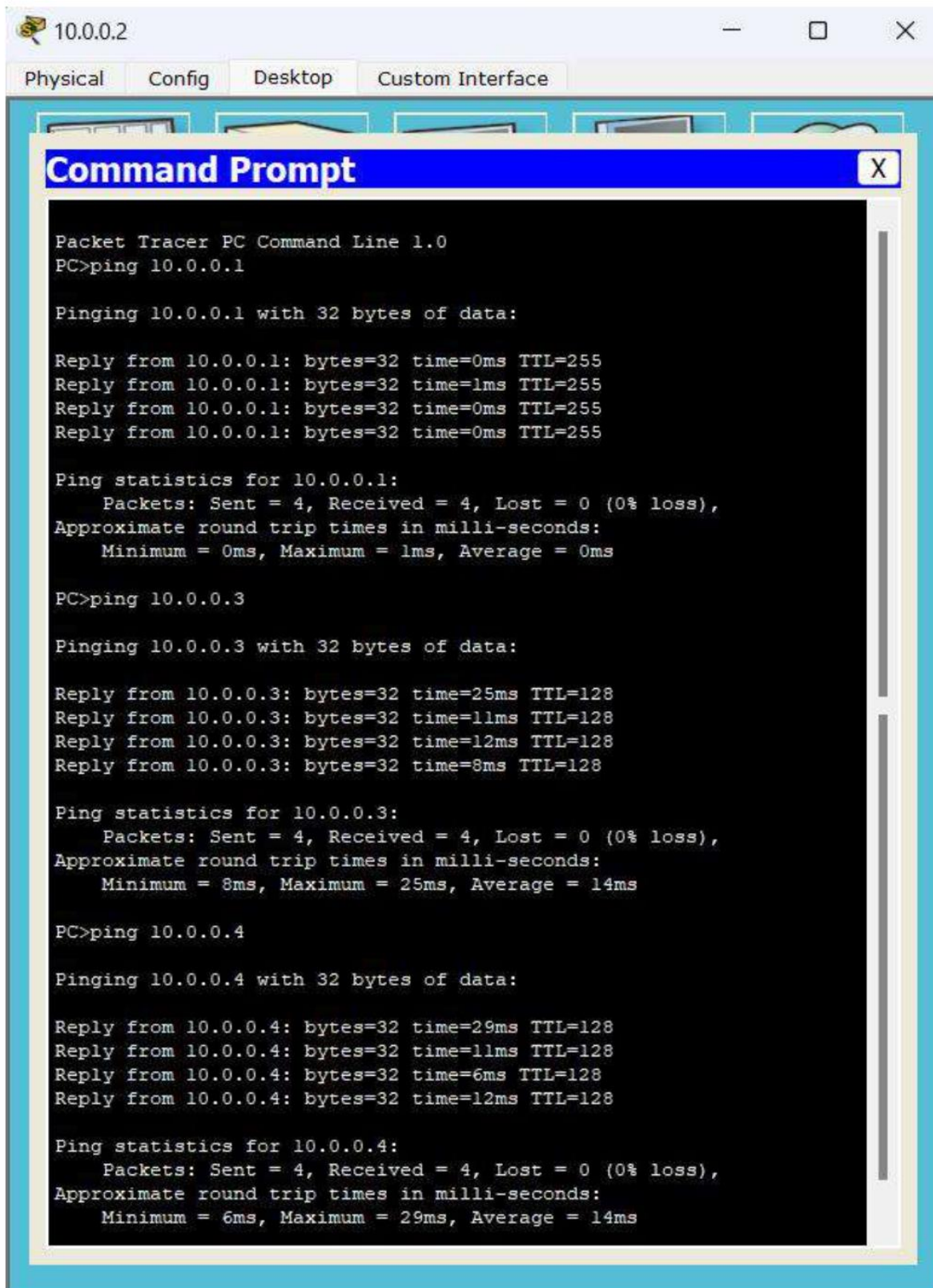
☐ Auto Config

☒ Static

IPv6 Address /

Link Local Address: FE80::209:7CFF:FE22:8143

## Ping From PC to all other devices:



The screenshot shows a Packet Tracer PC Command Prompt window titled "10.0.0.2". The window has tabs for "Physical", "Config", "Desktop", and "Custom Interface". The "Desktop" tab is active, displaying a "Command Prompt" window. The command prompt shows the following output:

```
Packet Tracer PC Command Line 1.0
PC>ping 10.0.0.1

Pinging 10.0.0.1 with 32 bytes of data:

Reply from 10.0.0.1: bytes=32 time=0ms TTL=255
Reply from 10.0.0.1: bytes=32 time=1ms TTL=255
Reply from 10.0.0.1: bytes=32 time=0ms TTL=255
Reply from 10.0.0.1: bytes=32 time=0ms TTL=255

Ping statistics for 10.0.0.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

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=25ms TTL=128
Reply from 10.0.0.3: bytes=32 time=11ms TTL=128
Reply from 10.0.0.3: bytes=32 time=12ms 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 = 25ms, Average = 14ms

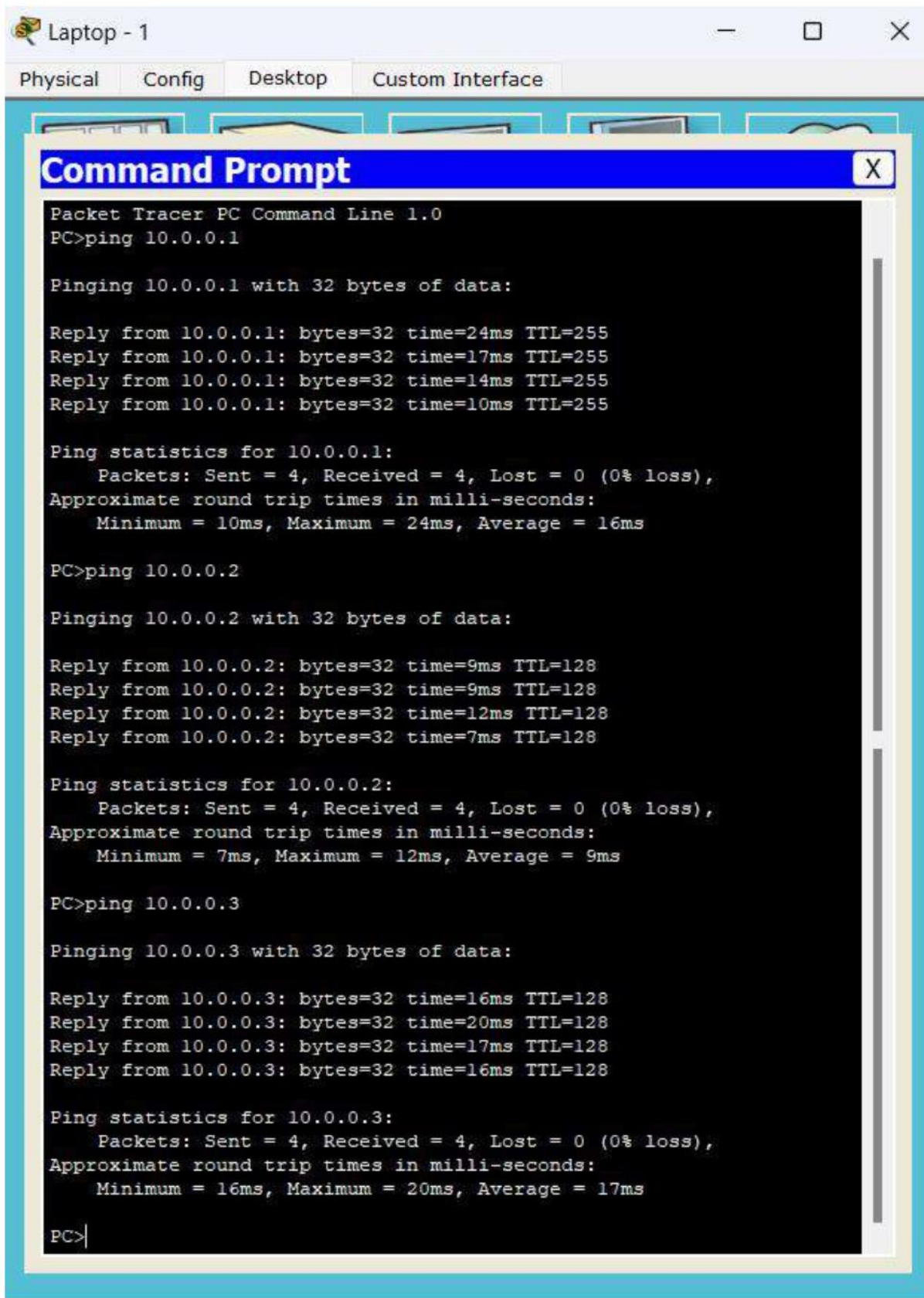
PC>ping 10.0.0.4

Pinging 10.0.0.4 with 32 bytes of data:

Reply from 10.0.0.4: bytes=32 time=29ms TTL=128
Reply from 10.0.0.4: bytes=32 time=11ms TTL=128
Reply from 10.0.0.4: bytes=32 time=6ms TTL=128
Reply from 10.0.0.4: bytes=32 time=12ms 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 = 29ms, Average = 14ms
```





```
C:\Users\Acer\Desktop\Notes (4th Semester)\Labs\Computer Networks (CN)\Cycle 2\Experiment - 4>python ServerUDP.py
The server is ready to receive

Sent contents of  ServerUDP.py
```

```
C:\Users\Acer\Desktop\Notes (4th Semester)\Labs\Computer Networks (CN)\Cycle 2\Experiment - 4>python ClientUDP.py

Enter file name:  ServerUDP.py

Reply from Server:

from socket import *
serverPort = 12000
serverSocket = socket(AF_INET, SOCK_DGRAM)
serverSocket.bind(("127.0.0.1", serverPort))
print ("The server is ready to receive")
while 1:
    sentence, clientAddress = serverSocket.recvfrom(2048)
    sentence = sentence.decode("utf-8")
    file=open(sentence,"r")
    con=file.read(2048)

    serverSocket.sendto(bytes(con,"utf-8"),clientAddress)

    print ('\nSent contents of ', end = ' ')
    print (sentence)
    # for i in sentence:
    #     print (str(i), end = '')
    file.close()
```