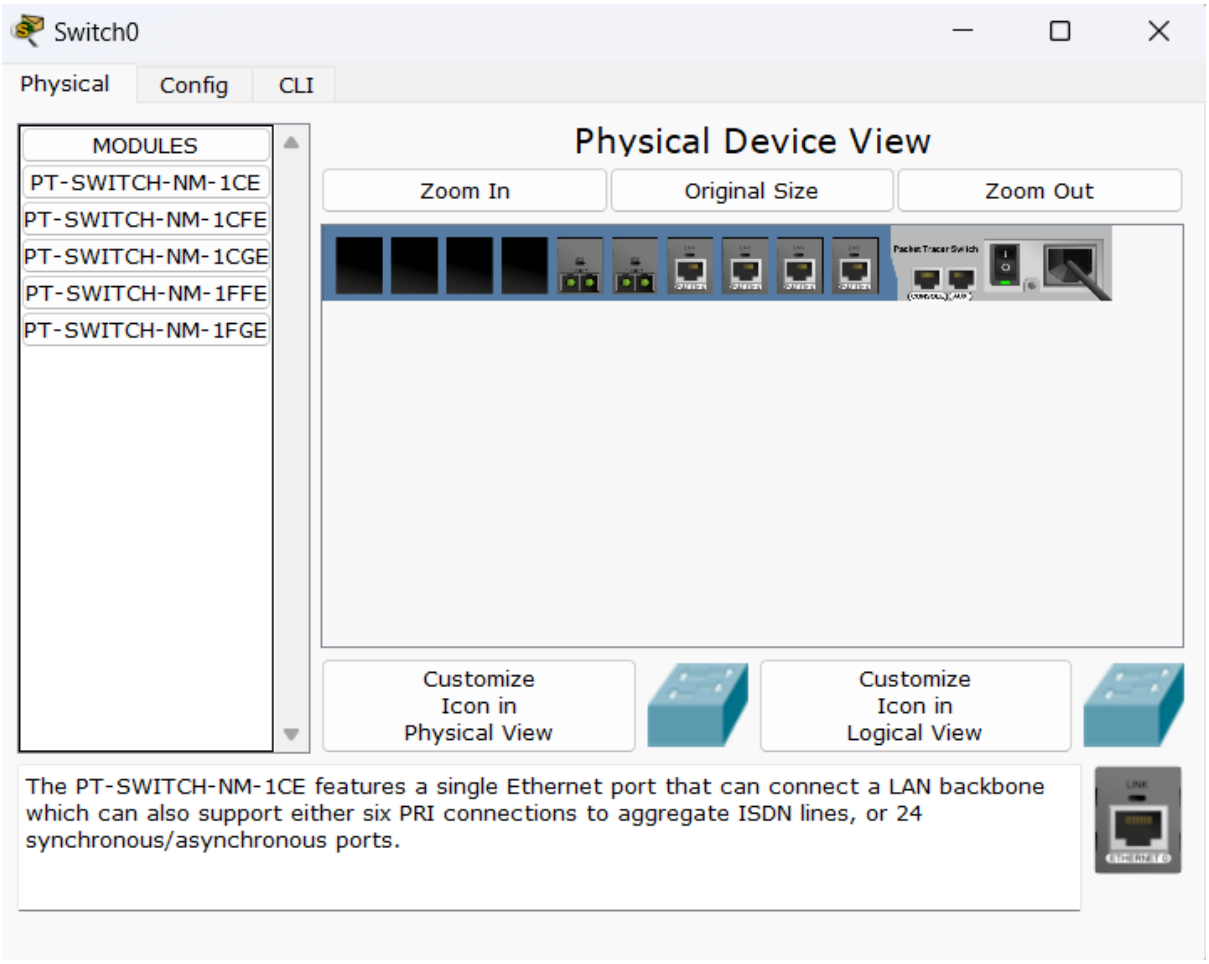
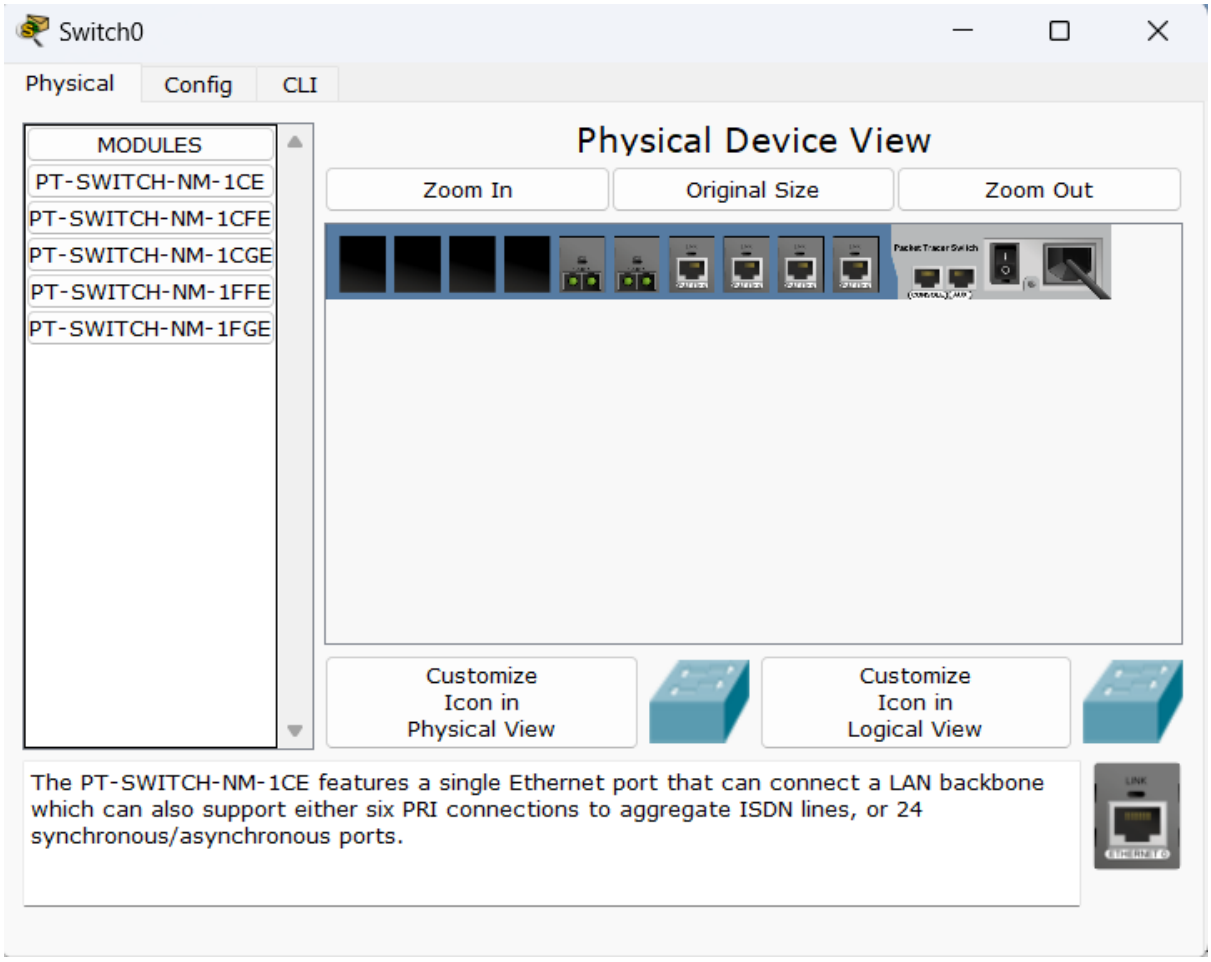
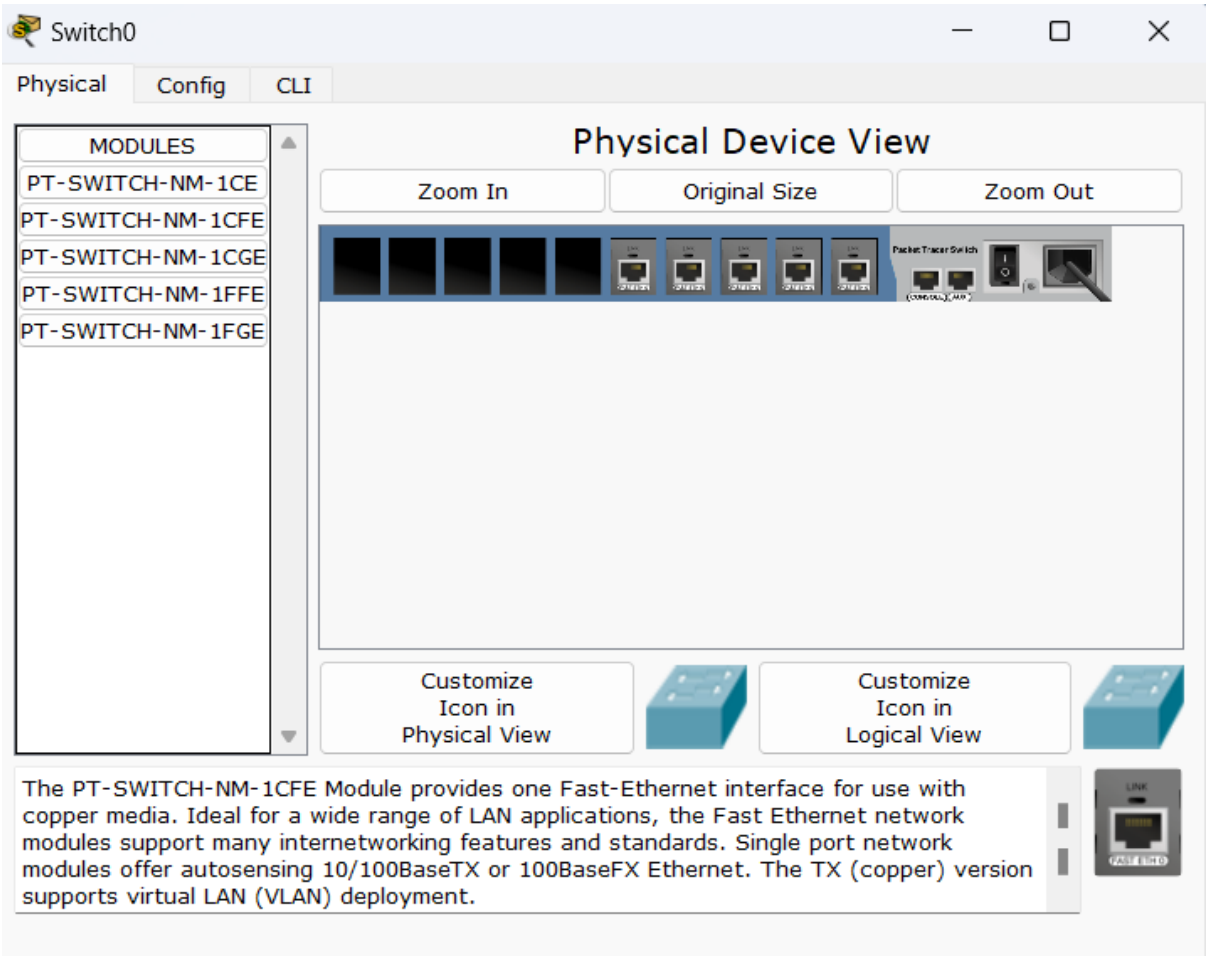
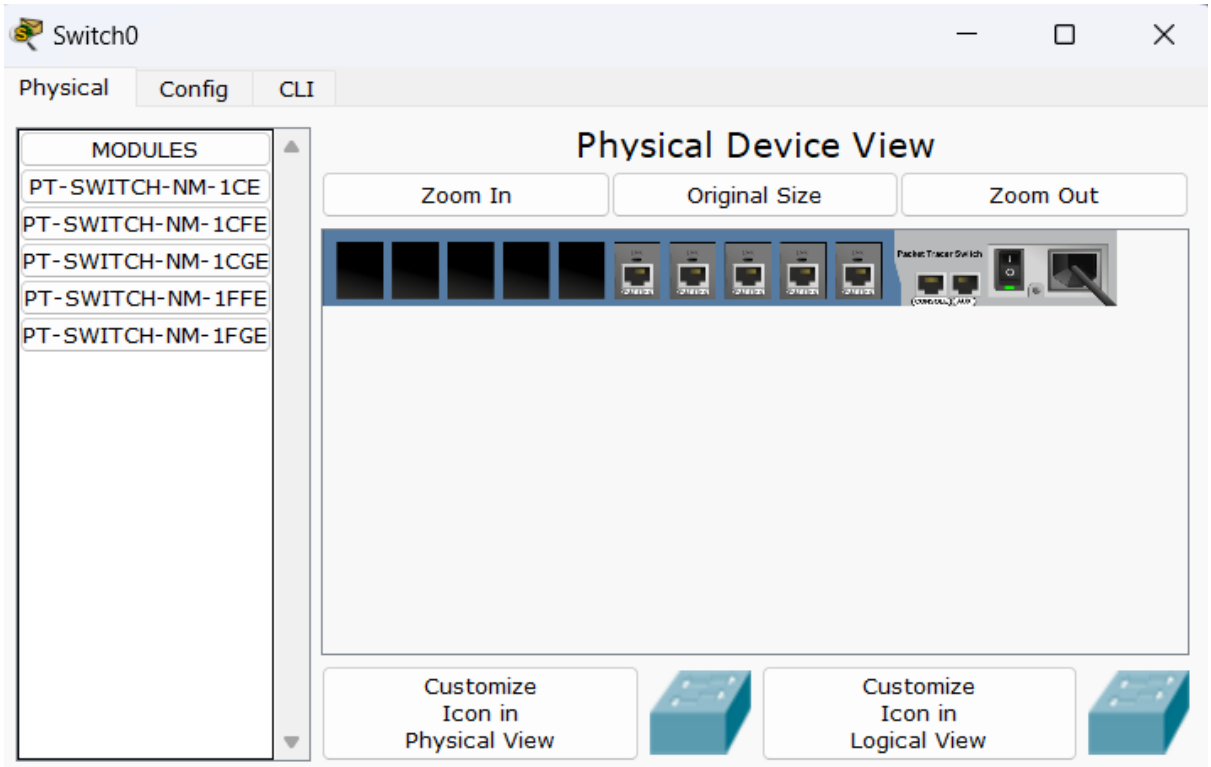
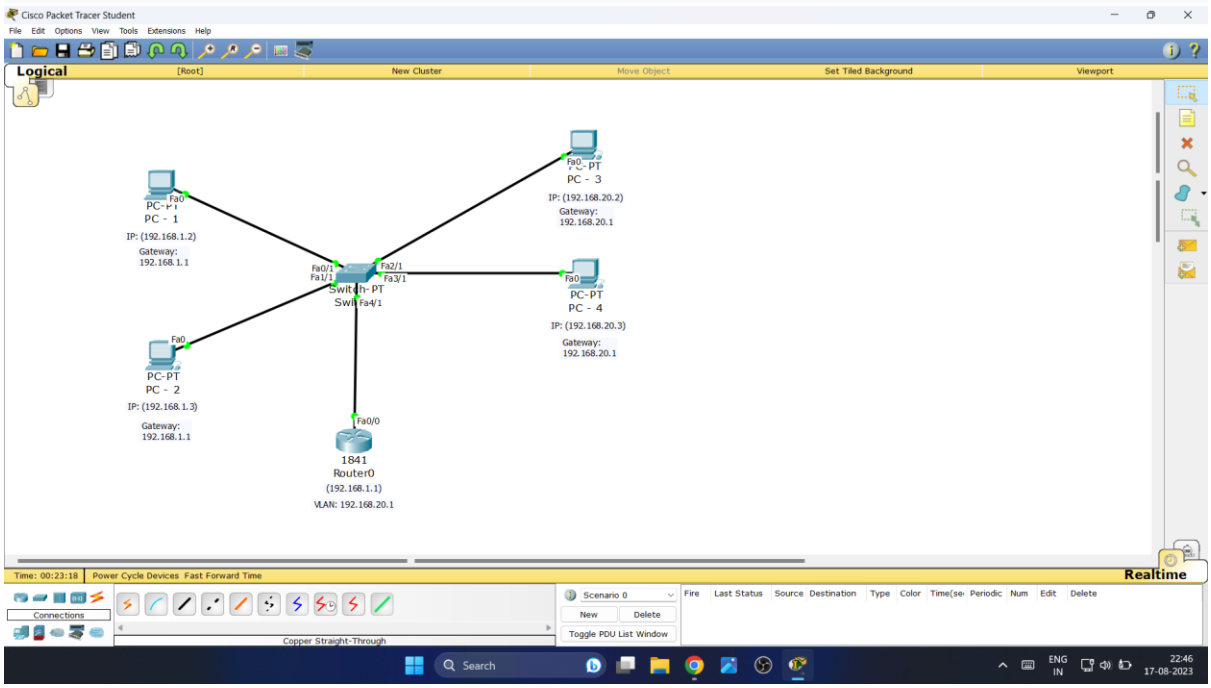
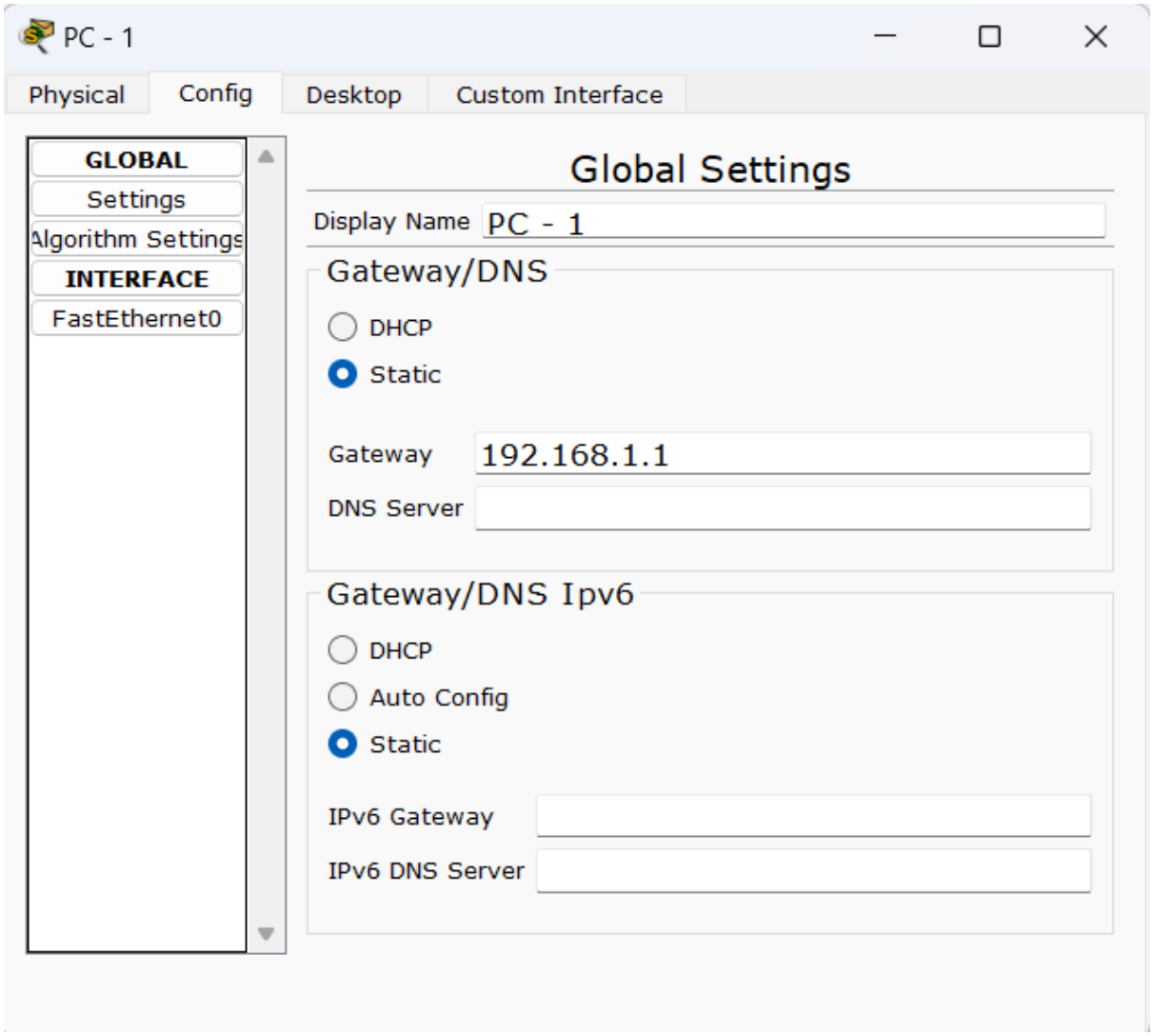

Switch0
Physical
Config
CLI
MODULES
PT-SWITCH-NM-1CE
PT-SWITCH-NM-1CFE
PT-SWITCH-NM-1CGE
PT-SWITCH-NM-1FFE
PT-SWITCH-NM-1FGE
Physical Device View
Zoom In
Original Size
Zoom Out
Customize Icon in Physical View
Customize Icon in Logical View
The PT-SWITCH-NM-1CE features a single Ethernet port that can connect a LAN backbone which can also support either six PRI connections to aggregate ISDN lines, or 24 synchronous/asynchronous ports.

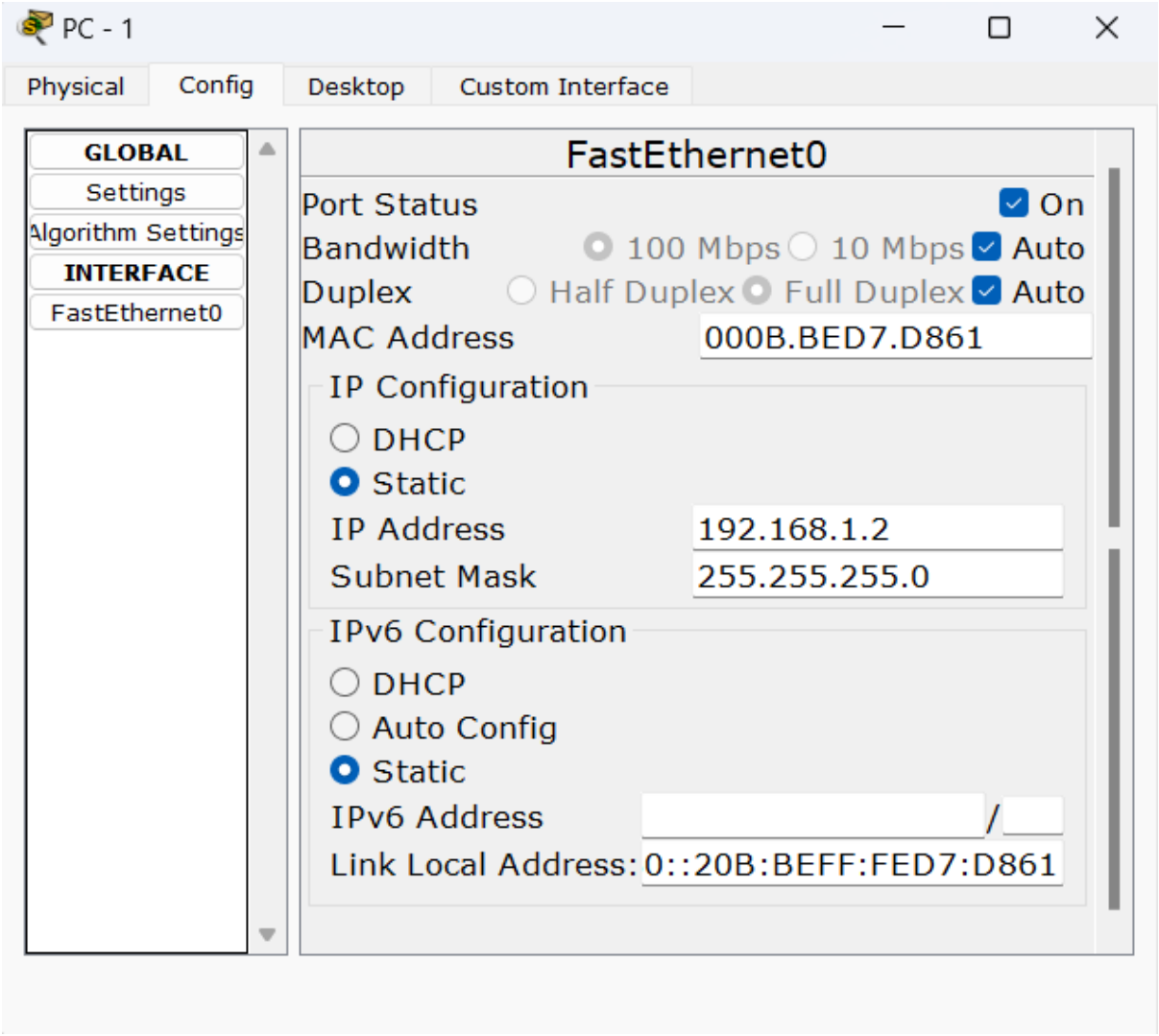

Switch0
Physical
Config
CLI
MODULES
PT-SWITCH-NM-1CE
PT-SWITCH-NM-1CFE
PT-SWITCH-NM-1CGE
PT-SWITCH-NM-1FFE
PT-SWITCH-NM-1FGE
Physical Device View
Zoom In
Original Size
Zoom Out
Customize Icon in Physical View
Customize Icon in Logical View
The PT-SWITCH-NM-1CE features a single Ethernet port that can connect a LAN backbone which can also support either six PRI connections to aggregate ISDN lines, or 24 synchronous/asynchronous ports.

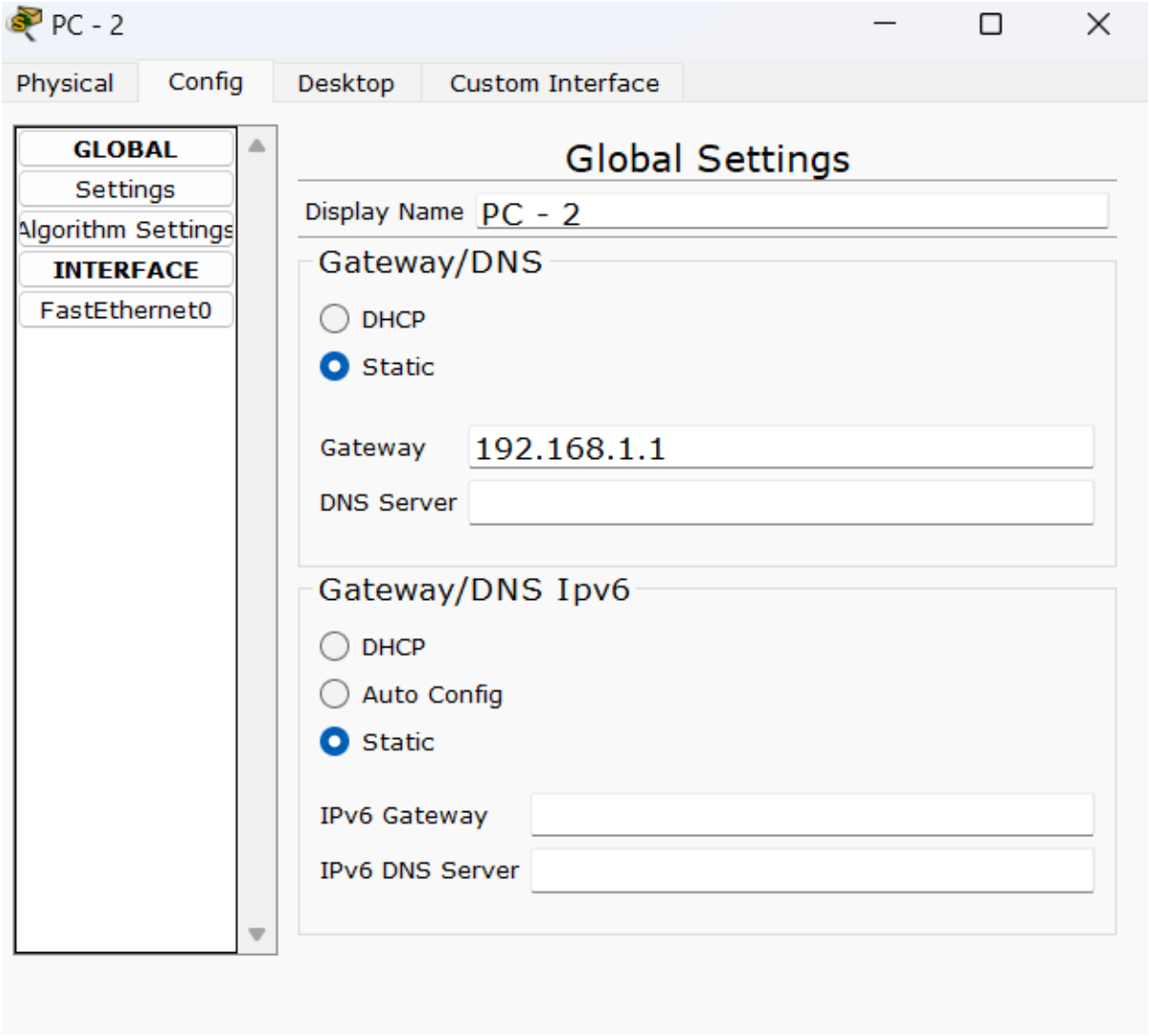

Switch0
Physical
Config
CLI
MODULES
PT-SWITCH-NM-1CE
PT-SWITCH-NM-1CFE
PT-SWITCH-NM-1CGE
PT-SWITCH-NM-1FFE
PT-SWITCH-NM-1FGE
Physical Device View
Zoom In
Original Size
Zoom Out
Customize Icon in Physical View
Customize Icon in Logical View
The PT-SWITCH-NM-1CFE Module provides one Fast-Ethernet interface for use with copper media. Ideal for a wide range of LAN applications, the Fast Ethernet network modules support many internetworking features and standards. Single port network modules offer autosensing 10/100BaseTX or 100BaseFX Ethernet. The TX (copper) version supports virtual LAN (VLAN) deployment.

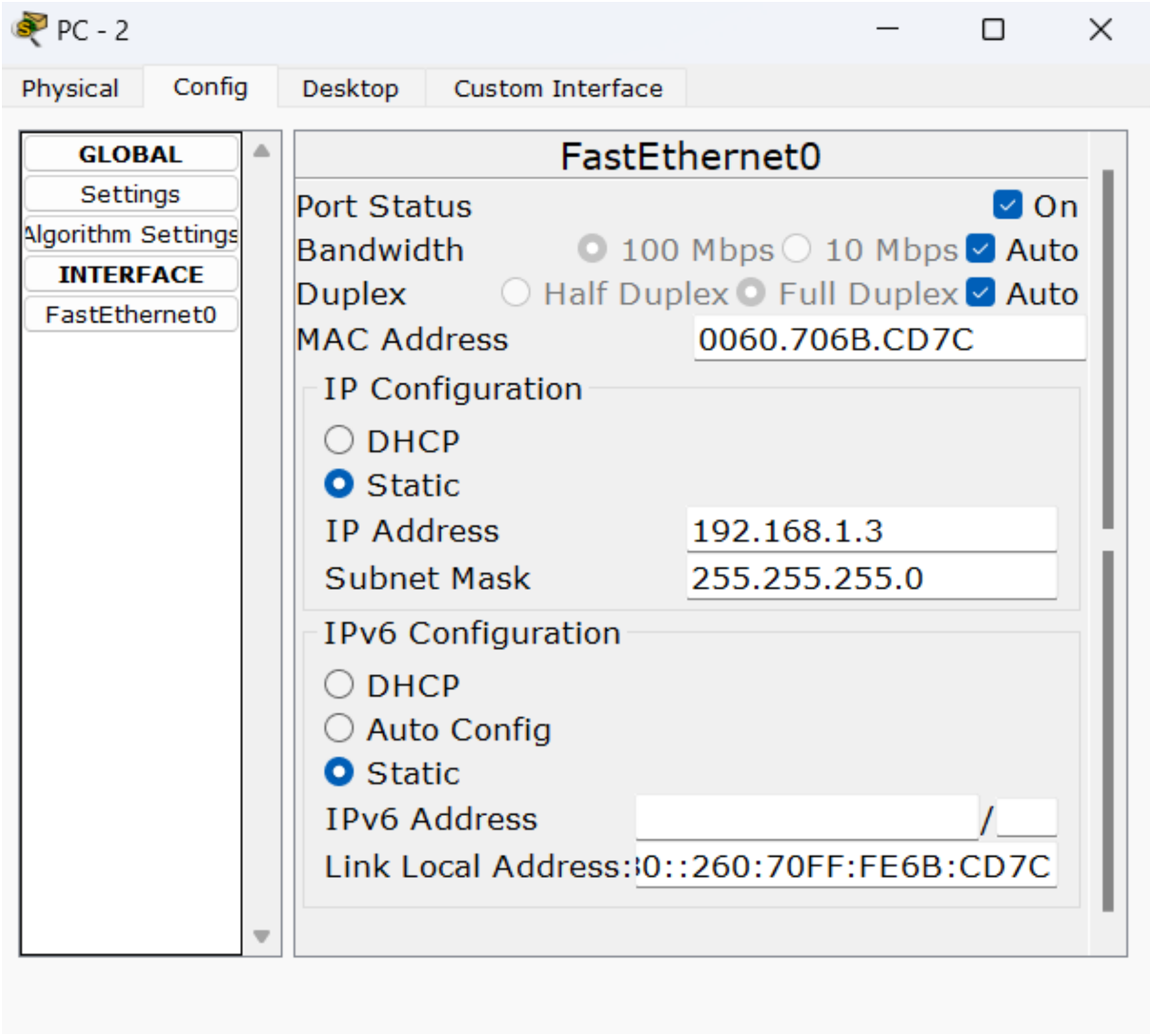

Switch0
Physical
Config
CLI
MODULES
PT-SWITCH-NM-1CE
PT-SWITCH-NM-1CFE
PT-SWITCH-NM-1CGE
PT-SWITCH-NM-1FFE
PT-SWITCH-NM-1FGE
Physical Device View
Zoom In
Original Size
Zoom Out
Customize Icon in Physical View
Customize Icon in Logical View
The PT-SWITCH-NM-1CFE Module provides one Fast-Ethernet interface for use with copper media. Ideal for a wide range of LAN applications, the Fast Ethernet network modules support many internetworking features and standards. Single port network modules offer autosensing 10/100BaseTX or 100BaseFX Ethernet. The TX (copper) version supports virtual LAN (VLAN) deployment.

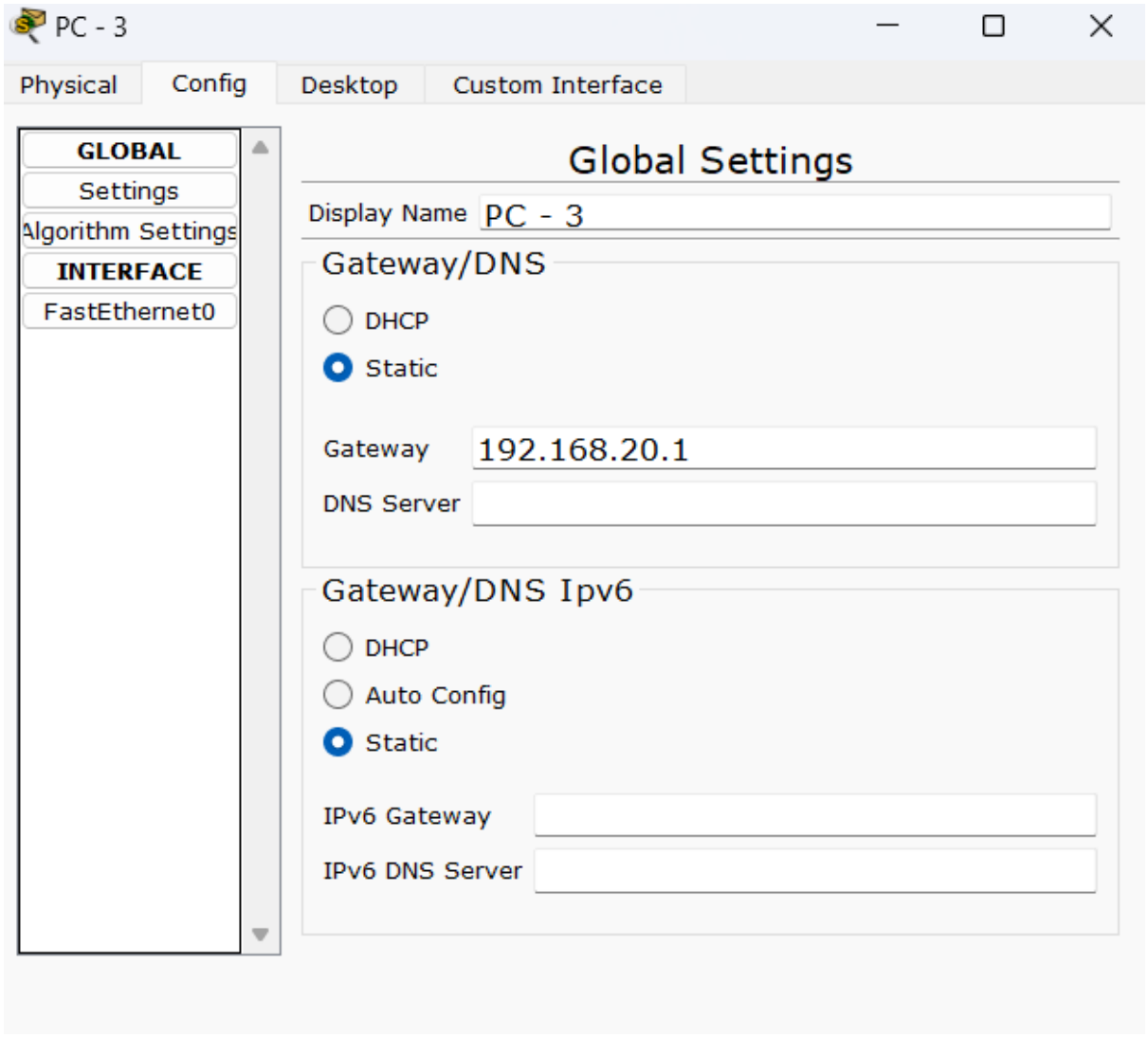

Cisco Packet Tracer Student
Logical
PC - 1
IP: (192.168.1.2)
Gateway: 192.168.1.1
PC - 2
IP: (192.168.1.3)
Gateway: 192.168.1.1
PC - 3
IP: (192.168.20.2)
Gateway: 192.168.20.1
PC - 4
IP: (192.168.20.3)
Gateway: 192.168.20.1
1841
Router0
(192.168.1.1)
VLAN: 192.168.20.1
Realtime

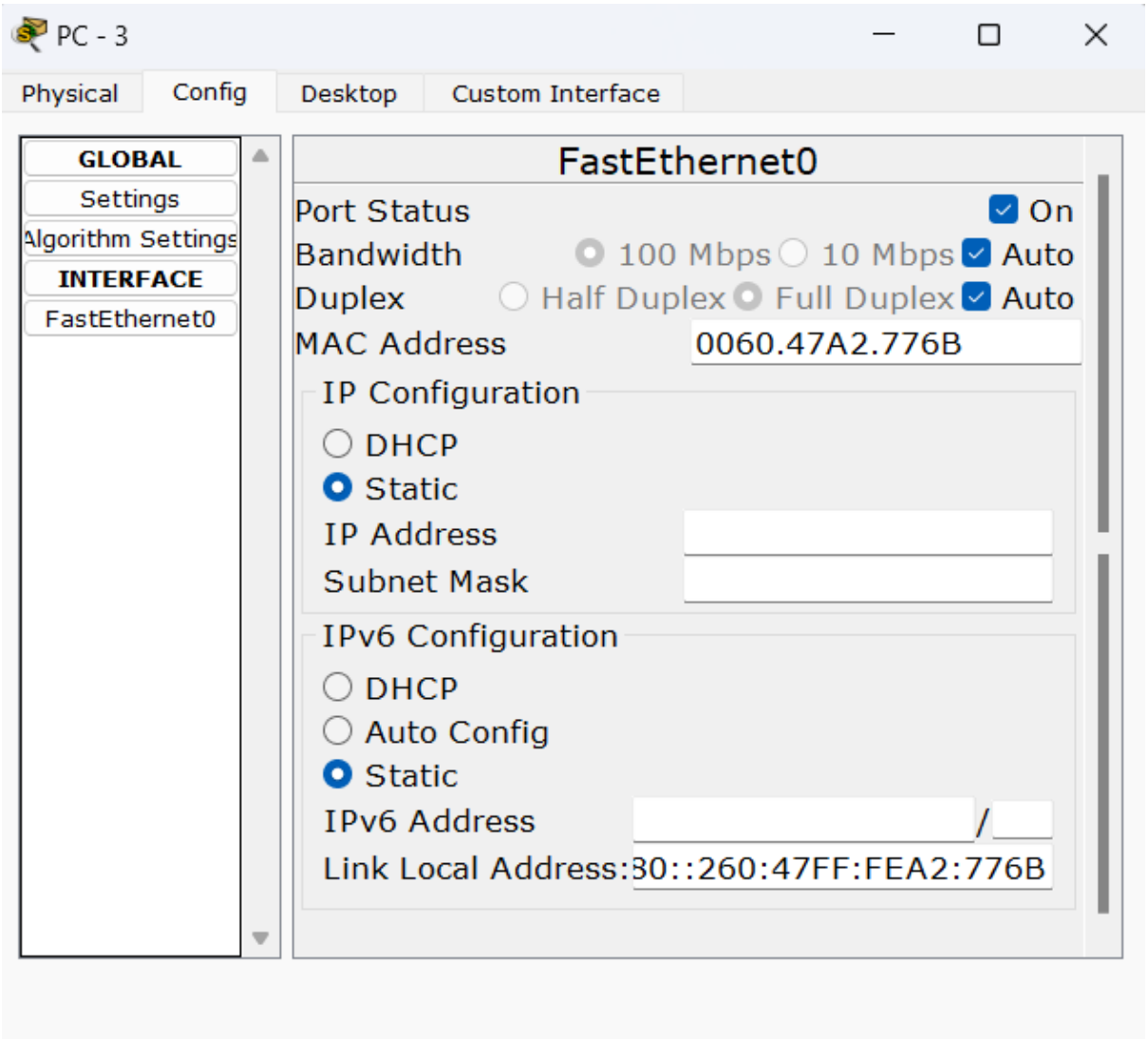

PC - 1
Physical
Config
Desktop
Custom Interface
GLOBAL
Settings
Algorithm Settings
INTERFACE
FastEthernet0
Global Settings
Display Name
PC - 1
Gateway/DNS
DHCP
Static
Gateway
192.168.1.1
DNS Server
Gateway/DNS Ipv6
DHCP
Auto Config
Static
IPv6 Gateway
IPv6 DNS Server

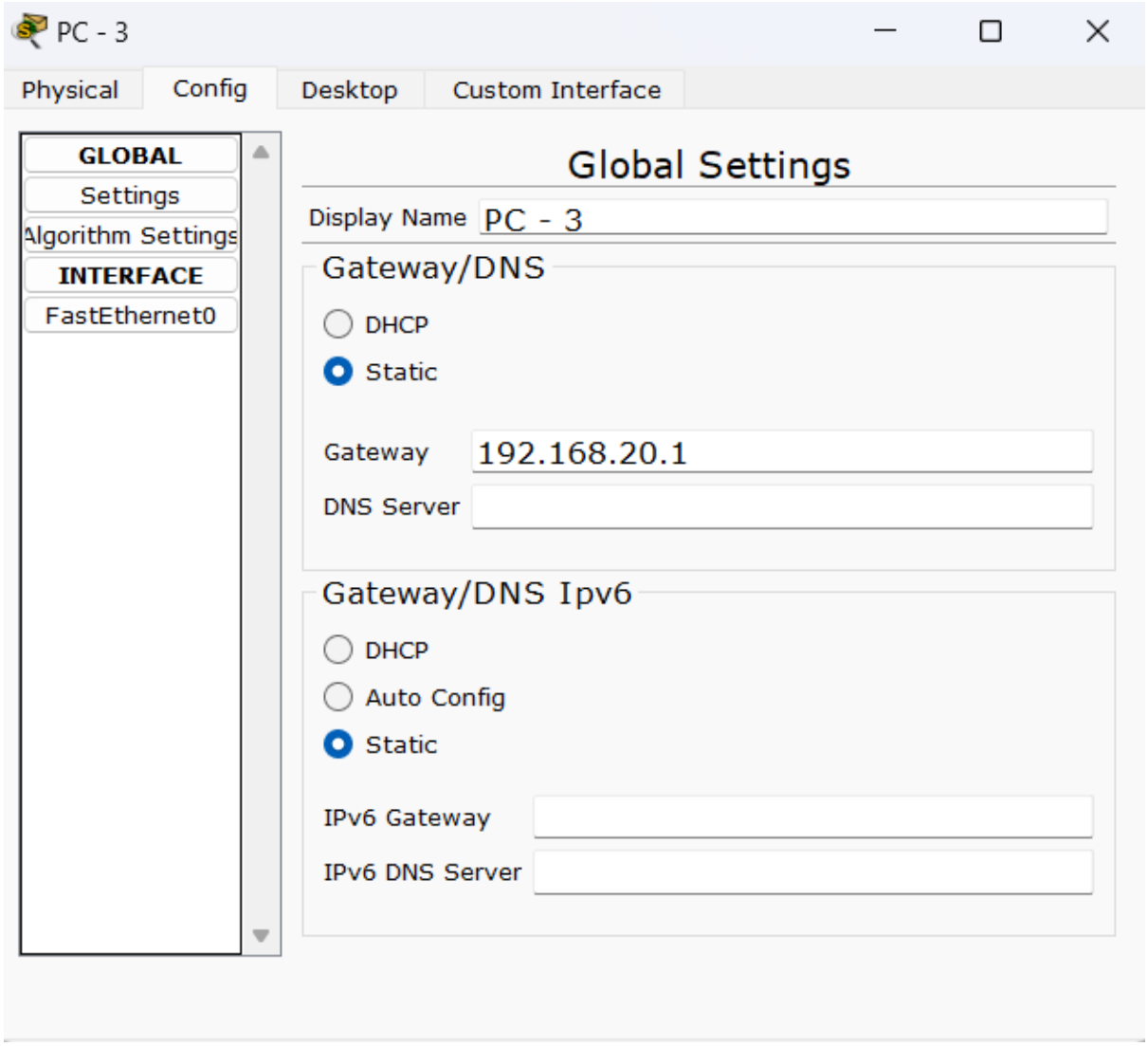

PC - 1
Physical
Config
Desktop
Custom Interface
GLOBAL
Settings
Algorithm Settings
INTERFACE
FastEthernet0
FastEthernet0
Port Status
On
Bandwidth
100 Mbps
10 Mbps
Auto
Duplex
Half Duplex
Full Duplex
Auto
MAC Address
000B.BED7.D861
IP Configuration
DHCP
Static
IP Address
192.168.1.2
Subnet Mask
255.255.255.0
IPv6 Configuration
DHCP
Auto Config
Static
IPv6 Address
/
Link Local Address:
0::20B:BEFF:FED7:D861

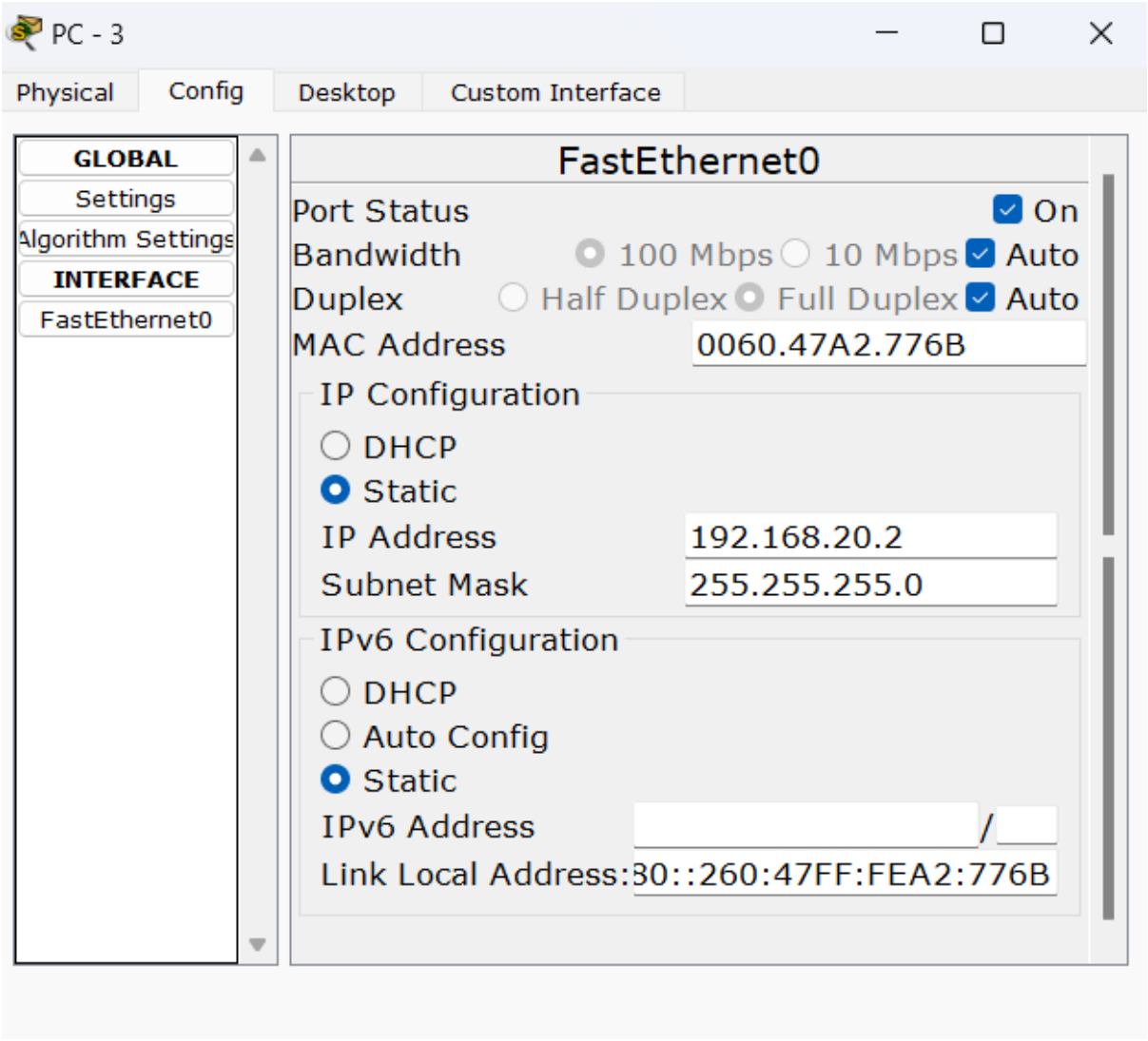

PC - 2
Physical
Config
Desktop
Custom Interface
GLOBAL
Settings
Algorithm Settings
INTERFACE
FastEthernet0
Global Settings
Display Name
PC - 2
Gateway/DNS
DHCP
Static
Gateway
192.168.1.1
DNS Server
Gateway/DNS Ipv6
DHCP
Auto Config
Static
IPv6 Gateway
IPv6 DNS Server

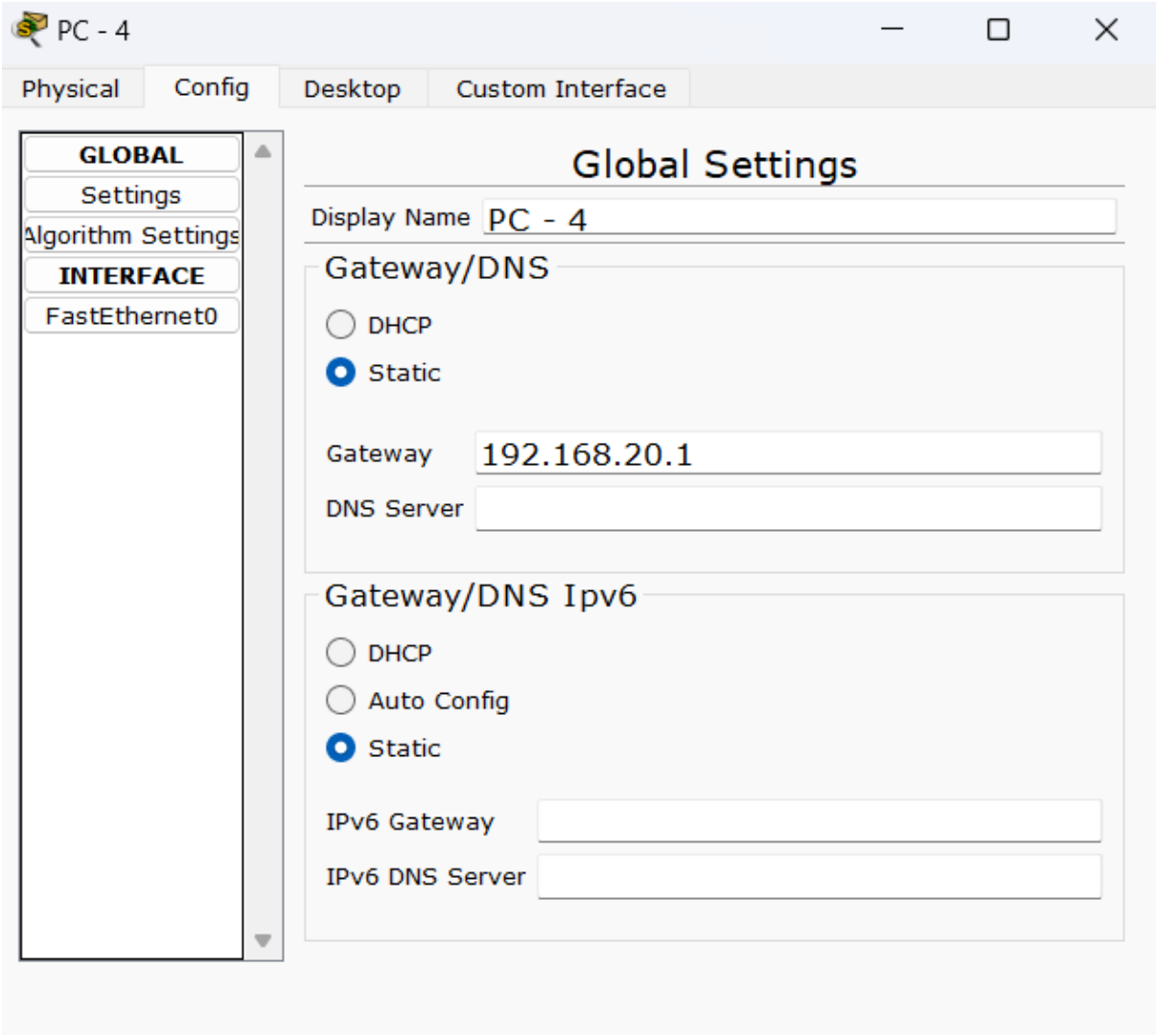

PC - 2
Physical
Config
Desktop
Custom Interface
GLOBAL
Settings
Algorithm Settings
INTERFACE
FastEthernet0
FastEthernet0
Port Status
On
Bandwidth
100 Mbps
10 Mbps
Auto
Duplex
Half Duplex
Full Duplex
Auto
MAC Address
0060.706B.CD7C
IP Configuration
DHCP
Static
IP Address
192.168.1.3
Subnet Mask
255.255.255.0
IPv6 Configuration
DHCP
Auto Config
Static
IPv6 Address
/
Link Local Address:
0::260:70FF:FE6B:CD7C

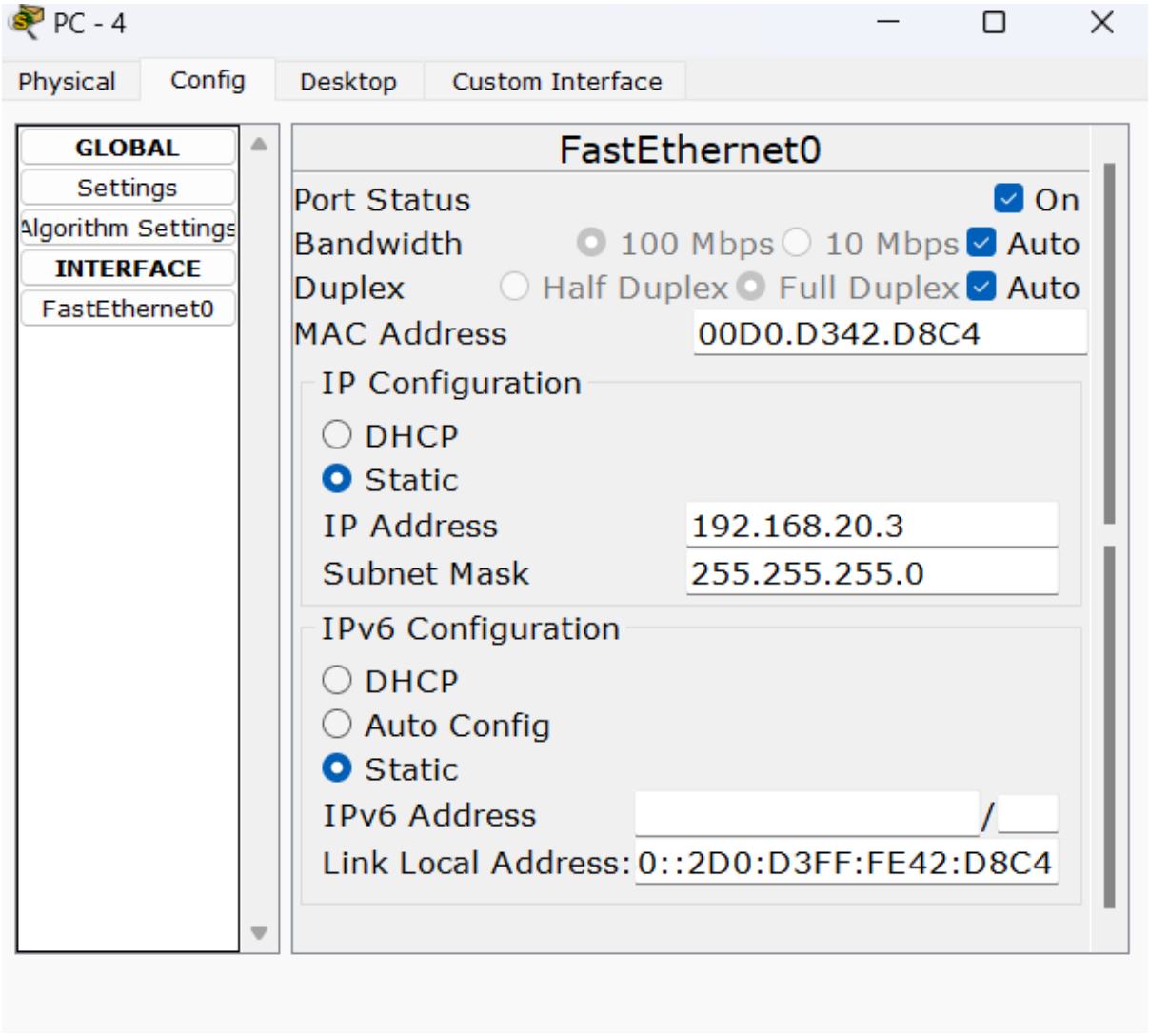

PC - 3
Physical
Config
Desktop
Custom Interface
GLOBAL
Settings
Algorithm Settings
INTERFACE
FastEthernet0
Global Settings
Display Name
PC - 3
Gateway/DNS
DHCP
Static
Gateway
192.168.20.1
DNS Server
Gateway/DNS Ipv6
DHCP
Auto Config
Static
IPv6 Gateway
IPv6 DNS Server

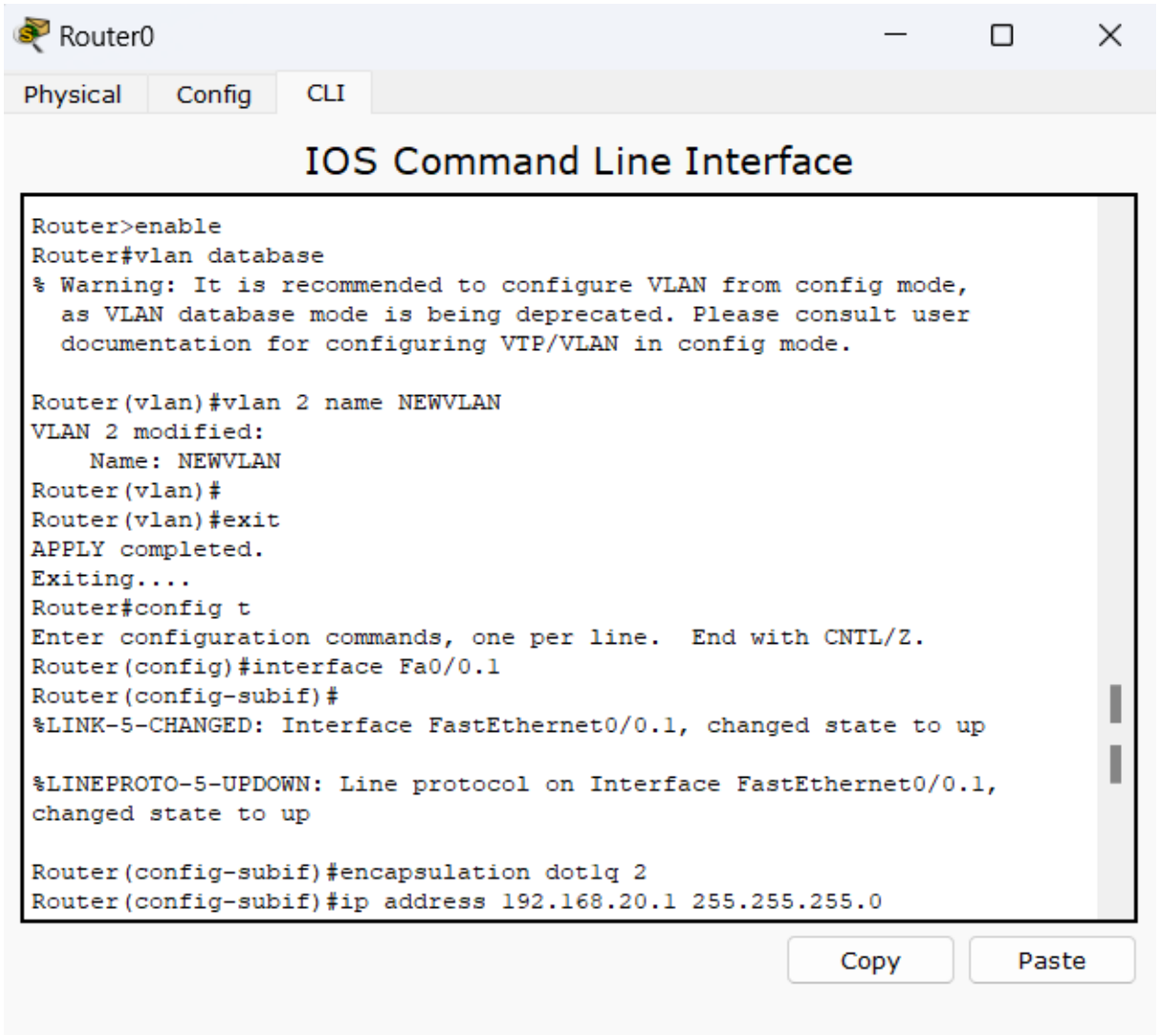

PC - 3
Physical
Config
Desktop
Custom Interface
GLOBAL
Settings
Algorithm Settings
INTERFACE
FastEthernet0
FastEthernet0
Port Status
On
Bandwidth
100 Mbps
10 Mbps
Auto
Duplex
Half Duplex
Full Duplex
Auto
MAC Address
0060.47A2.776B
IP Configuration
DHCP
Static
IP Address
Subnet Mask
IPv6 Configuration
DHCP
Auto Config
Static
IPv6 Address
/
Link Local Address:80::260:47FF:FEA2:776B

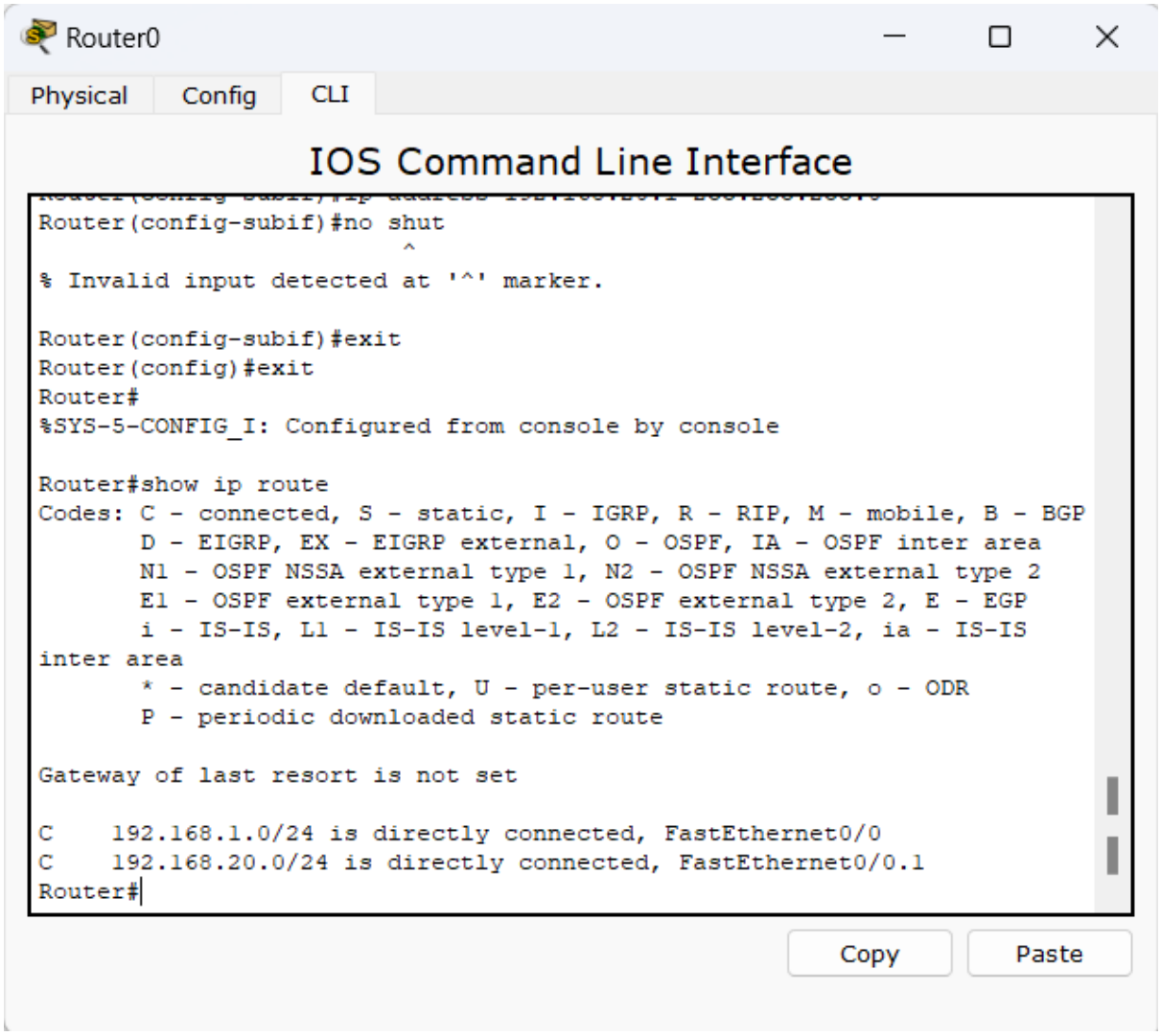

PC - 3
Physical
Config
Desktop
Custom Interface
GLOBAL
Settings
Algorithm Settings
INTERFACE
FastEthernet0
Global Settings
Display Name
PC - 3
Gateway/DNS
DHCP
Static
Gateway
192.168.20.1
DNS Server
Gateway/DNS Ipv6
DHCP
Auto Config
Static
IPv6 Gateway
IPv6 DNS Server

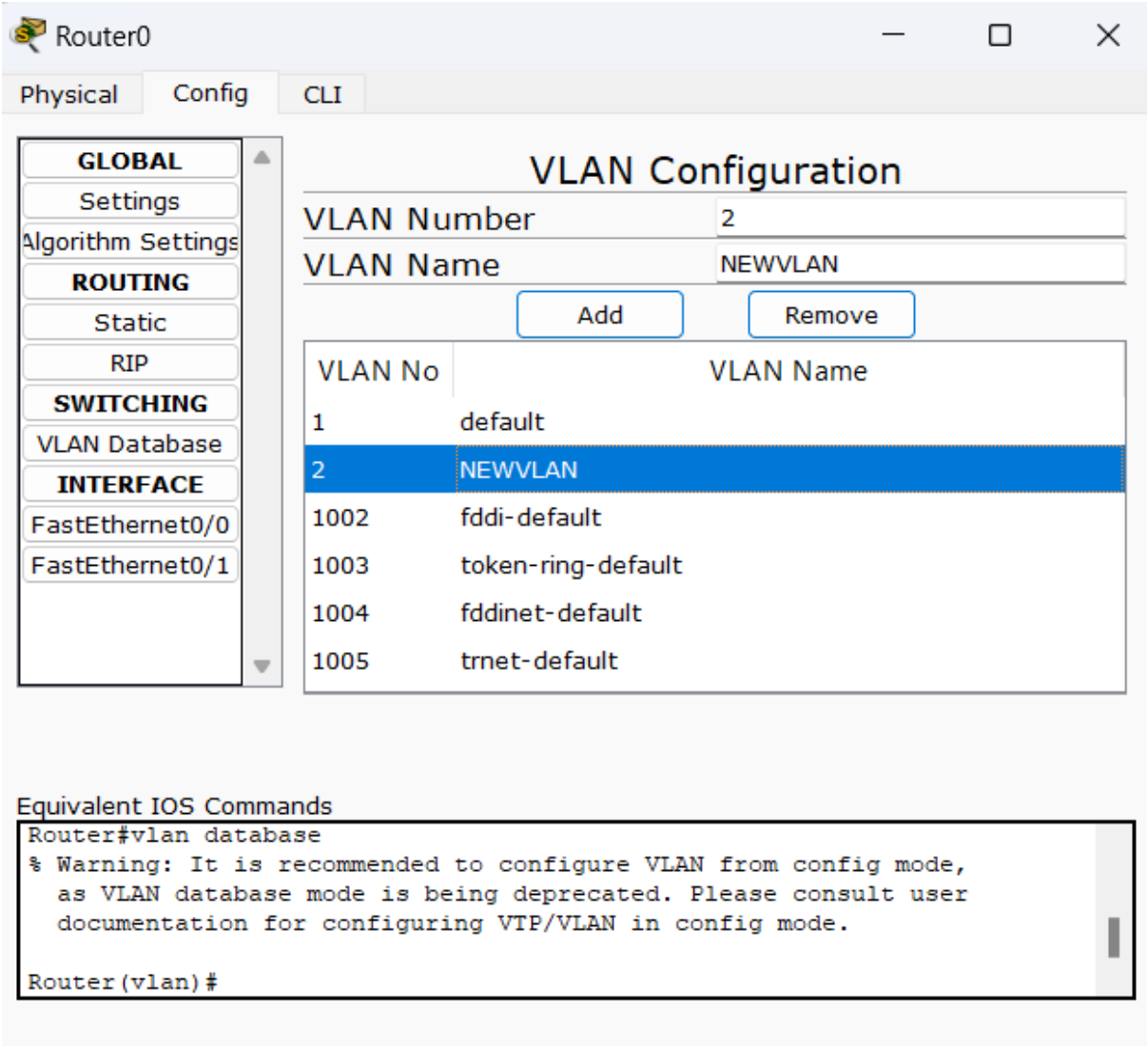

PC - 3
Physical
Config
Desktop
Custom Interface
GLOBAL
Settings
Algorithm Settings
INTERFACE
FastEthernet0
FastEthernet0
Port Status
On
Bandwidth
100 Mbps
10 Mbps
Auto
Duplex
Half Duplex
Full Duplex
Auto
MAC Address
0060.47A2.776B
IP Configuration
DHCP
Static
IP Address
192.168.20.2
Subnet Mask
255.255.255.0
IPv6 Configuration
DHCP
Auto Config
Static
IPv6 Address
/
Link Local Address:
30::260:47FF:FEA2:776B

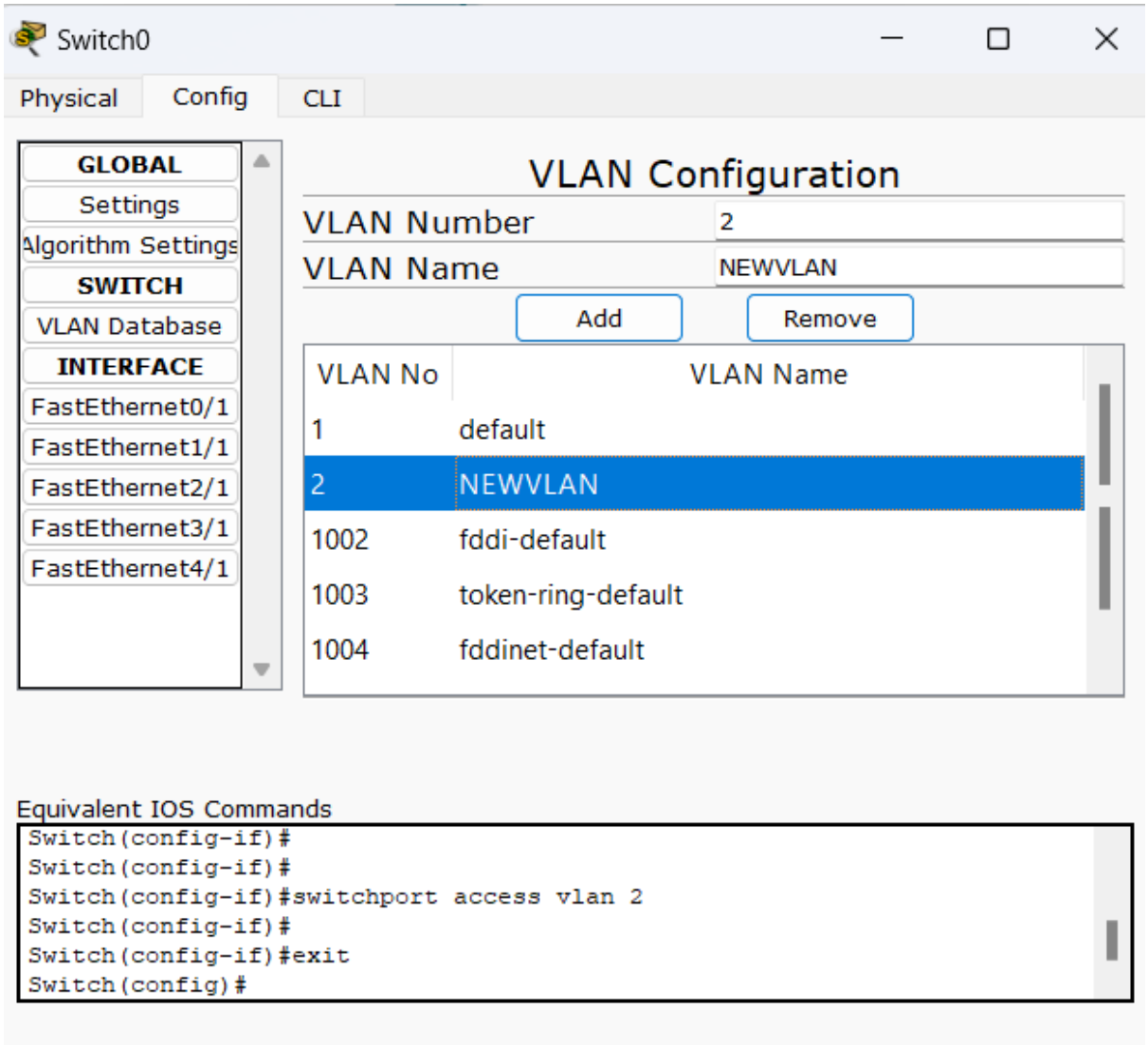

PC - 4
Physical
Config
Desktop
Custom Interface
GLOBAL
Settings
Algorithm Settings
INTERFACE
FastEthernet0
Global Settings
Display Name
PC - 4
Gateway/DNS
DHCP
Static
Gateway
192.168.20.1
DNS Server
Gateway/DNS Ipv6
DHCP
Auto Config
Static
IPv6 Gateway
IPv6 DNS Server

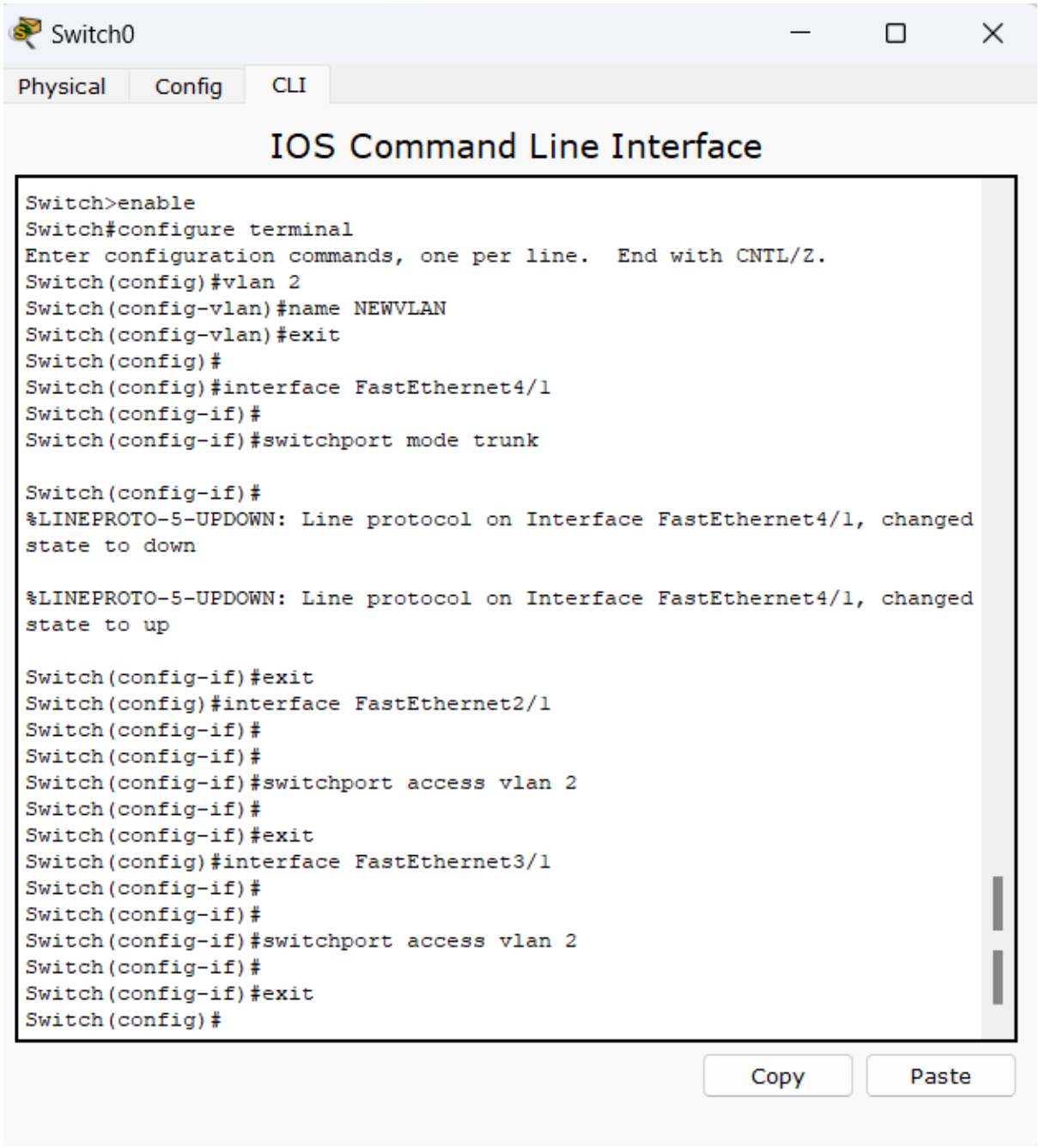

PC - 4
Physical
Config
Desktop
Custom Interface
GLOBAL
Settings
Algorithm Settings
INTERFACE
FastEthernet0
FastEthernet0
Port Status
On
Bandwidth
100 Mbps
10 Mbps
Auto
Duplex
Half Duplex
Full Duplex
Auto
MAC Address
00D0.D342.D8C4
IP Configuration
DHCP
Static
IP Address
192.168.20.3
Subnet Mask
255.255.255.0
IPv6 Configuration
DHCP
Auto Config
Static
IPv6 Address
/
Link Local Address:
0::2D0:D3FF:FE42:D8C4

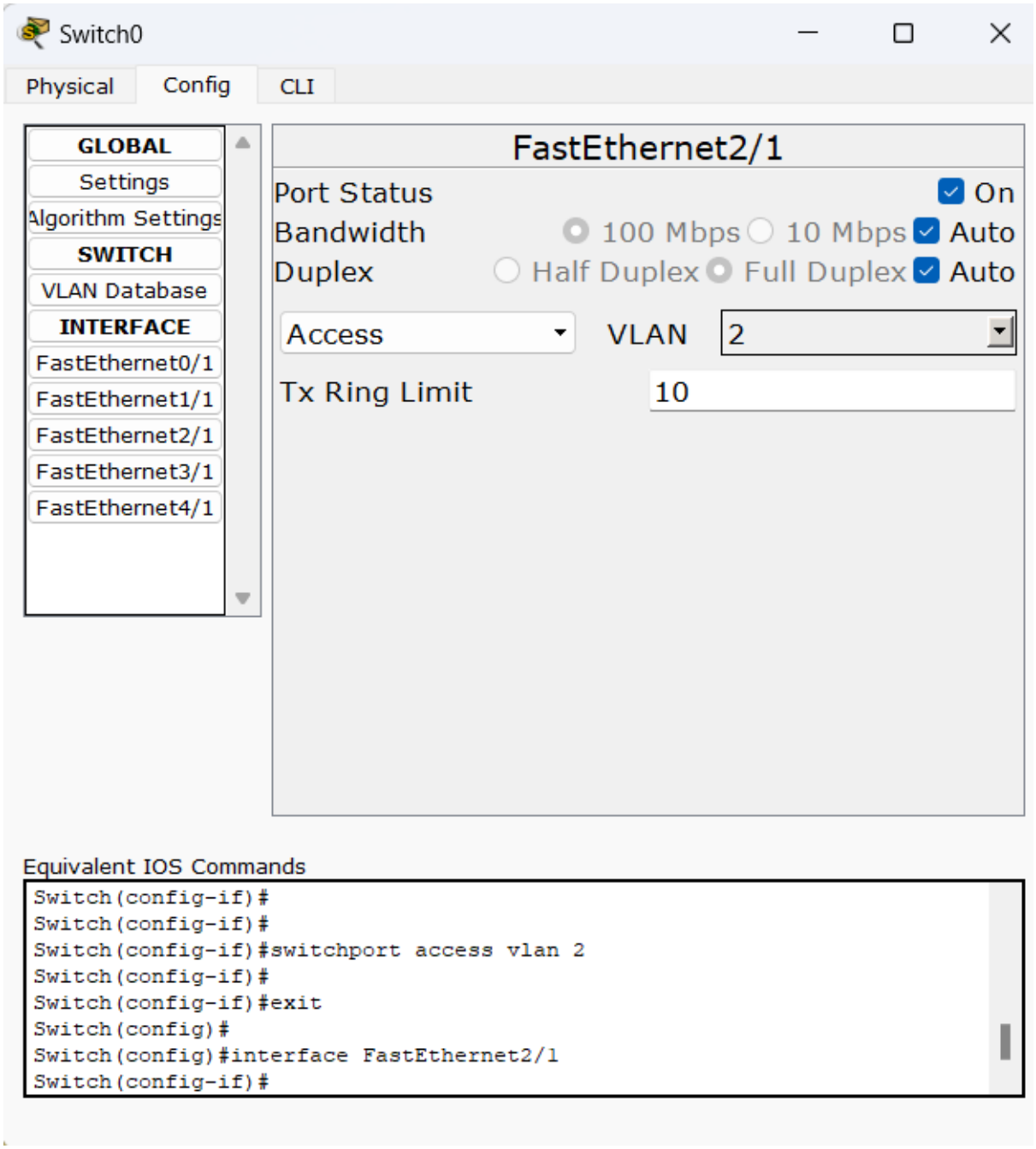

Router0
Physical
Config
CLI
IOS Command Line Interface
Router>enable
Router#vlan database
% Warning: It is recommended to configure VLAN from config mode,
as VLAN database mode is being deprecated. Please consult user
documentation for configuring VTP/VLAN in config mode.
Router(vlan)#vlan 2 name NEWVLAN
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

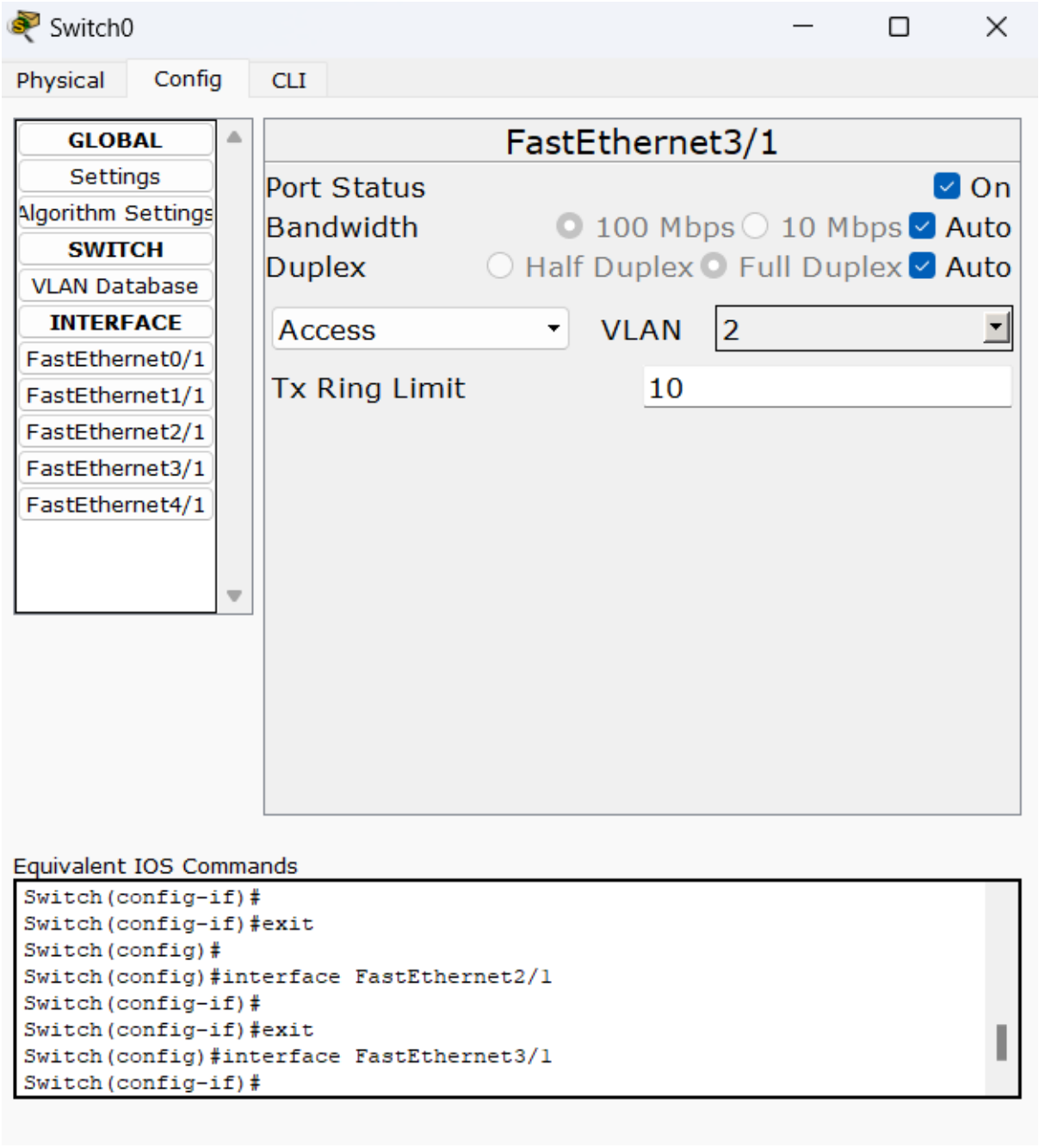

Router0
Physical
Config
CLI
IOS Command Line Interface
Router(config-subif)#no shut
^
% Invalid input detected at '^' marker.
Router(config-subif)#exit
Router(config)#exit
Router#
%SYS-5-CONFIG_I: Configured from console by console
Router#show ip route
Codes: C - connected, S - static, I - IGRP, R - 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

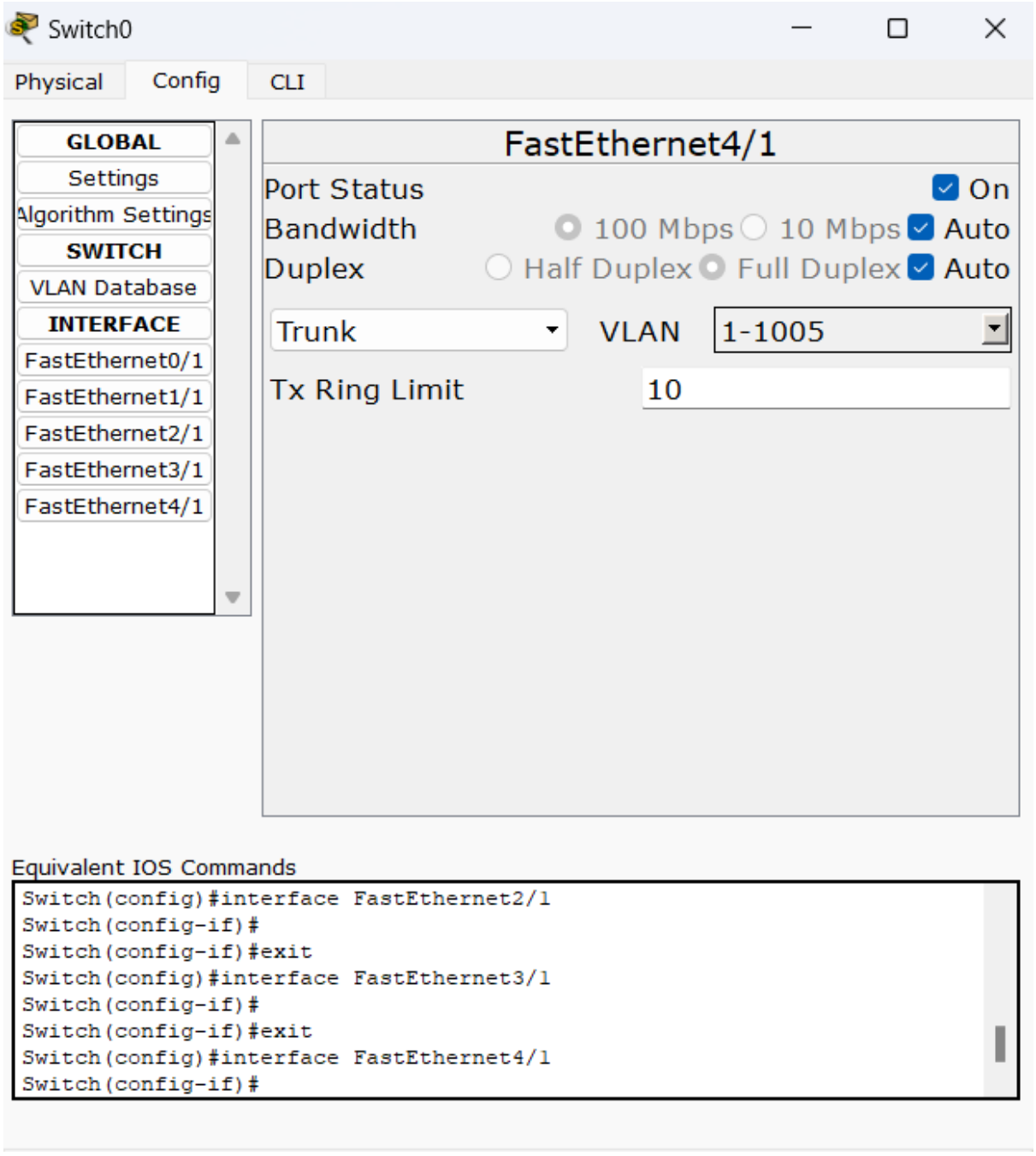

Router0
Physical
Config
CLI
GLOBAL
Settings
Algorithm Settings
ROUTING
Static
RIP
SWITCHING
VLAN Database
INTERFACE
FastEthernet0/0
FastEthernet0/1
VLAN Configuration
VLAN Number
2
VLAN Name
NEWVLAN
Add
Remove
VLAN No
VLAN Name
1
default
2
NEWVLAN
1002
fddi-default
1003
token-ring-default
1004
fddinet-default
1005
trnet-default
Equivalent IOS Commands
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 VTP/VLAN in config mode.
Router(vlan)#

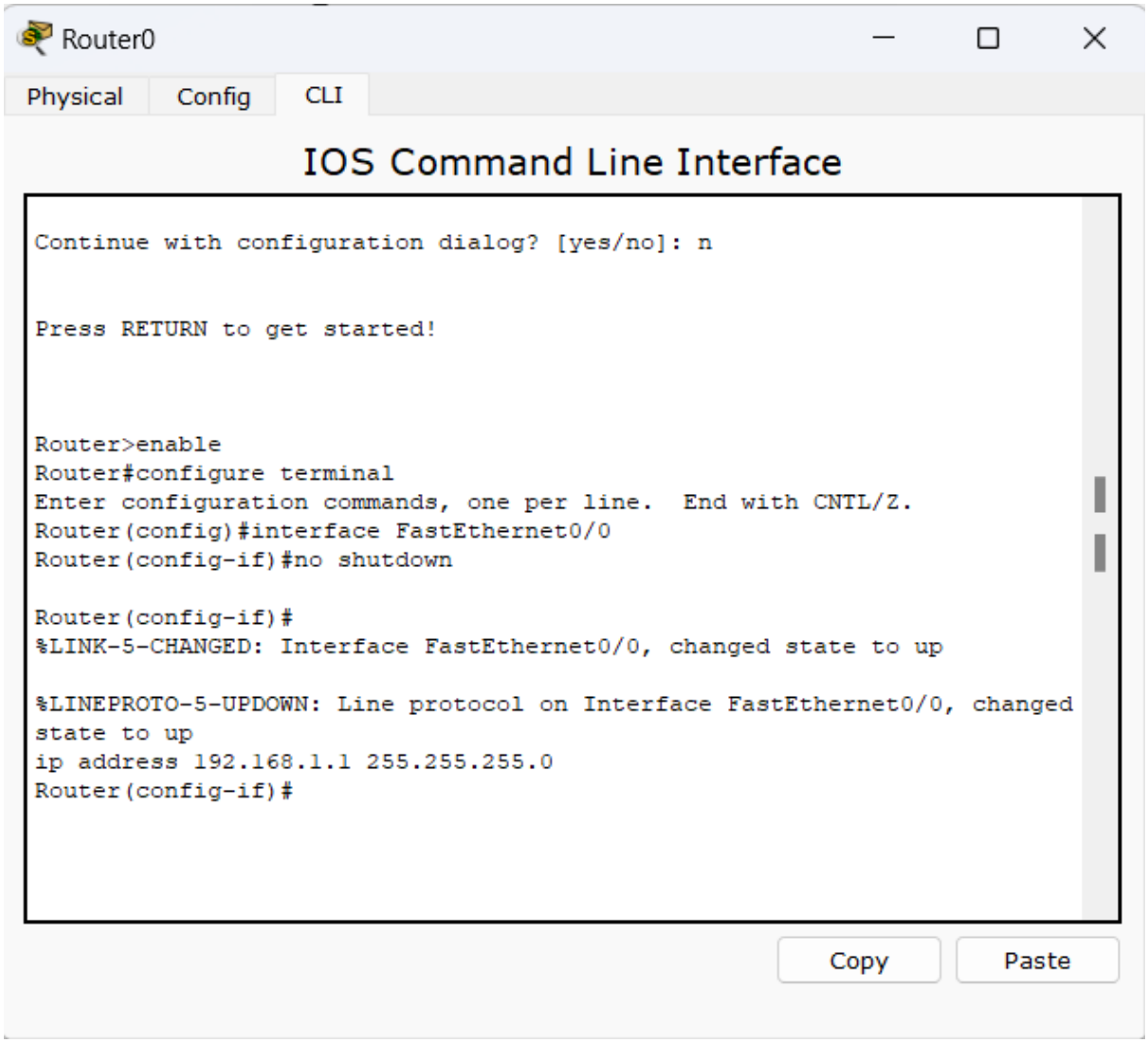

Switch0
Physical
Config
CLI
GLOBAL
Settings
Algorithm Settings
SWITCH
VLAN Database
INTERFACE
FastEthernet0/1
FastEthernet1/1
FastEthernet2/1
FastEthernet3/1
FastEthernet4/1
VLAN Configuration
VLAN Number
2
VLAN Name
NEWVLAN
Add
Remove
VLAN No
VLAN Name
1
default
2
NEWVLAN
1002
fddi-default
1003
token-ring-default
1004
fddinet-default
Equivalent IOS Commands
Switch(config-if)#
Switch(config-if)#
Switch(config-if)#switchport access vlan 2
Switch(config-if)#
Switch(config-if)#exit
Switch(config)#

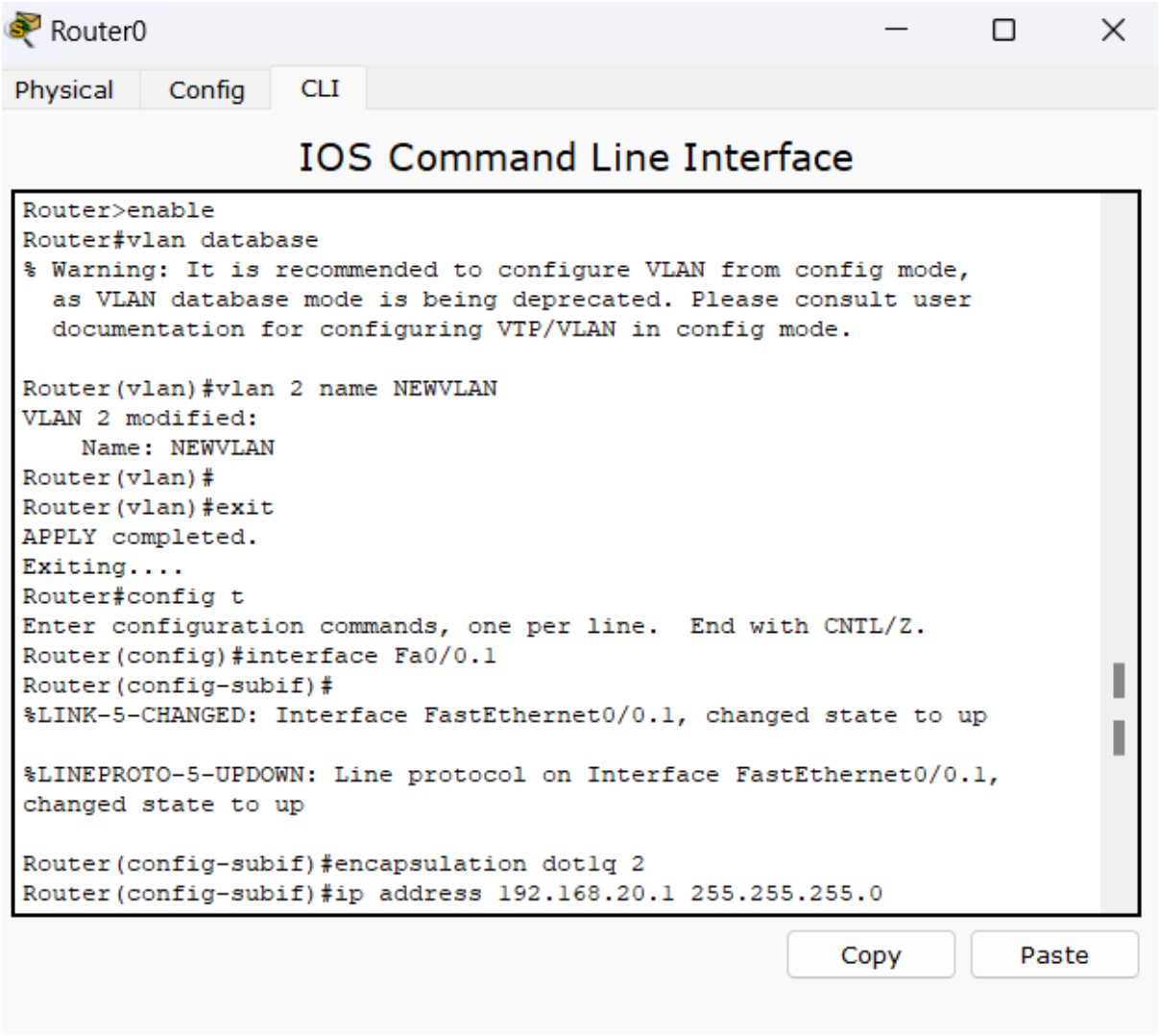

Switch0
Physical
Config
CLI
IOS Command Line Interface
Switch>enable
Switch#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#vlan 2
Switch(config-vlan)#name NEWVLAN
Switch(config-vlan)#exit
Switch(config)#
Switch(config)#interface FastEthernet4/1
Switch(config-if)#
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)#
Copy
Paste

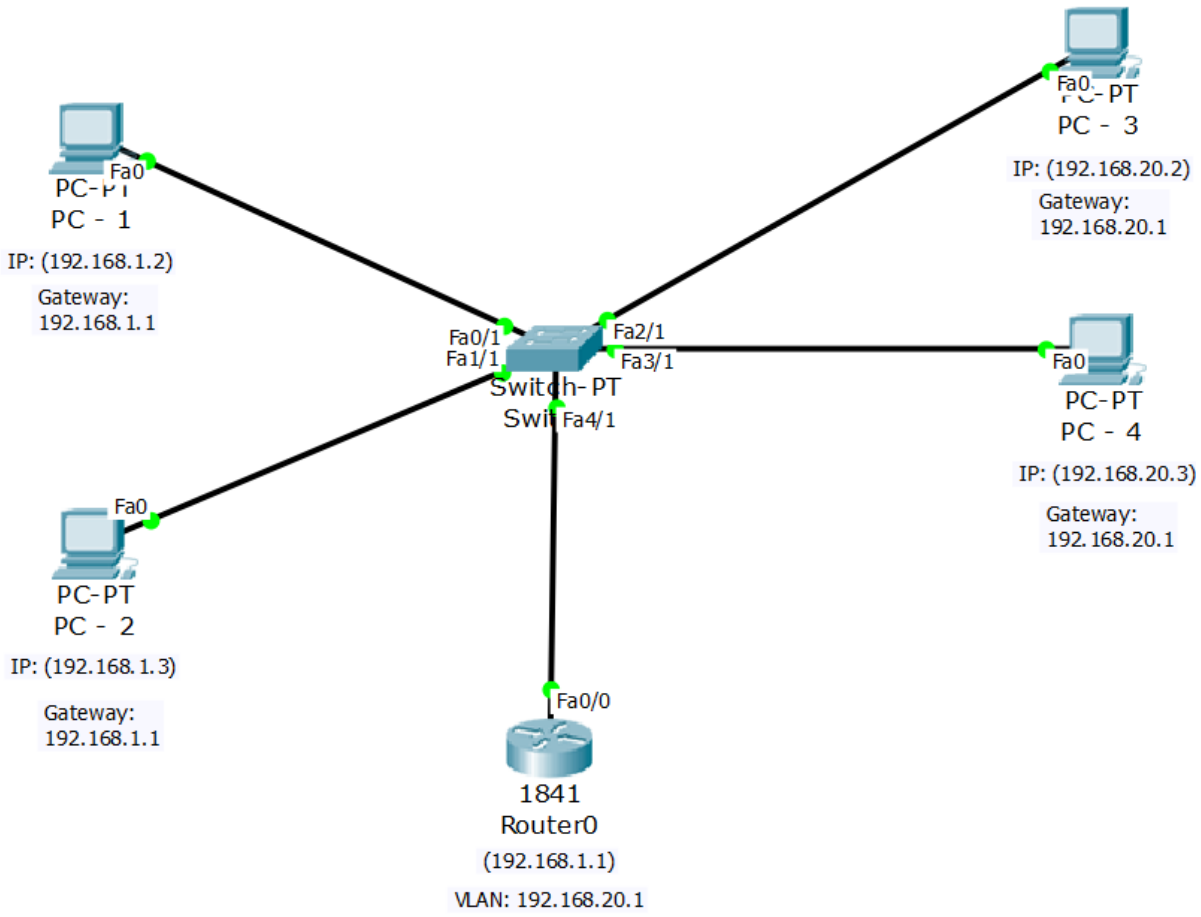

Switch0
Physical
Config
CLI
GLOBAL
Settings
Algorithm Settings
SWITCH
VLAN Database
INTERFACE
FastEthernet0/1
FastEthernet1/1
FastEthernet2/1
FastEthernet3/1
FastEthernet4/1
FastEthernet2/1
Port Status
On
Bandwidth
100 Mbps
10 Mbps
Auto
Duplex
Half Duplex
Full Duplex
Auto
Access
VLAN
2
Tx Ring Limit
10
Equivalent IOS Commands
Switch(config-if)#
Switch(config-if)#
Switch(config-if)#switchport access vlan 2
Switch(config-if)#
Switch(config-if)#exit
Switch(config)#
Switch(config)#interface FastEthernet2/1
Switch(config-if)#

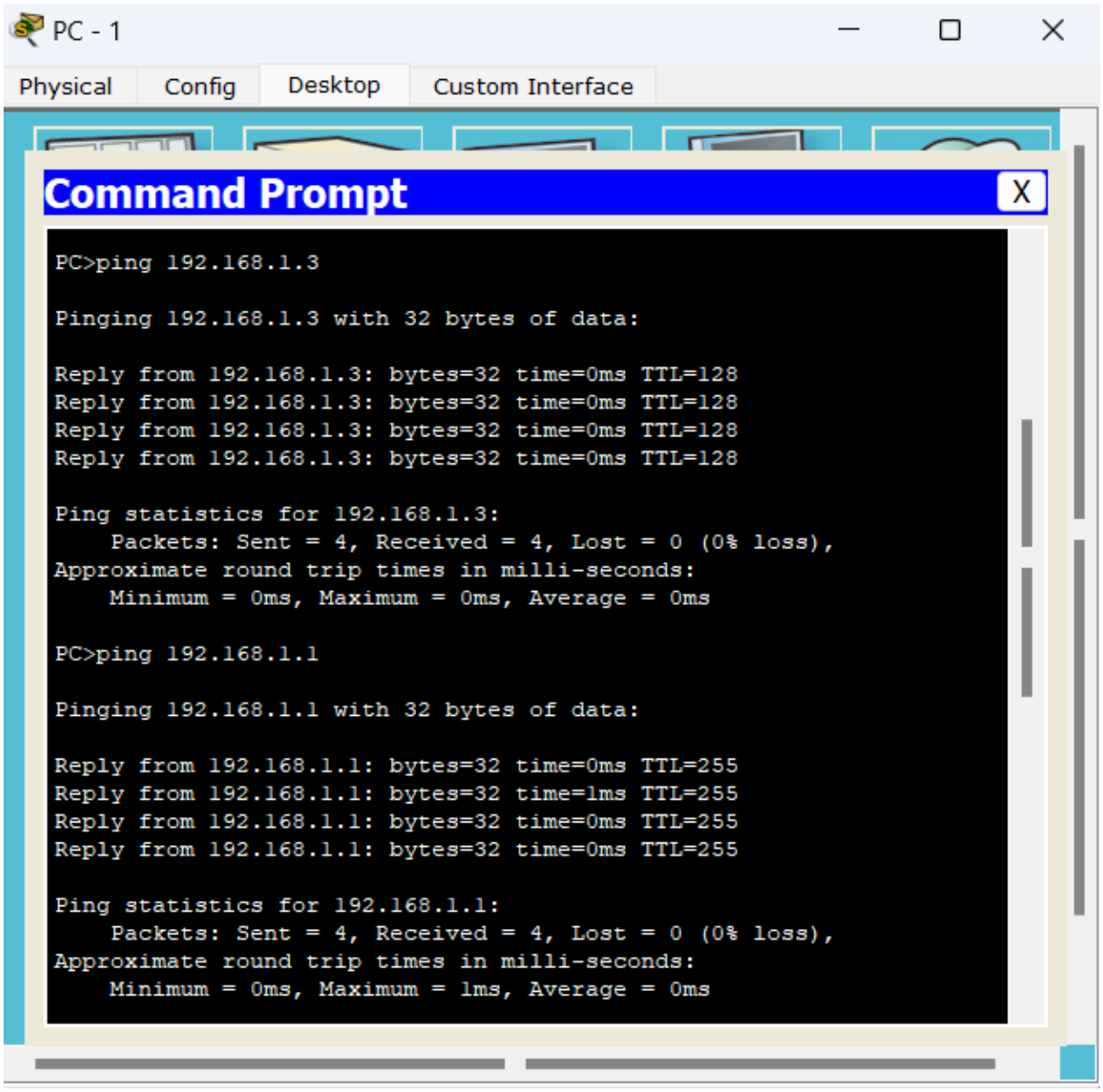

Switch0
Physical
Config
CLI
GLOBAL
Settings
Algorithm Settings
SWITCH
VLAN Database
INTERFACE
FastEthernet0/1
FastEthernet1/1
FastEthernet2/1
FastEthernet3/1
FastEthernet4/1
FastEthernet3/1
Port Status
On
Bandwidth
100 Mbps
10 Mbps
Auto
Duplex
Half Duplex
Full Duplex
Auto
Access
VLAN
2
Tx Ring Limit
10
Equivalent IOS Commands
Switch(config-if)#
Switch(config-if)#exit
Switch(config)#
Switch(config)#interface FastEthernet2/1
Switch(config-if)#
Switch(config-if)#exit
Switch(config)#interface FastEthernet3/1
Switch(config-if)#


Switch0
Physical
Config
CLI
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
1-1005
Tx Ring Limit
10
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)#


Router0
Physical
Config
CLI
IOS Command Line Interface
Continue with configuration dialog? [yes/no]: n
Press RETURN to get started!
Router>enable
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface FastEthernet0/0
Router(config-if)#no shutdown
Router(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
ip address 192.168.1.1 255.255.255.0
Router(config-if)#
Copy
Paste


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 VTP/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


Fa0
PC-PT
PC - 1
IP: (192.168.1.2)
Gateway:
192.168.1.1
Fa0
PC-PT
PC - 3
IP: (192.168.20.2)
Gateway:
192.168.20.1
Fa0/1
Fa1/1
Fa2/1
Fa3/1
Fa4/1
Switch-PT
Fa0
PC-PT
PC - 4
IP: (192.168.20.3)
Gateway:
192.168.20.1
Fa0
PC-PT
PC - 2
IP: (192.168.1.3)
Gateway:
192.168.1.1
Fa0/0
1841
Router0
(192.168.1.1)
VLAN: 192.168.20.1


PC - 1
Physical
Config
Desktop
Custom Interface
Command Prompt
X
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