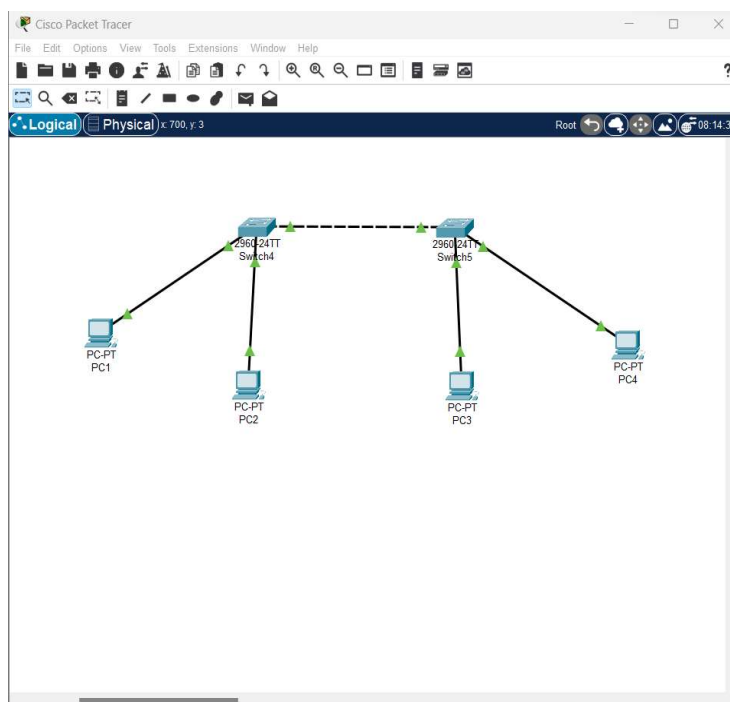
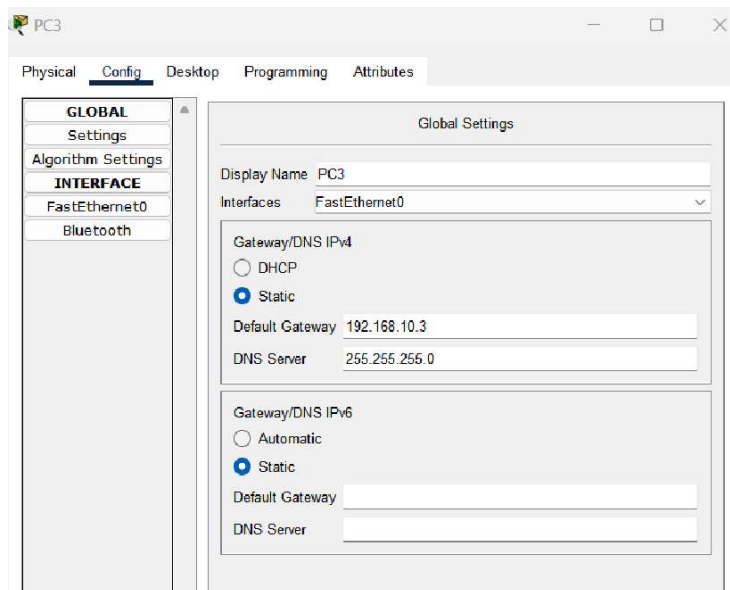
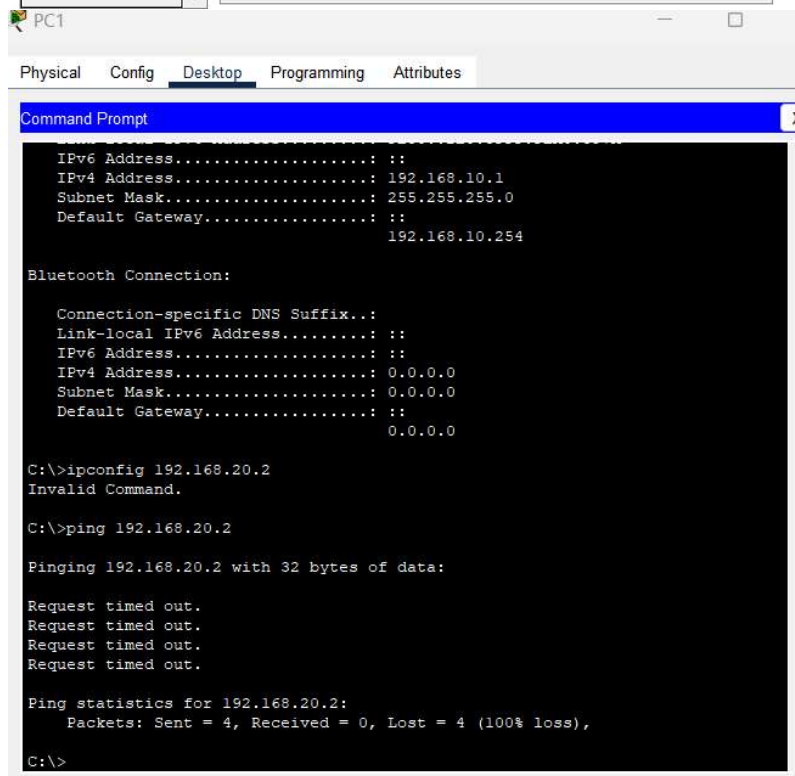
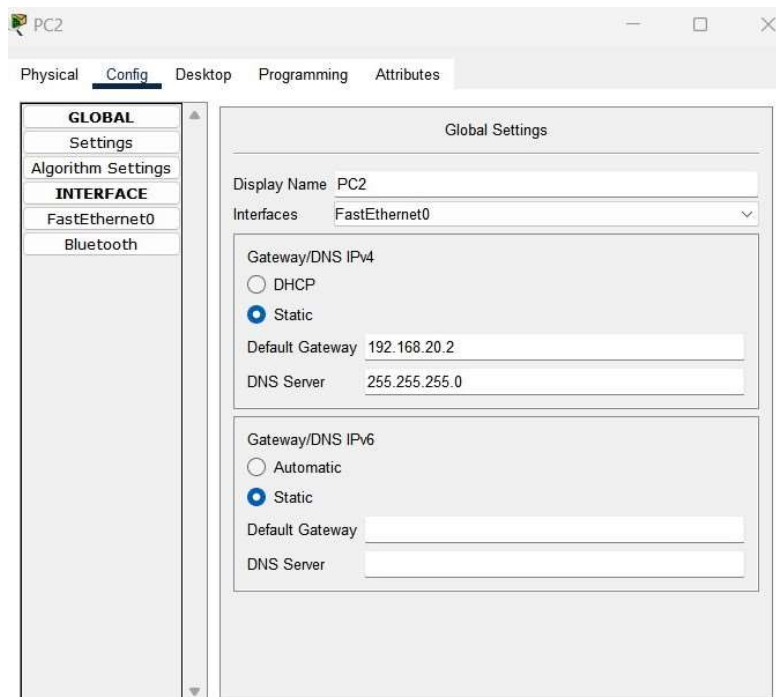


Séparer les flux - Chap Vlan - TP Routage Inter Vlan

Josselin





```
PC1
Physical Config Desktop Programming Attributes
Command Prompt
0.0.0.0
C:\>ipconfig 192.168.20.2
Invalid Command.
C:\>ping 192.168.20.2
Pinging 192.168.20.2 with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.
Ping statistics for 192.168.20.2:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
C:\>ping 192.168.10.3
Pinging 192.168.10.3 with 32 bytes of data:
Reply from 192.168.10.3: bytes=32 time<1ms TTL=128
Reply from 192.168.10.3: bytes=32 time<1ms TTL=128
Reply from 192.168.10.3: bytes=32 time<1ms TTL=128
Reply from 192.168.10.3: bytes=32 time<1ms TTL=128
Ping statistics for 192.168.10.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms
C:\>
```

```
PC2
Physical Config Desktop Programming Attributes
Command Prompt
Link-local IPv6 Address.....: FE80::260:2FFF:FE82:1702
IPv6 Address.....: ::
IPv4 Address.....: 192.168.20.2
Subnet Mask.....: 255.255.255.0
Default Gateway.....: ::
192.168.20.254
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:\>ping 192.168.20.4
Pinging 192.168.20.4 with 32 bytes of data:
Reply from 192.168.20.4: bytes=32 time<1ms TTL=128
Reply from 192.168.20.4: bytes=32 time<1ms TTL=128
Reply from 192.168.20.4: bytes=32 time<1ms TTL=128
Reply from 192.168.20.4: bytes=32 time=4ms TTL=128
Ping statistics for 192.168.20.4:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 4ms, Average = 1ms
C:\>
```

C1

Physical Config CLI Attributes

IOS Command Line Interface

```
up
%LINK-3-UPDOWN: Interface FastEthernet0/1, changed state to down
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to down
%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up

Switch>enable
Switch#show vlan brief

VLAN Name                Status    Ports
-----
1    default                active    Fa0/1, Fa0/2, Fa0/3, Fa0/4
                                           Fa0/5, Fa0/6, Fa0/7, Fa0/8
                                           Fa0/9, Fa0/10, Fa0/11, Fa0/12
                                           Fa0/13, Fa0/14, Fa0/15, Fa0/16
                                           Fa0/17, Fa0/18, Fa0/19, Fa0/20
                                           Fa0/21, Fa0/22, Fa0/23, Fa0/24
                                           Gig0/1, Gig0/2

1002 fddi-default          active
1003 token-ring-default     active
1004 fddinet-default         active
1005 trnet-default          active
Switch#
```

Copy Paste

C1

Physical Config CLI Attributes

IOS Command Line Interface

```
Switch>enable
Switch#show vlan brief

VLAN Name                Status    Ports
-----
1    default                active    Fa0/1, Fa0/2, Fa0/3, Fa0/4
                                           Fa0/5, Fa0/6, Fa0/7, Fa0/8
                                           Fa0/9, Fa0/10, Fa0/11, Fa0/12
                                           Fa0/13, Fa0/14, Fa0/15, Fa0/16
                                           Fa0/17, Fa0/18, Fa0/19, Fa0/20
                                           Fa0/21, Fa0/22, Fa0/23, Fa0/24

1002 fddi-default          active
1003 token-ring-default     active
1004 fddinet-default         active
1005 trnet-default          active
Switch#enable
Switch#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.

Switch(vlan)#vlan 10 name vlan 10
^
% Invalid input detected at '^' marker.

Switch(vlan)#vlan 10 name vlan10
VLAN 10 added:
  Name: vlan10
Switch(vlan)#vlan 20 name vlan20
VLAN 20 added:
  Name: vlan20
Switch(vlan)#exit
APPLY completed.
Exiting....
Switch#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Switch(config)#interface fastEthernet 0/1
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#exit
Switch(config)#interface fastEthernet 0/2
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 20
^
% Invalid input detected at '^' marker.

Switch(config-if)#switchport access vlan 20
Switch(config-if)#end
Switch#
%SYS-5-CONFIG_I: Configured from console by console
```

Physical Config CLI Attributes

IOS Command Line Interface

```
as VLAN database mode is being deprecated. Please consult user
documentation for configuring VTP/VLAN in config mode.

Switch(vlan)#vlan 10 name vlan 10
^
% Invalid input detected at '^' marker.

Switch(vlan)#vlan 10 name vlan10
VLAN 10 added:
  Name: vlan10
Switch(vlan)#vlan 20 name vlan20
VLAN 20 added:
  Name: vlan20
Switch(vlan)#exit
APPLY completed.
Exiting....
Switch#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#interface fastEthernet 0/1
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#exit
Switch(config)#interface fastEthernet 0/2
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 20
^
% Invalid input detected at '^' marker.

Switch(config-if)#switchport access vlan 20
Switch(config-if)#end
Switch#
%SYS-5-CONFIG_I: Configured from console by console

Switch#show vlan brief

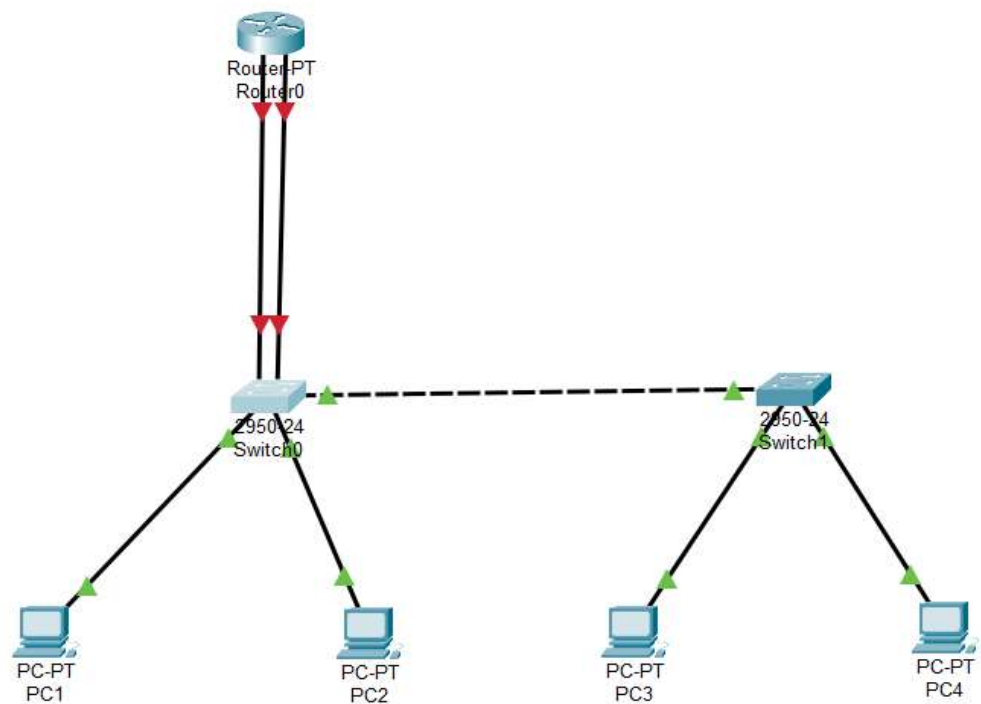
VLAN Name                Status    Ports
-----
1    default                active    Fa0/3, Fa0/4, Fa0/5, Fa0/6
                                           Fa0/7, Fa0/8, Fa0/9, Fa0/10
                                           Fa0/11, Fa0/12, Fa0/13, Fa0/14
                                           Fa0/15, Fa0/16, Fa0/17, Fa0/18
                                           Fa0/19, Fa0/20, Fa0/21, Fa0/22
                                           Fa0/23, Fa0/24
10   vlan10                 active    Fa0/1
20   vlan20                 active    Fa0/2
1002 fddi-default          active
1003 token-ring-default    active
1004 fddinet-default        active
1005 trnet-default          active
Switch#
```

```
Switch>enable
Switch#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.

Switch(vlan)#vlan 10 name vlan10
VLAN 10 added:
  Name: vlan10
Switch(vlan)#vlan 10 name vlan20
VLAN 10 modified:
  Name: vlan20
Switch(vlan)#exit
APPLY completed.
Exiting....
Switch#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#interface fastEthernet 0/1
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#exit
Switch(config)#interface fastEthernet 0/2
Switch(config-if)#switchport mode access
```

Switch con0 is now available

Press RETURN to get started.



```
Physical  Config  Desktop  Programming  Attributes
Command Prompt X

Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.10.3

Pinging 192.168.10.3 with 32 bytes of data:

Reply from 192.168.10.3: bytes=32 time=1ms TTL=128
Reply from 192.168.10.3: bytes=32 time=1ms TTL=128
Reply from 192.168.10.3: bytes=32 time<1ms TTL=128
Reply from 192.168.10.3: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.10.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\>
```

```
Power supply serial number: DAB0605127D
Model revision number: C0
Motherboard revision number: A0
Model number: WS-C2950-24
System serial number: FHK061020WC

Cisco Internetwork Operating System Software
IOS (tm) C2950 Software (C2950-I6Q4L2-M), Version 12.1(22)EA4, RELEASE SOFTWARE(fcl)
Copyright (c) 1986-2005 by cisco Systems, Inc.
Compiled Wed 18-May-05 22:31 by jharirba

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 FastEthernet0/8, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/8, changed state to up
%LINK-5-CHANGED: Interface FastEthernet0/2, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to up

Switch>enable
Switch#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#interface fastEthernet 0/8
Switch(config-if)#switch mode trunk
Switch(config-if)#switchport trunk allowed vlan 10-20
Switch(config-if)#END
Switch#
%SYS-5-CONFIG_I: Configured from console by console

Switch#show interface trunk
Port      Mode      Encapsulation  Status      Native vlan
Fa0/8     on        802.1q         trunking    1

Port      Vlans allowed on trunk
Fa0/8     10-20

Port      Vlans allowed and active in management domain
Fa0/8     10,20

Port      Vlans in spanning tree forwarding state and not pruned
Fa0/8     10,20

Switch#
```

Physical Config Desktop Programming Attributes

Command Prompt

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.10.10

Pinging 192.168.10.10 with 32 bytes of data:

Reply from 192.168.10.10: bytes=32 time=4ms TTL=128
Reply from 192.168.10.10: bytes=32 time<1ms TTL=128
Reply from 192.168.10.10: bytes=32 time=10ms TTL=128
Reply from 192.168.10.10: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.10.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 10ms, Average = 3ms

C:\>
```

Physical Config CLI Attributes

FastEthernet0/0

Port Status ☒ On

Bandwidth ☐ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex ☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address 00D0.581B.76D2

IP Configuration

IPv4 Address 192.168.10.254

Subnet Mask 255.255.255.0

Tx Ring Limit 10

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

INTERFACE

FastEthernet0/0

FastEthernet1/0

Serial2/0

Serial3/0

FastEthernet4/0

FastEthernet5/0

Equivalent IOS Commands

```
Router(config)#
Router(config)#interface FastEthernet1/0
Router(config-if)#no shutdown
Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet1/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0, changed state to up

Router(config-if)#exit
Router(config)#interface FastEthernet0/0
Router(config-if)#
Router(config-if)#exit
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 192.168.10.254 255.255.255.0
Router(config-if)#ip address 192.168.10.254 255.255.255.0
Router(config-if)#
Router(config-if)#
Router(config-if)#exit
Router(config)#interface FastEthernet0/0
Router(config-if)#
```


IOS Command Line Interface

```
Switch#

Switch con0 is now available

Press RETURN to get started.

%LINK-5-CHANGED: Interface FastEthernet0/11, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/11, changed state to up
%LINK-5-CHANGED: Interface FastEthernet0/10, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/10, changed state to up

Switch>enable
Switch#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#interface FastEthernet 0/10
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#exit
Switch(config)#interface FastEthernet 0/11
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 20
Switch(config-if)#
```

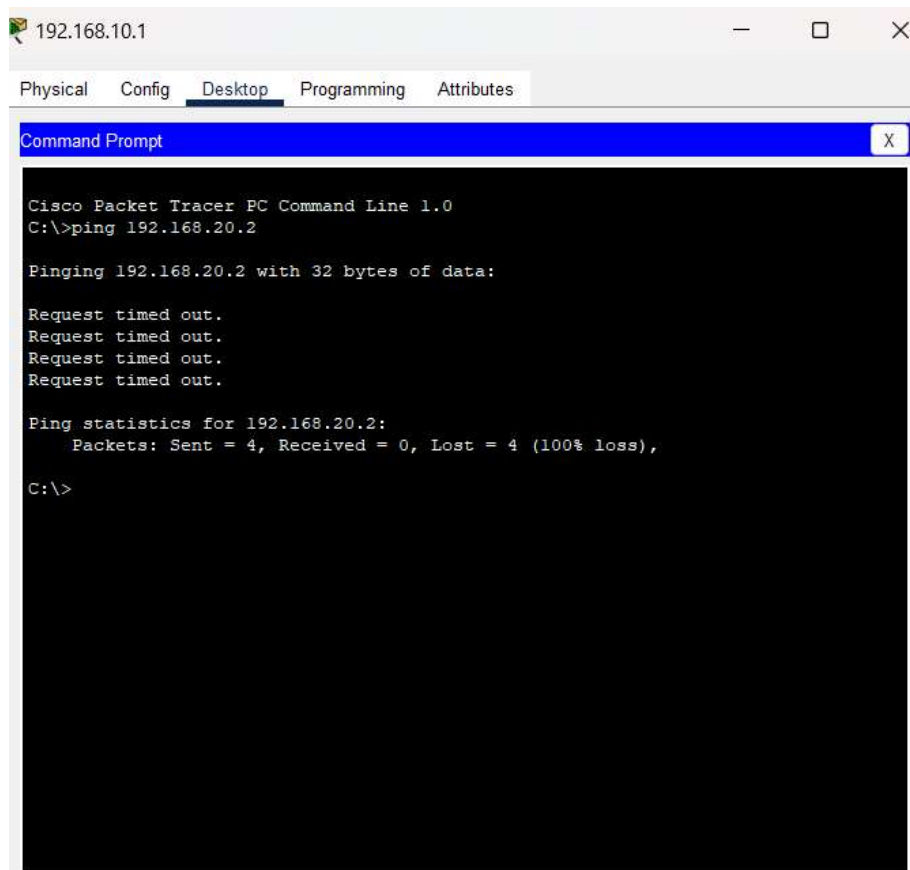
IOS Command Line Interface

```
Press RETURN to get started.

Router>enable
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface fastEthernet 0/0
Router(config-if)#ip address 192.168.10.254 255.255.255.0
Router(config-if)#exit
Router(config)#interface fastEthernet 1/0
Router(config-if)#ip address 192.168.20.254 255.255.255.0
Router(config-if)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#show running-config
Building configuration...

Current configuration : 718 bytes
!
version 12.2
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname Router
!
!
!
!
!
!
ip cef
no ipv6 cef
!
!
--More--
```



```
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0.1, changed state to up
Router(config-subif)#encapsulation dot1Q 10
Router(config-subif)#ip address 192.168.10.254 255.255.255?
A.B.C.D
Router(config-subif)#ip address 192.168.10.254 255.255.255.0
Router(config-subif)#no shutdown
Router(config-subif)#exit
Router(config)#interface fastEthernet 0/0.2
Router(config-subif)#
%LINK-5-CHANGED: Interface FastEthernet0/0.2, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0.2, changed state to up
Router(config-subif)#encapsulation dot1Q 20
Router(config-subif)#ip address 192.168.20.254 255.255.255.0
% 192.168.20.0 overlaps with FastEthernet1/0
Router(config-subif)#no shutdown
Router(config-subif)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console
Router#show running-config
^
% Invalid input detected at '^' marker.
Router#show running-config
Building configuration...

Current configuration : 856 bytes
!
version 12.2
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname Router
!
!
!
!
!
!
ip cef
no ipv6 cef
!
!
--More--
```

```
Switch>enable
Switch#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#interface fastEthernet 0/9
Switch(config-if)#switchport mode trunk
^
% Invalid input detected at '^' marker.
Switch(config-if)#switchport mode trunk

Switch(config-if)#
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/9, changed state to down
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/9, changed state to up

Switch(config-if)#end
Switch#
%SYS-5-CONFIG_I: Configured from console by console

Switch#show running-config
Building configuration...

Current configuration : 1305 bytes
!
version 12.1
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname Switch
!
!
!
!
!
!
spanning-tree mode pvst
spanning-tree extend system-id
!
interface FastEthernet0/1
switchport access vlan 10
switchport mode access
--More--
```

