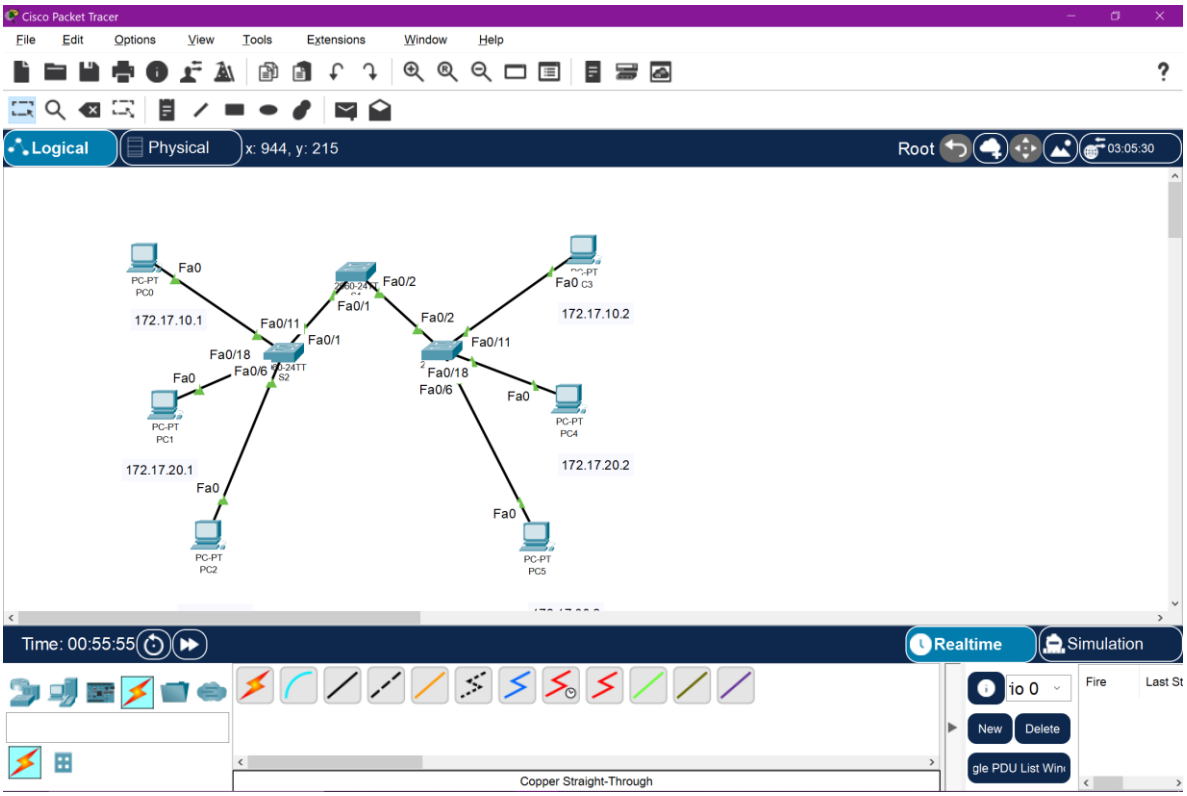
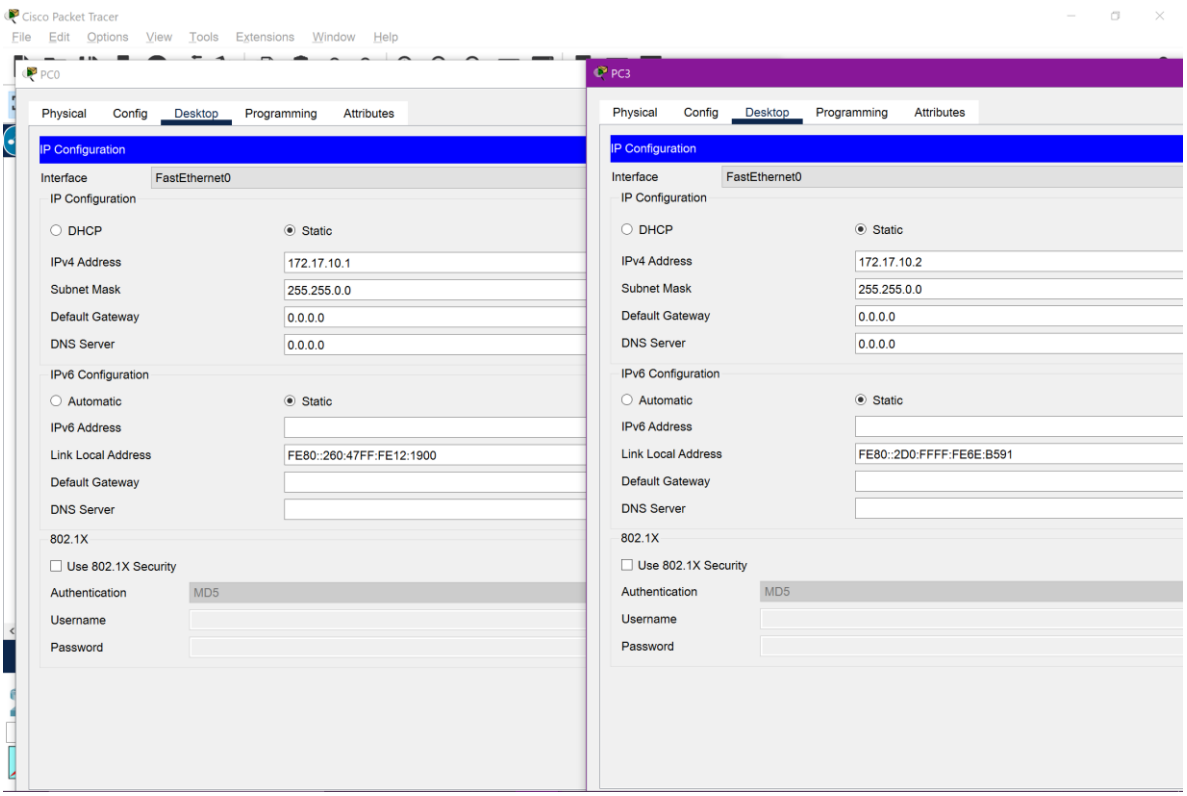
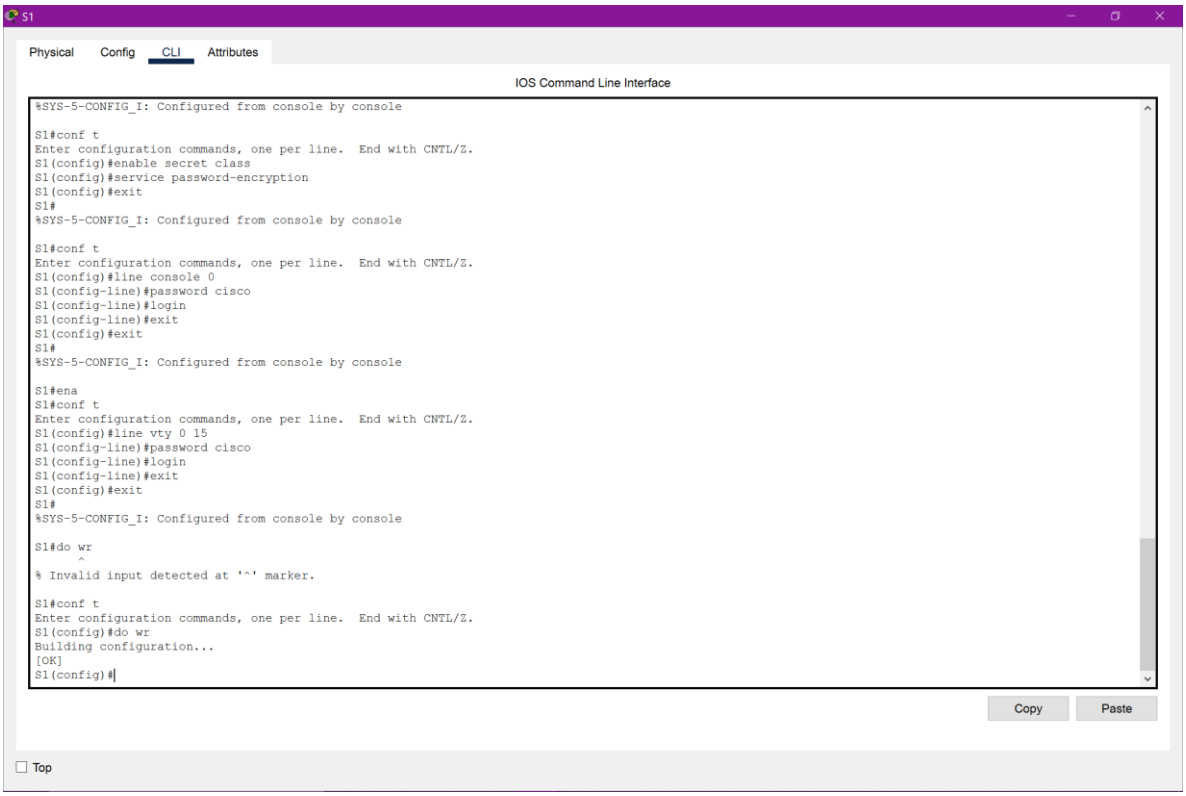
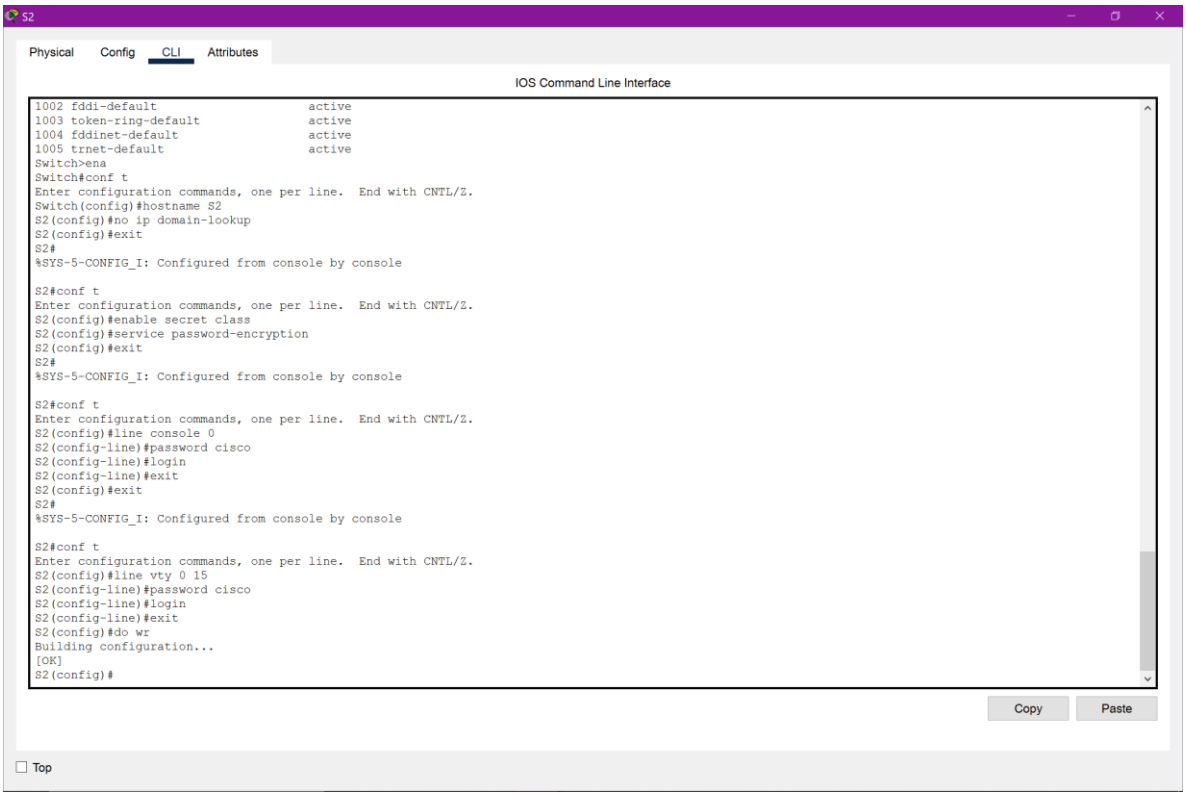
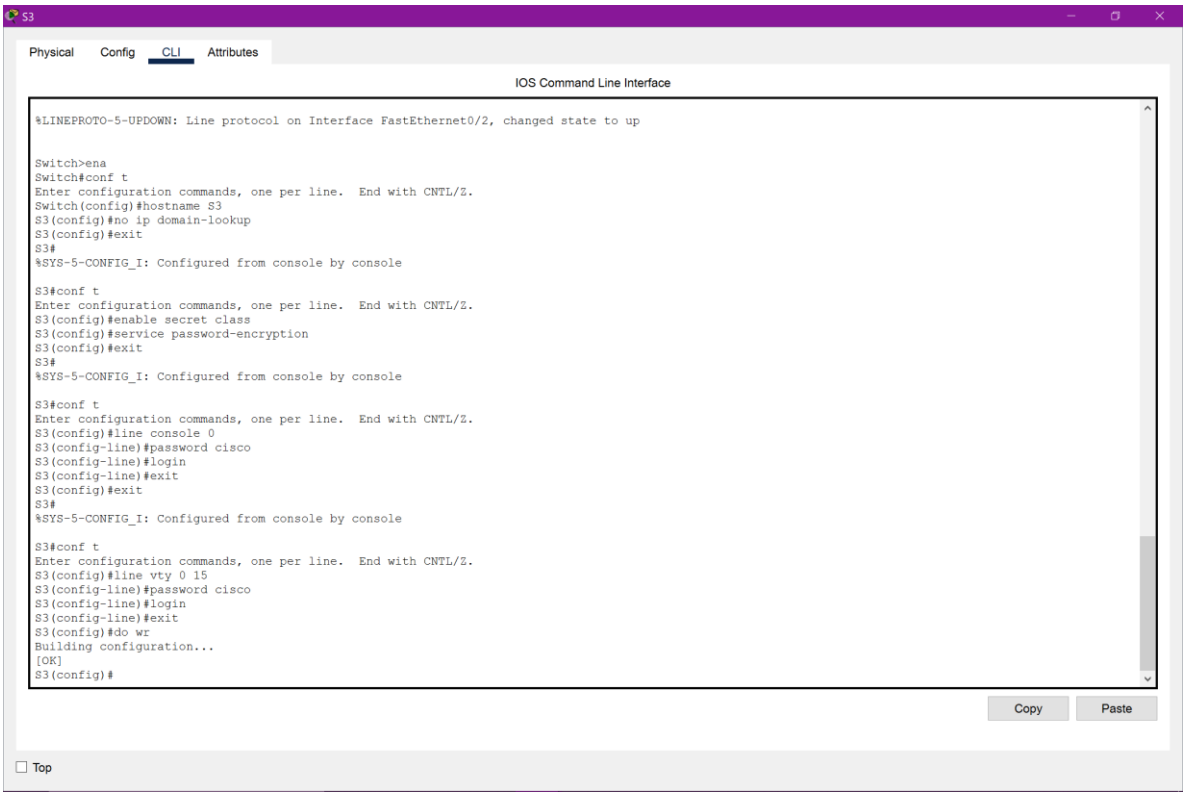

Cisco Packet Tracer
File Edit Options View Tools Extensions Window Help
Logical
Physical
x: 944, y: 215
Root
03:05:30
PC-PT PC0
Fa0
172.17.10.1
Fa0/11
Fa0/1
Fa0/18
Fa0/6
Fa0
PC-PT PC1
172.17.20.1
Fa0
PC-PT PC2
Fa0/1
Fa0/2
Fa0/2
Fa0/11
Fa0/18
Fa0/6
PC-PT C3
Fa0
172.17.10.2
Fa0
PC-PT PC4
172.17.20.2
Fa0
PC-PT PC5
Time: 00:55:55
Realtime
Simulation
Copper Straight-Through
New
Delete
Fire
Last St

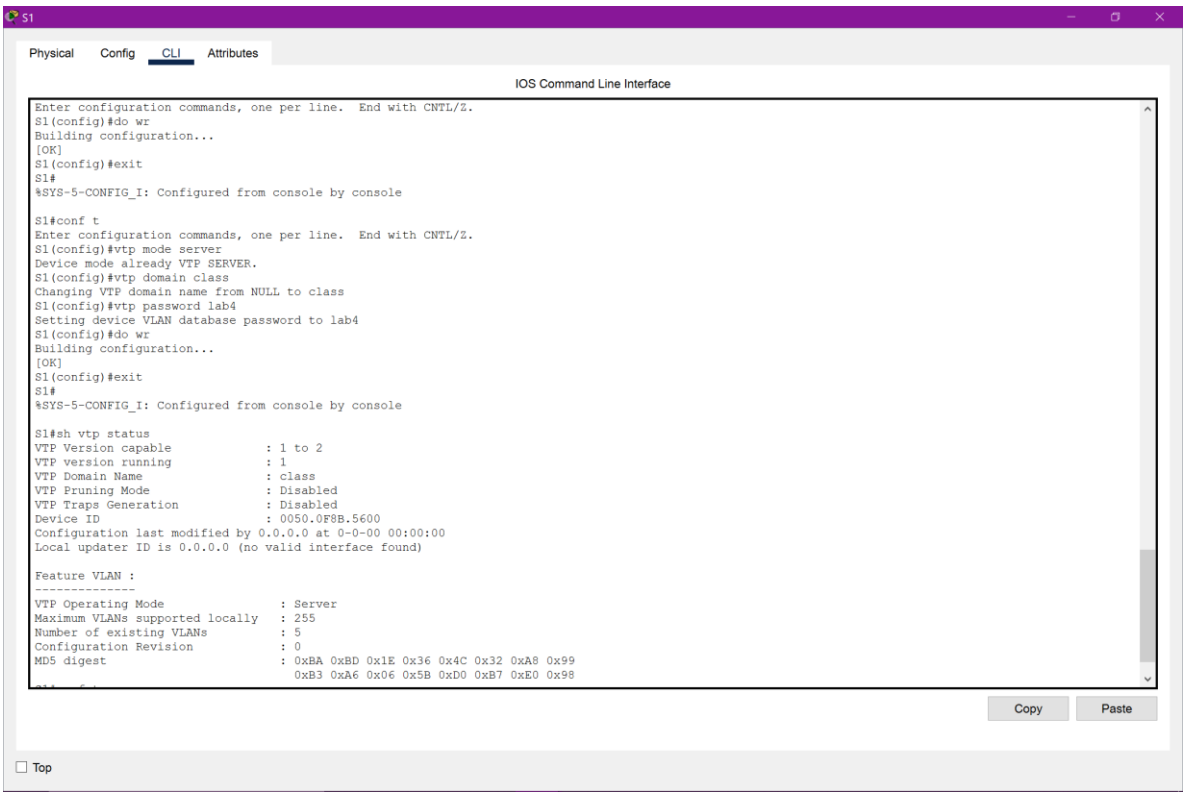

Cisco Packet Tracer
File Edit Options View Tools Extensions Window Help
PC0
Physical Config Desktop Programming Attributes
IP Configuration
Interface FastEthernet0
IP Configuration
DHCP
Static
IPv4 Address 172.17.10.1
Subnet Mask 255.255.0.0
Default Gateway 0.0.0.0
DNS Server 0.0.0.0
IPv6 Configuration
Automatic
Static
IPv6 Address
Link Local Address FE80::260:47FF:FE12:1900
Default Gateway
DNS Server
802.1X
Use 802.1X Security
Authentication MD5
Username
Password
PC3
Physical Config Desktop Programming Attributes
IP Configuration
Interface FastEthernet0
IP Configuration
DHCP
Static
IPv4 Address 172.17.10.2
Subnet Mask 255.255.0.0
Default Gateway 0.0.0.0
DNS Server 0.0.0.0
IPv6 Configuration
Automatic
Static
IPv6 Address
Link Local Address FE80::2D0:FFFF:FE6E:B591
Default Gateway
DNS Server
802.1X
Use 802.1X Security
Authentication MD5
Username
Password

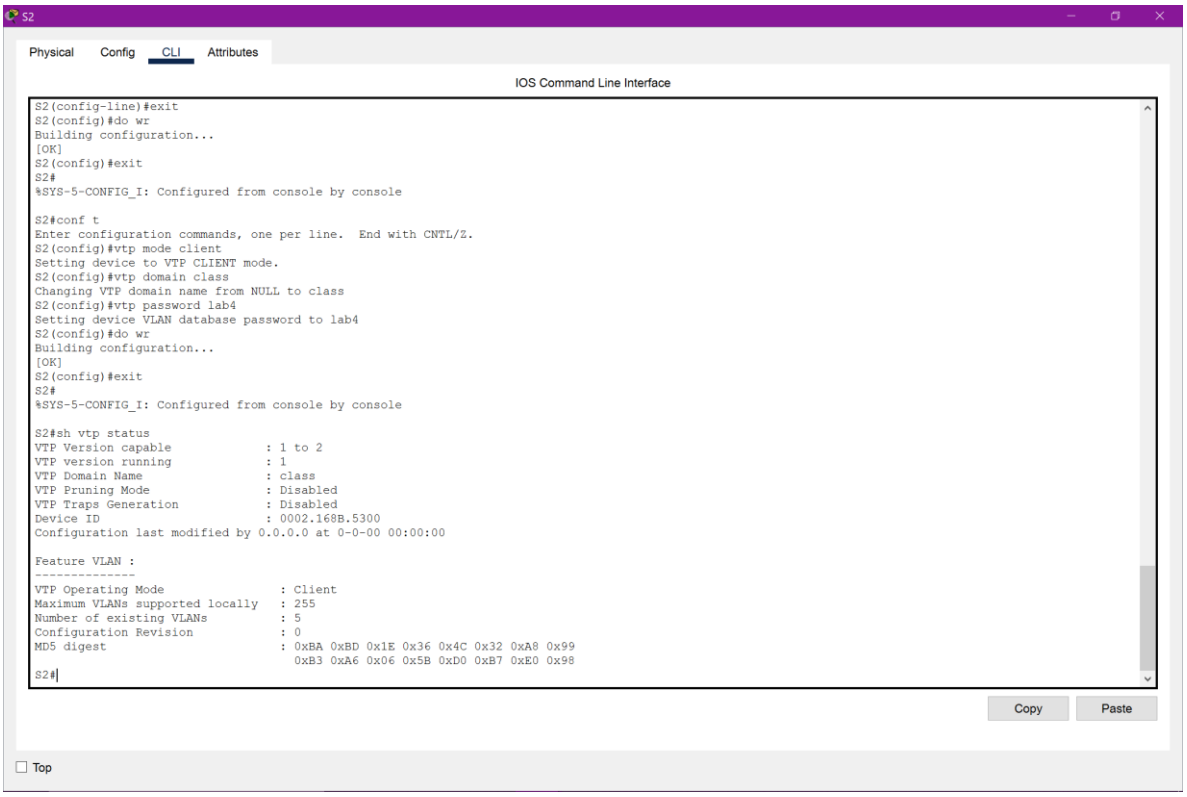

S1
Physical
Config
CLI
Attributes
IOS Command Line Interface
%SYS-5-CONFIG_I: Configured from console by console
S1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
S1(config)#enable secret class
S1(config)#service password-encryption
S1(config)#exit
S1#
%SYS-5-CONFIG_I: Configured from console by console
S1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
S1(config)#line console 0
S1(config-line)#password cisco
S1(config-line)#login
S1(config-line)#exit
S1(config)#exit
S1#
%SYS-5-CONFIG_I: Configured from console by console
S1#ena
S1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
S1(config)#line vty 0 15
S1(config-line)#password cisco
S1(config-line)#login
S1(config-line)#exit
S1(config)#exit
S1#
%SYS-5-CONFIG_I: Configured from console by console
S1#do wr
^
% Invalid input detected at '^' marker.
S1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
S1(config)#do wr
Building configuration...
[OK]
S1(config)#
Copy
Paste
Top

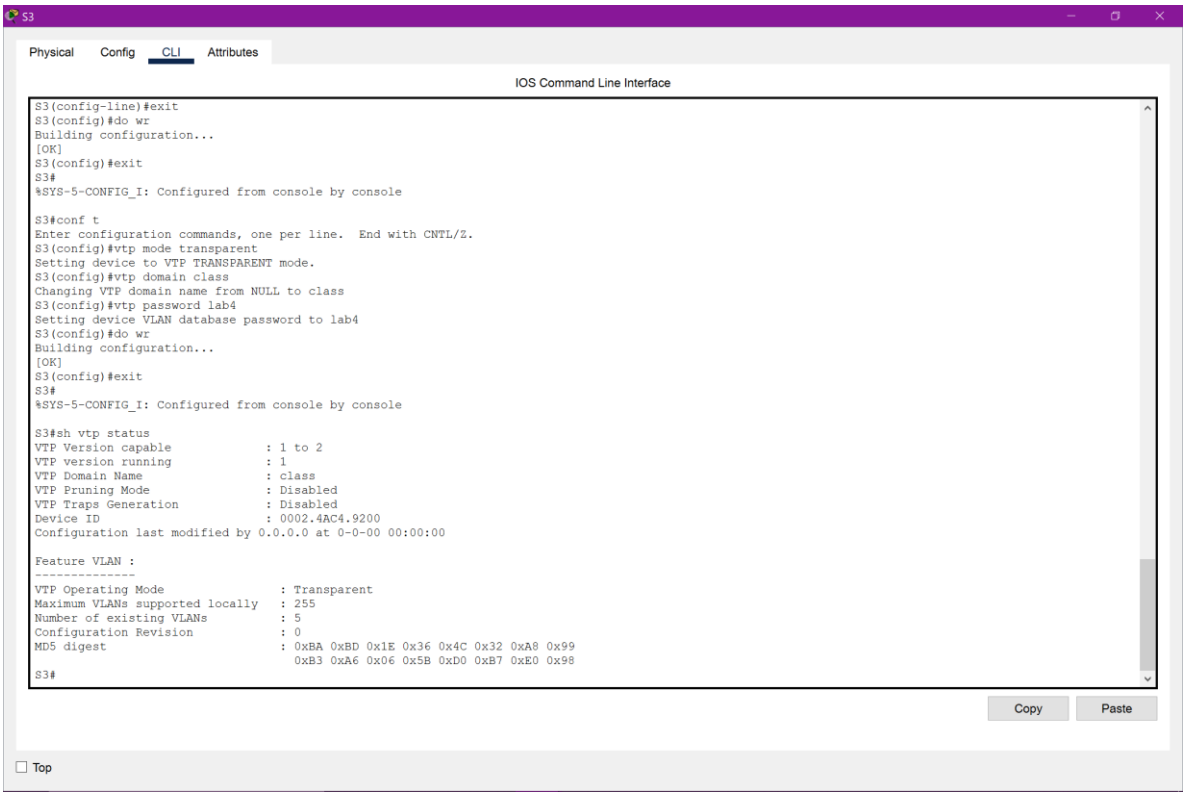

S2
Physical
Config
CLI
Attributes
IOS Command Line Interface
1002 fddi-default active
1003 token-ring-default active
1004 fddinet-default active
1005 trnet-default active
Switch>ena
Switch#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#hostname S2
S2(config)#no ip domain-lookup
S2(config)#exit
S2#
%SYS-5-CONFIG_I: Configured from console by console
S2#conf t
Enter configuration commands, one per line. End with CNTL/Z.
S2(config)#enable secret class
S2(config)#service password-encryption
S2(config)#exit
S2#
%SYS-5-CONFIG_I: Configured from console by console
S2#conf t
Enter configuration commands, one per line. End with CNTL/Z.
S2(config)#line console 0
S2(config-line)#password cisco
S2(config-line)#login
S2(config-line)#exit
S2(config)#exit
S2#
%SYS-5-CONFIG_I: Configured from console by console
S2#conf t
Enter configuration commands, one per line. End with CNTL/Z.
S2(config)#line vty 0 15
S2(config-line)#password cisco
S2(config-line)#login
S2(config-line)#exit
S2(config)#do wr
Building configuration...
[OK]
S2(config)#
Copy
Paste
Top


S3
Physical
Config
CLI
Attributes
IOS Command Line Interface
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to up
Switch>ena
Switch#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#hostname S3
S3(config)#no ip domain-lookup
S3(config)#exit
S3#
%SYS-5-CONFIG_I: Configured from console by console
S3#conf t
Enter configuration commands, one per line. End with CNTL/Z.
S3(config)#enable secret class
S3(config)#service password-encryption
S3(config)#exit
S3#
%SYS-5-CONFIG_I: Configured from console by console
S3#conf t
Enter configuration commands, one per line. End with CNTL/Z.
S3(config)#line console 0
S3(config-line)#password cisco
S3(config-line)#login
S3(config-line)#exit
S3(config)#exit
S3#
%SYS-5-CONFIG_I: Configured from console by console
S3#conf t
Enter configuration commands, one per line. End with CNTL/Z.
S3(config)#line vty 0 15
S3(config-line)#password cisco
S3(config-line)#login
S3(config-line)#exit
S3(config)#do wr
Building configuration...
[OK]
S3(config)#
Copy
Paste
Top

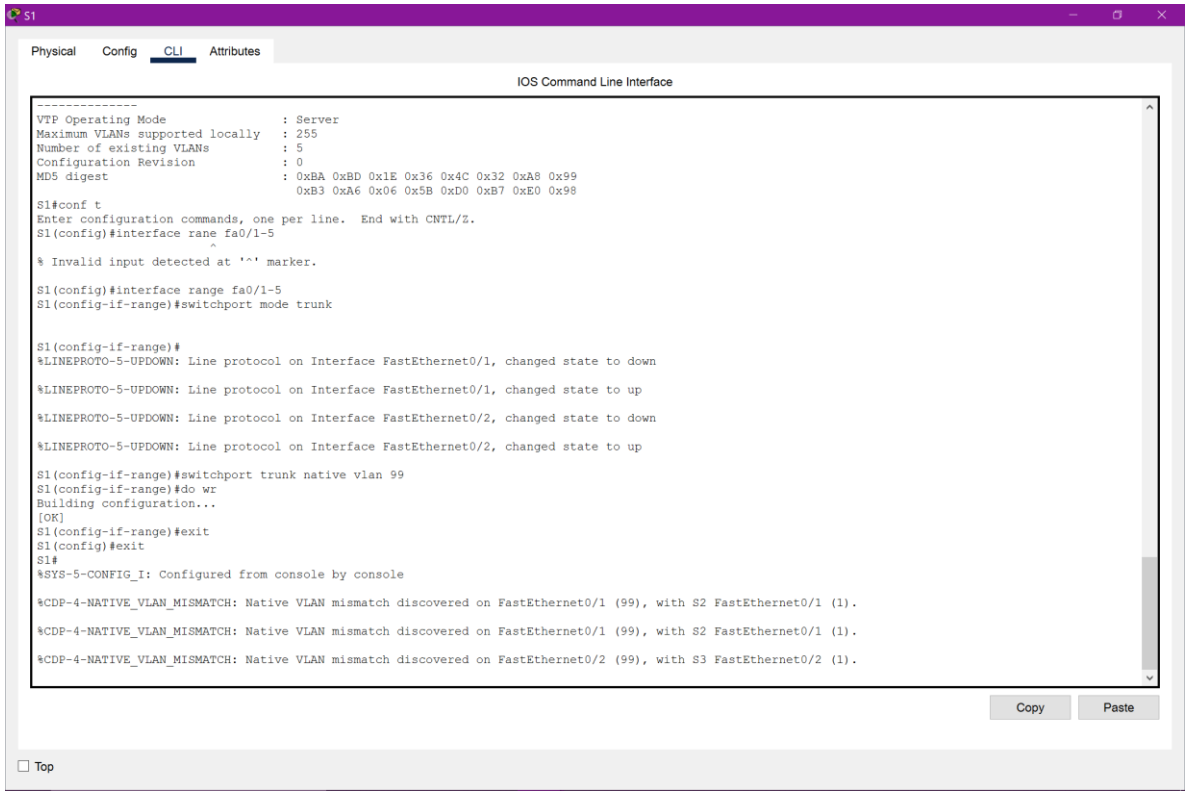
VTP:

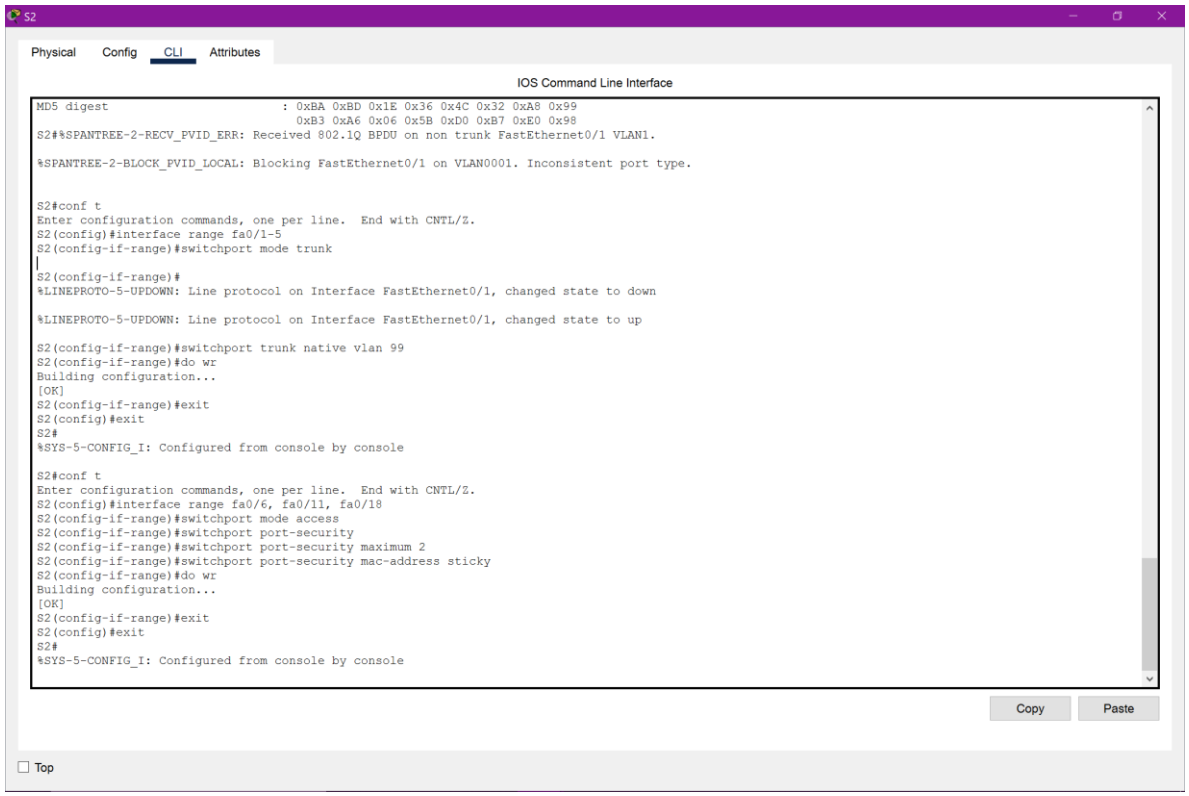

S1
Physical
Config
CLI
Attributes
IOS Command Line Interface
Enter configuration commands, one per line. End with CNTL/Z.
S1(config)#do wr
Building configuration...
[OK]
S1(config)#exit
S1#
%SYS-5-CONFIG_I: Configured from console by console
S1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
S1(config)#vtp mode server
Device mode already VTP SERVER.
S1(config)#vtp domain class
Changing VTP domain name from NULL to class
S1(config)#vtp password lab4
Setting device VLAN database password to lab4
S1(config)#do wr
Building configuration...
[OK]
S1(config)#exit
S1#
%SYS-5-CONFIG_I: Configured from console by console
S1#sh vtp status
VTP Version capable : 1 to 2
VTP version running : 1
VTP Domain Name : class
VTP Pruning Mode : Disabled
VTP Traps Generation : Disabled
Device ID : 0050.0F8B.5600
Configuration last modified by 0.0.0.0 at 0-0-00 00:00:00
Local updater ID is 0.0.0.0 (no valid interface found)
Feature VLAN :
VTP Operating Mode : Server
Maximum VLANs supported locally : 255
Number of existing VLANs : 5
Configuration Revision : 0
MD5 digest : 0xBA 0xBD 0x1E 0x36 0x4C 0x32 0xA8 0x99
0xB3 0xA6 0x06 0x5B 0xD0 0xB7 0xE0 0x98
Copy
Paste
Top

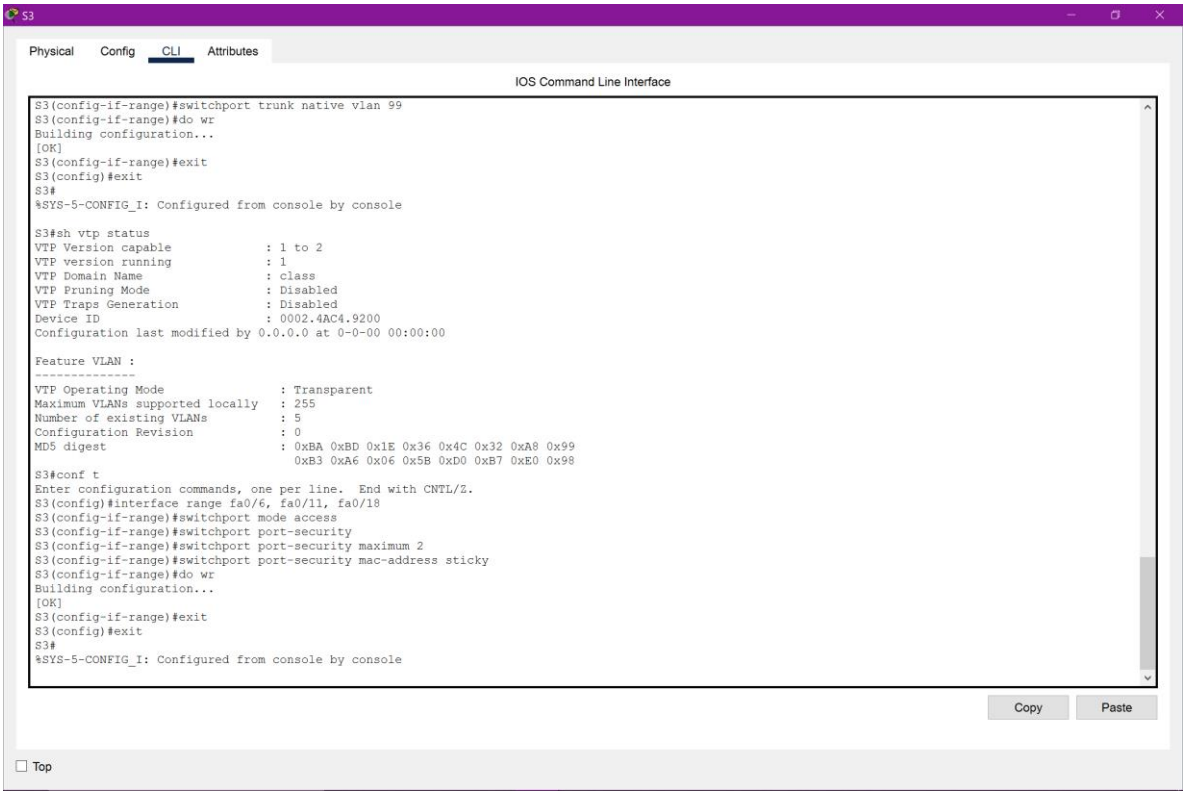

S2
Physical
Config
CLI
Attributes
IOS Command Line Interface
S2(config-line)#exit
S2(config)#do wr
Building configuration...
[OK]
S2(config)#exit
S2#
%SYS-5-CONFIG_I: Configured from console by console
S2#conf t
Enter configuration commands, one per line. End with CNTL/Z.
S2(config)#vtp mode client
Setting device to VTP CLIENT mode.
S2(config)#vtp domain class
Changing VTP domain name from NULL to class
S2(config)#vtp password lab4
Setting device VLAN database password to lab4
S2(config)#do wr
Building configuration...
[OK]
S2(config)#exit
S2#
%SYS-5-CONFIG_I: Configured from console by console
S2#sh vtp status
VTP Version capable : 1 to 2
VTP version running : 1
VTP Domain Name : class
VTP Pruning Mode : Disabled
VTP Traps Generation : Disabled
Device ID : 0002.168B.5300
Configuration last modified by 0.0.0.0 at 0-0-00 00:00:00
Feature VLAN :
VTP Operating Mode : Client
Maximum VLANs supported locally : 255
Number of existing VLANs : 5
Configuration Revision : 0
MD5 digest : 0xBA 0xBD 0x1E 0x36 0x4C 0x32 0xA8 0x99
0xB3 0xA6 0x06 0x5B 0xD0 0xB7 0xE0 0x98
S2#
Copy
Paste
Top


S3
Physical
Config
CLI
Attributes
IOS Command Line Interface
S3(config-line)#exit
S3(config)#do wr
Building configuration...
[OK]
S3(config)#exit
S3#
%SYS-5-CONFIG_I: Configured from console by console
S3#conf t
Enter configuration commands, one per line. End with CNTL/Z.
S3(config)#vtp mode transparent
Setting device to VTP TRANSPARENT mode.
S3(config)#vtp domain class
Changing VTP domain name from NULL to class
S3(config)#vtp password lab4
Setting device VLAN database password to lab4
S3(config)#do wr
Building configuration...
[OK]
S3(config)#exit
S3#
%SYS-5-CONFIG_I: Configured from console by console
S3#sh vtp status
VTP Version capable : 1 to 2
VTP version running : 1
VTP Domain Name : class
VTP Pruning Mode : Disabled
VTP Traps Generation : Disabled
Device ID : 0002.4AC4.9200
Configuration last modified by 0.0.0.0 at 0-0-00 00:00:00
Feature VLAN :
VTP Operating Mode : Transparent
Maximum VLANs supported locally : 255
Number of existing VLANs : 5
Configuration Revision : 0
MD5 digest : 0xBA 0xBD 0x1E 0x36 0x4C 0x32 0xA8 0x99
0xB3 0xA6 0x06 0x5B 0xD0 0xB7 0xE0 0x98
S3#
Copy
Paste
Top

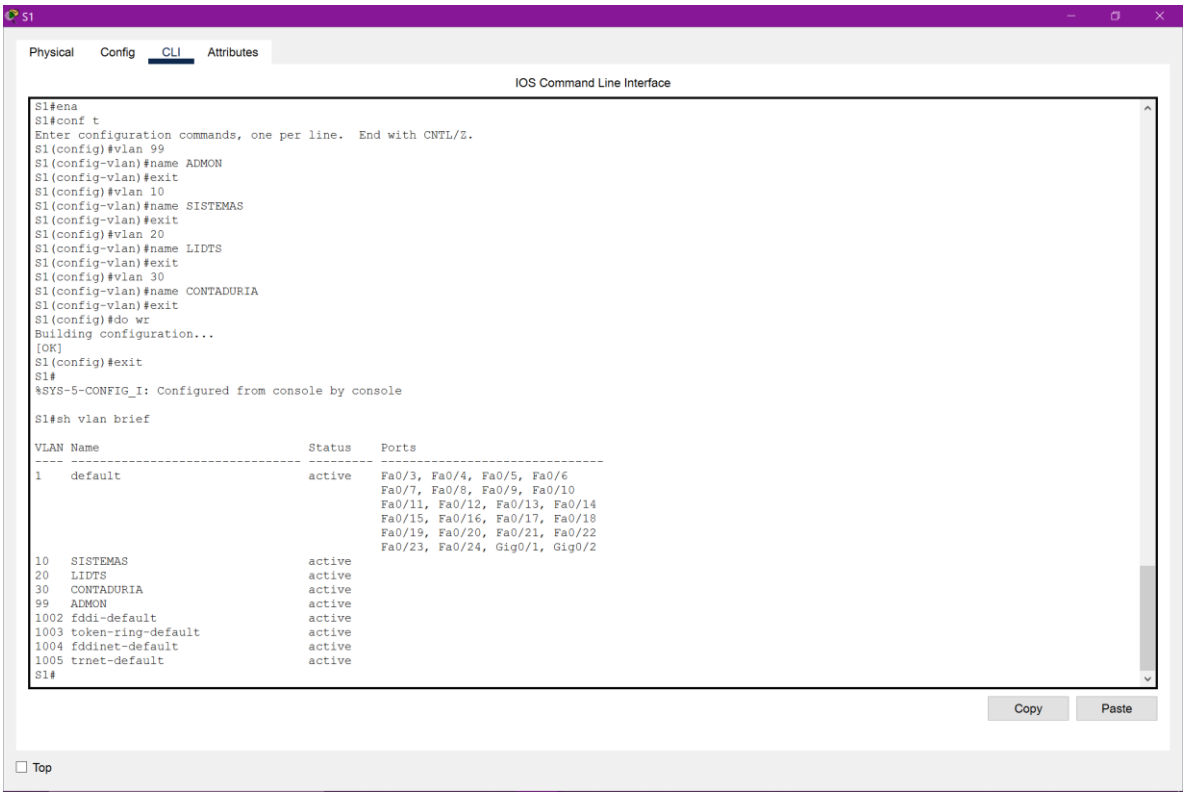
VLAN 99 NATIVA & Seguridad del puerto limitada (Sw2 y Sw3):



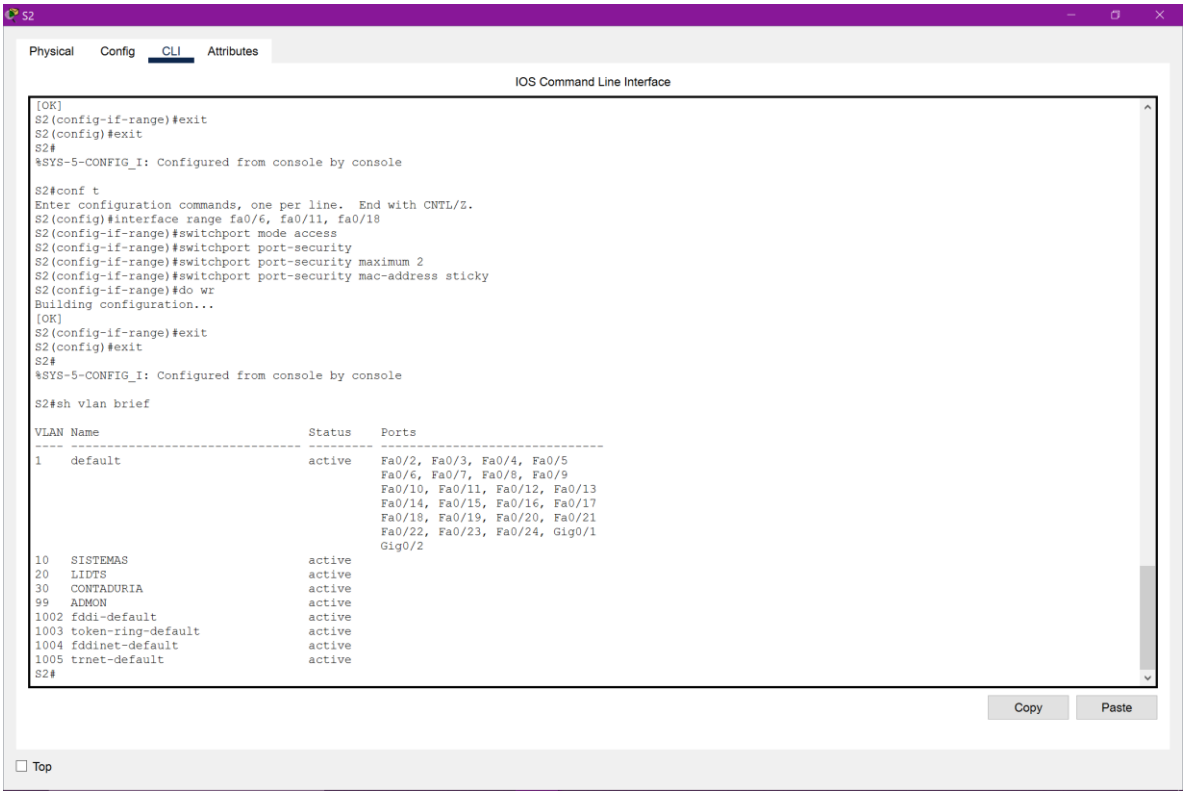


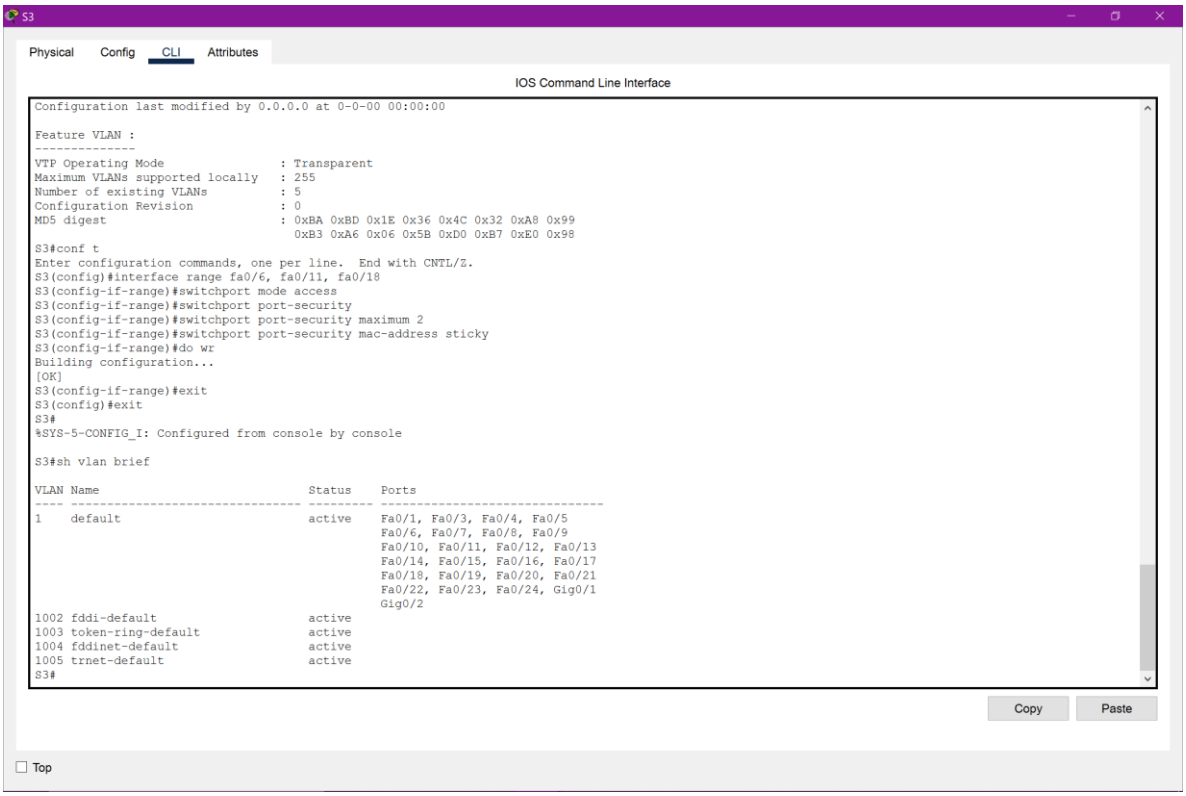


Configuración VLANS (VTP SERVIDOR SW1):

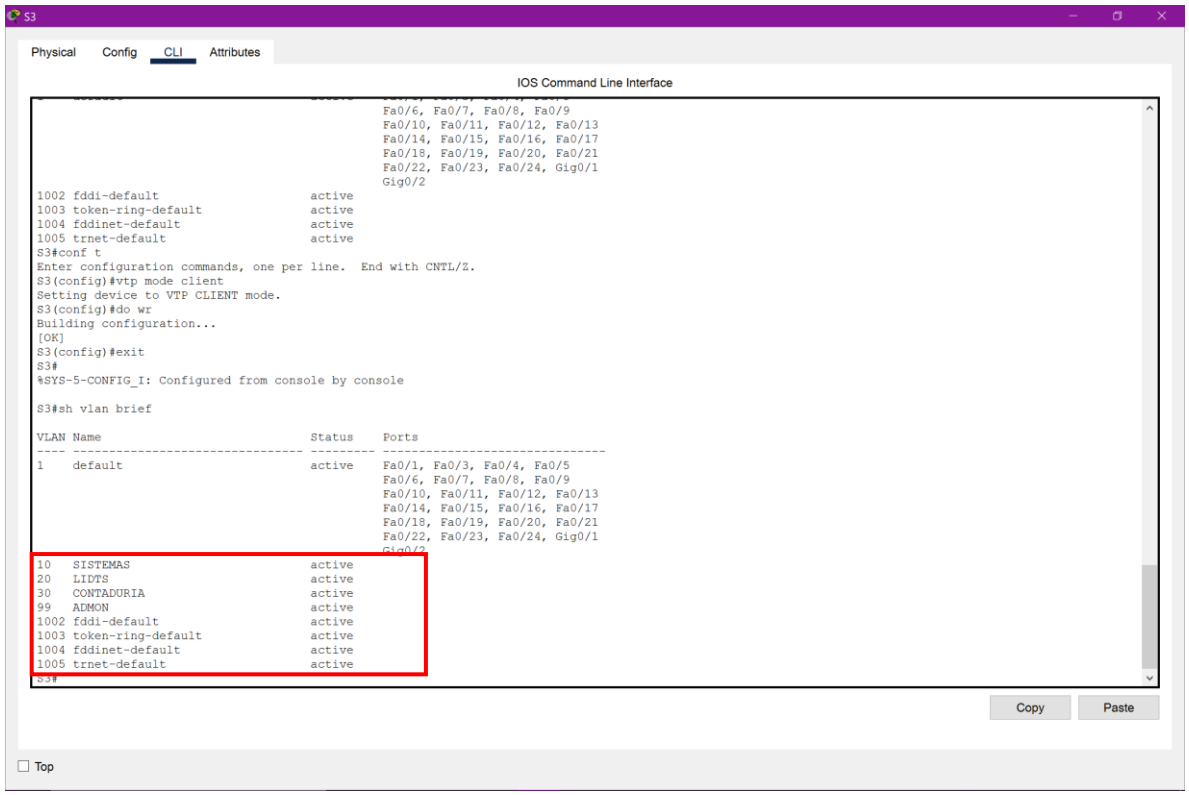


Propagación SW2 (SW3 no *modo transparente*).

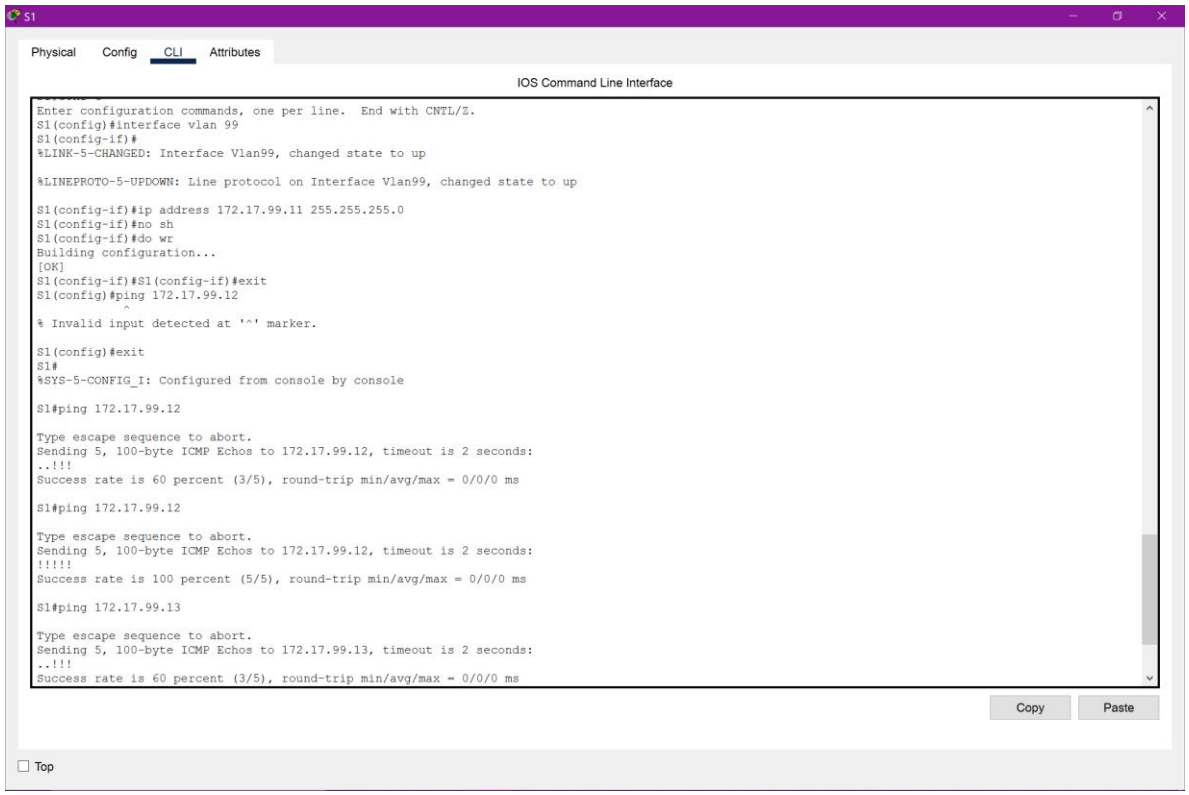


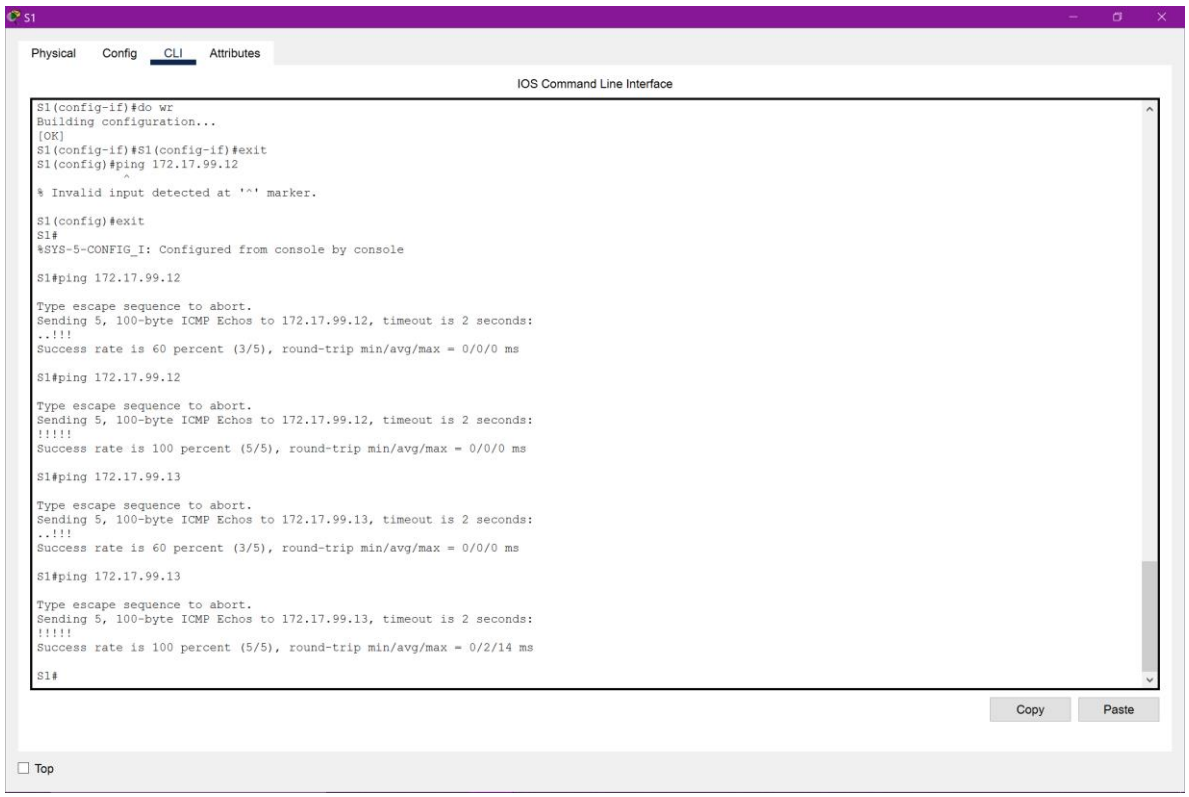


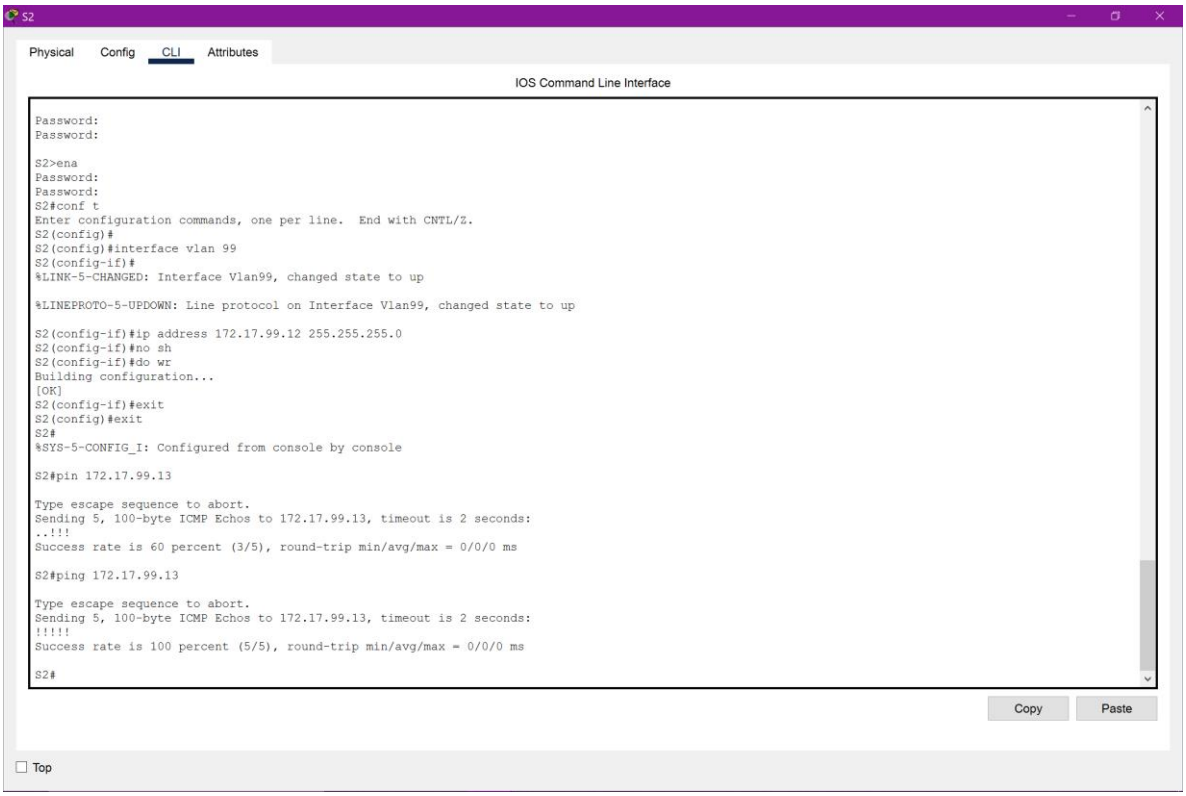
Cambio de SW3 a modo cliente:



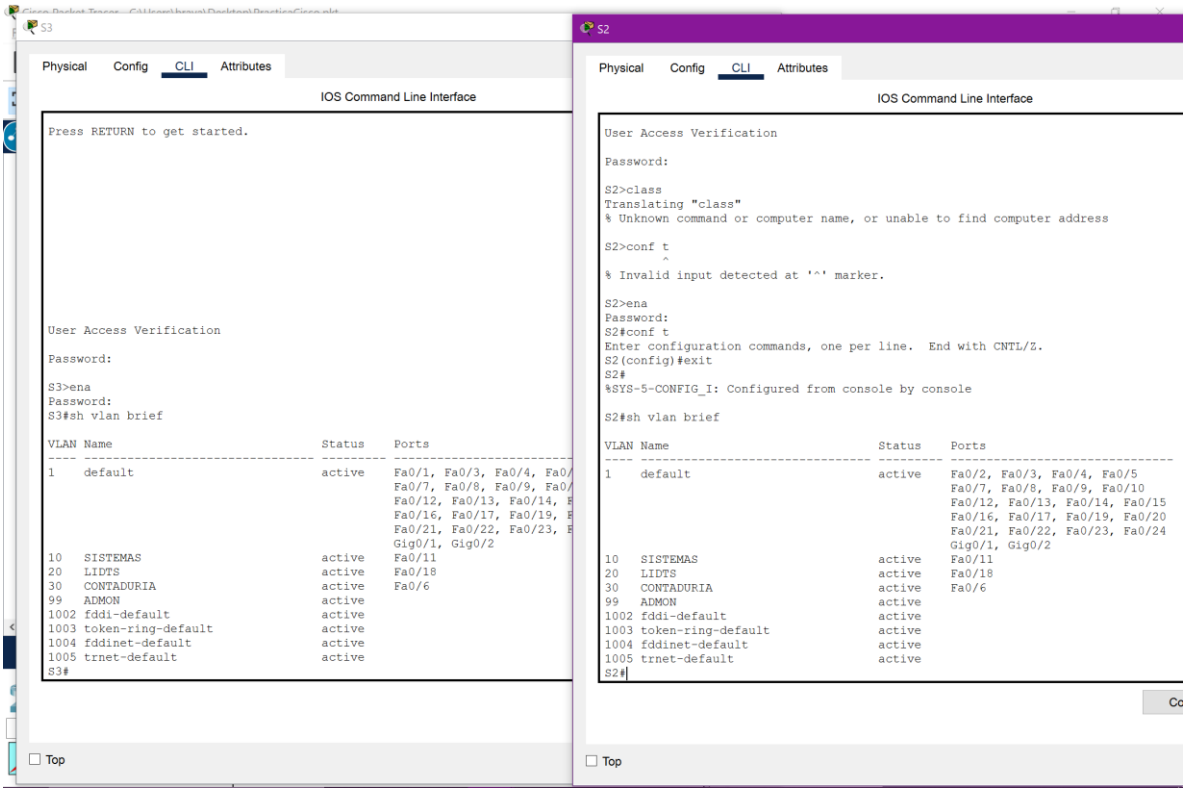
PING entre SWITCHES:

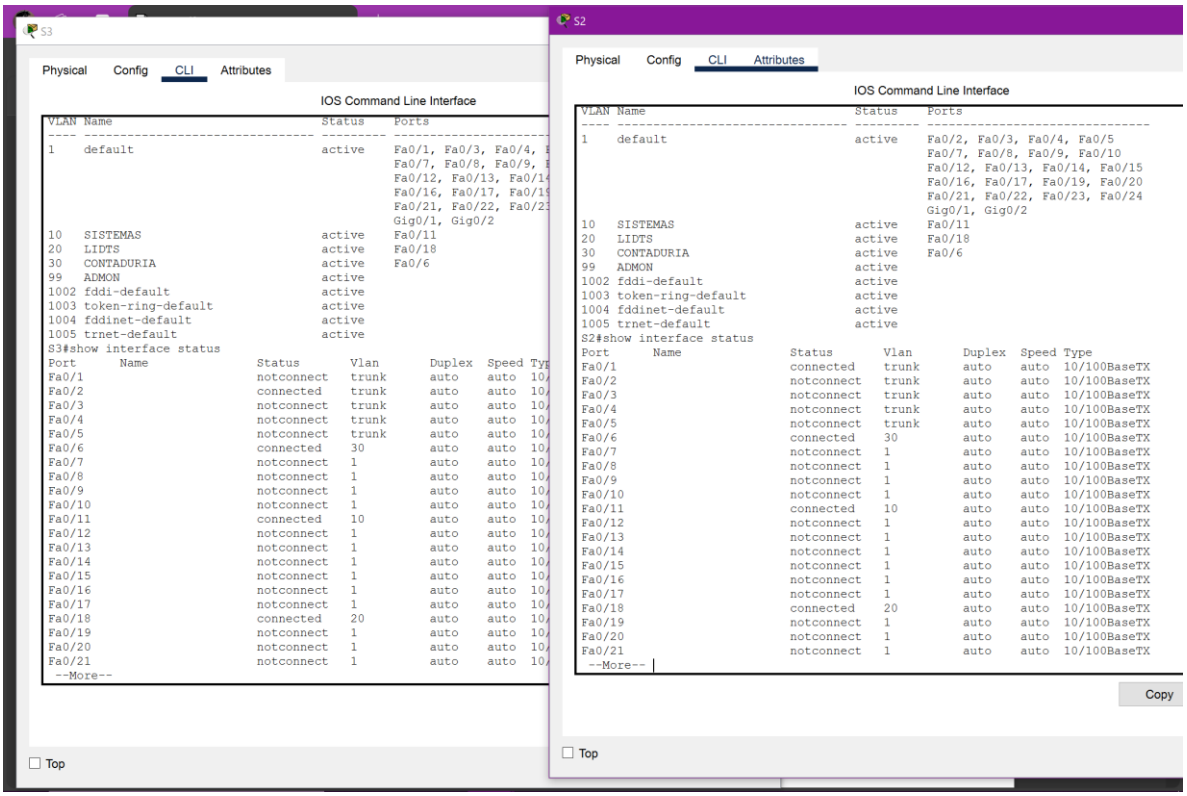




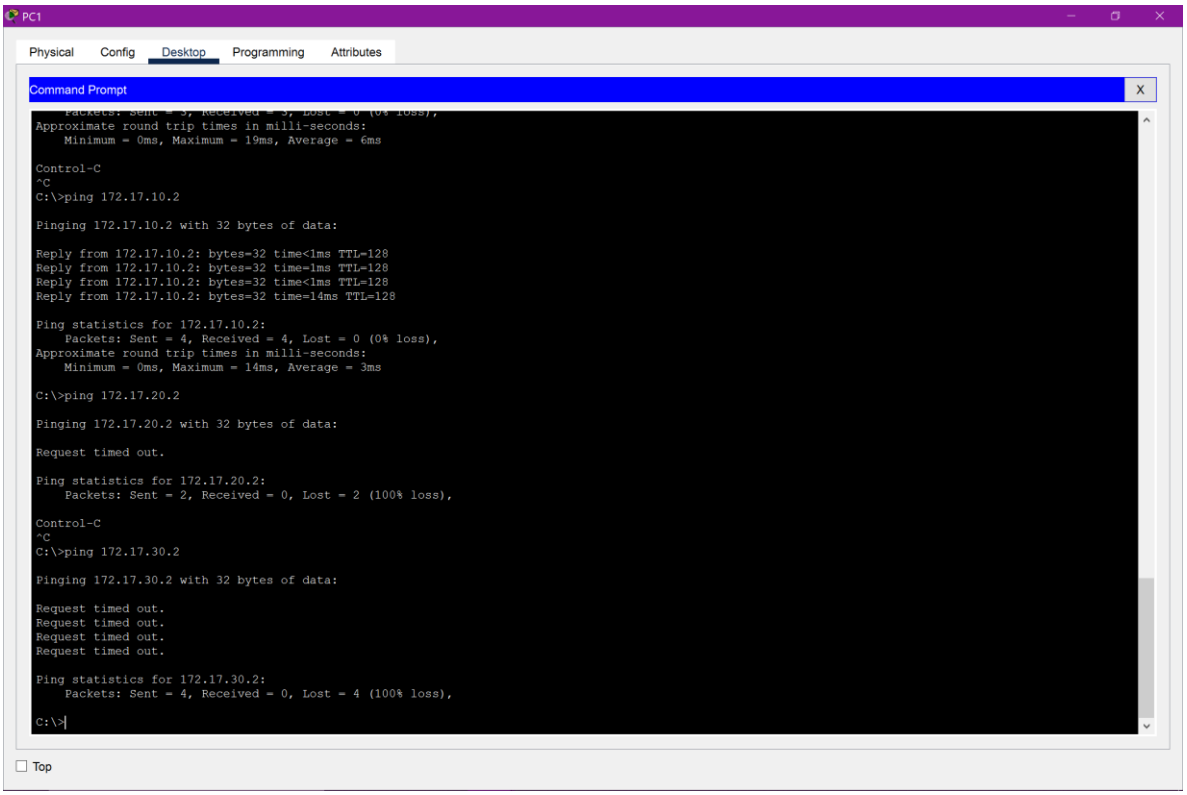


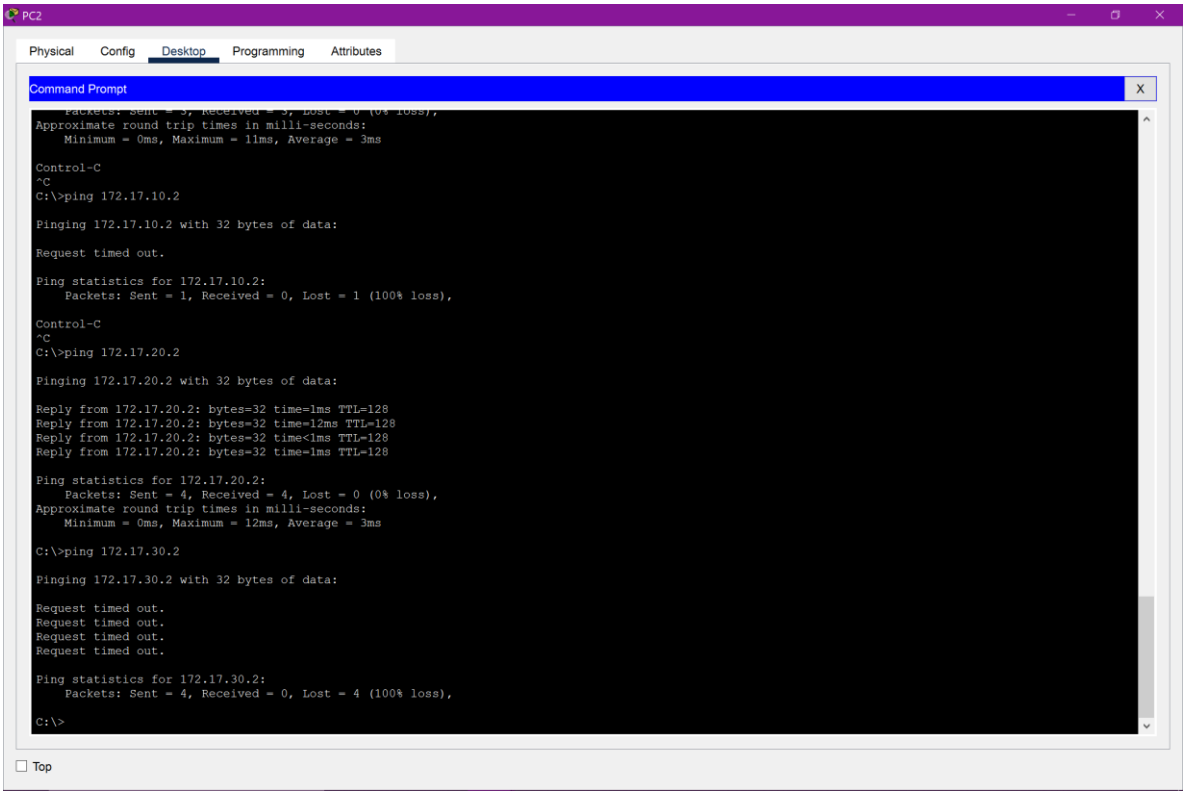
Ningún PING fallido.

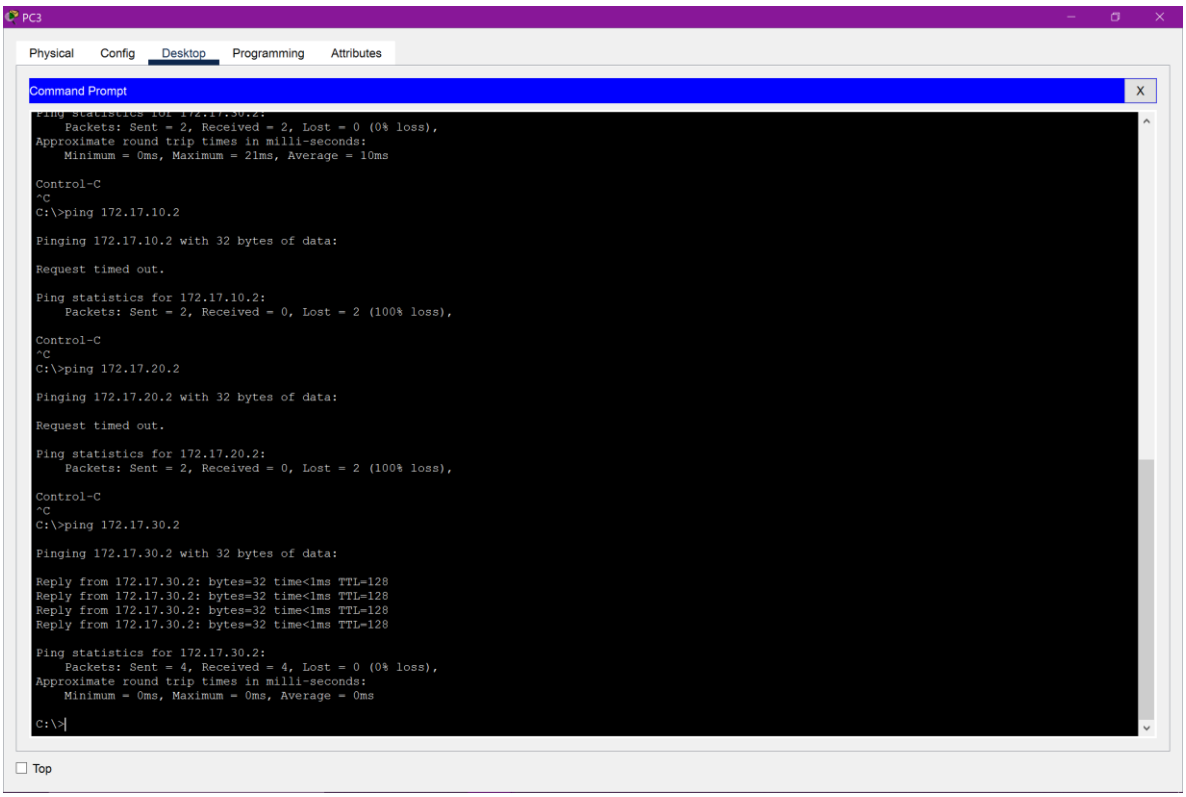

S3
Physical Config CLI Attributes
IOS Command Line Interface
Press RETURN to get started.
User Access Verification
Password:
S3>ena
Password:
S3#sh vlan brief
VLAN Name Status Ports
1 default active Fa0/1, Fa0/3, Fa0/4, Fa0/
Fa0/7, Fa0/8, Fa0/9, Fa0/
Fa0/12, Fa0/13, Fa0/14, F
Fa0/16, Fa0/17, Fa0/19, F
Fa0/21, Fa0/22, Fa0/23, F
Gig0/1, Gig0/2
10 SISTEMAS active Fa0/11
20 LIDTS active Fa0/18
30 CONTADURIA active Fa0/6
99 ADMON active
1002 fddi-default active
1003 token-ring-default active
1004 fddinet-default active
1005 trnet-default active
S3#
Top
S2
Physical Config CLI Attributes
IOS Command Line Interface
User Access Verification
Password:
S2>class
Translating "class"
% Unknown command or computer name, or unable to find computer address
S2>conf t
^
% Invalid input detected at '^' marker.
S2>ena
Password:
S2#conf t
Enter configuration commands, one per line. End with CNTL/Z.
S2(config)#exit
S2#
%SYS-5-CONFIG_I: Configured from console by console
S2#sh vlan brief
VLAN Name Status Ports
1 default active Fa0/2, Fa0/3, Fa0/4, Fa0/5
Fa0/7, Fa0/8, Fa0/9, Fa0/10
Fa0/12, Fa0/13, Fa0/14, Fa0/15
Fa0/16, Fa0/17, Fa0/19, Fa0/20
Fa0/21, Fa0/22, Fa0/23, Fa0/24
Gig0/1, Gig0/2
10 SISTEMAS active Fa0/11
20 LIDTS active Fa0/18
30 CONTADURIA active Fa0/6
99 ADMON active
1002 fddi-default active
1003 token-ring-default active
1004 fddinet-default active
1005 trnet-default active
S2#
Top


S3
Physical Config CLI Attributes
IOS Command Line Interface
VLAN Name Status Ports
1 default active Fa0/1, Fa0/3, Fa0/4,
Fa0/7, Fa0/8, Fa0/9,
Fa0/12, Fa0/13, Fa0/14
Fa0/16, Fa0/17, Fa0/19
Fa0/21, Fa0/22, Fa0/23
Gig0/1, Gig0/2
10 SISTEMAS active Fa0/11
20 LIDTS active Fa0/18
30 CONTADURIA active Fa0/6
99 ADMON active
1002 fddi-default active
1003 token-ring-default active
1004 fddinet-default active
1005 trnet-default active
S3#show interface status
Port Name Status Vlan Duplex Speed Type
Fa0/1 notconnect trunk auto auto 10/
Fa0/2 connected trunk auto auto 10/
Fa0/3 notconnect trunk auto auto 10/
Fa0/4 notconnect trunk auto auto 10/
Fa0/5 notconnect trunk auto auto 10/
Fa0/6 connected 30 auto auto 10/
Fa0/7 notconnect 1 auto auto 10/
Fa0/8 notconnect 1 auto auto 10/
Fa0/9 notconnect 1 auto auto 10/
Fa0/10 notconnect 1 auto auto 10/
Fa0/11 connected 10 auto auto 10/
Fa0/12 notconnect 1 auto auto 10/
Fa0/13 notconnect 1 auto auto 10/
Fa0/14 notconnect 1 auto auto 10/
Fa0/15 notconnect 1 auto auto 10/
Fa0/16 notconnect 1 auto auto 10/
Fa0/17 notconnect 1 auto auto 10/
Fa0/18 connected 20 auto auto 10/
Fa0/19 notconnect 1 auto auto 10/
Fa0/20 notconnect 1 auto auto 10/
Fa0/21 notconnect 1 auto auto 10/
--More--
Top
S2
Physical Config CLI Attributes
IOS Command Line Interface
VLAN Name Status Ports
1 default active Fa0/2, Fa0/3, Fa0/4, Fa0/5
Fa0/7, Fa0/8, Fa0/9, Fa0/10
Fa0/12, Fa0/13, Fa0/14, Fa0/15
Fa0/16, Fa0/17, Fa0/19, Fa0/20
Fa0/21, Fa0/22, Fa0/23, Fa0/24
Gig0/1, Gig0/2
10 SISTEMAS active Fa0/11
20 LIDTS active Fa0/18
30 CONTADURIA active Fa0/6
99 ADMON active
1002 fddi-default active
1003 token-ring-default active
1004 fddinet-default active
1005 trnet-default active
S2#show interface status
Port Name Status Vlan Duplex Speed Type
Fa0/1 connected trunk auto auto 10/100BaseTX
Fa0/2 notconnect trunk auto auto 10/100BaseTX
Fa0/3 notconnect trunk auto auto 10/100BaseTX
Fa0/4 notconnect trunk auto auto 10/100BaseTX
Fa0/5 notconnect trunk auto auto 10/100BaseTX
Fa0/6 connected 30 auto auto 10/100BaseTX
Fa0/7 notconnect 1 auto auto 10/100BaseTX
Fa0/8 notconnect 1 auto auto 10/100BaseTX
Fa0/9 notconnect 1 auto auto 10/100BaseTX
Fa0/10 notconnect 1 auto auto 10/100BaseTX
Fa0/11 connected 10 auto auto 10/100BaseTX
Fa0/12 notconnect 1 auto auto 10/100BaseTX
Fa0/13 notconnect 1 auto auto 10/100BaseTX
Fa0/14 notconnect 1 auto auto 10/100BaseTX
Fa0/15 notconnect 1 auto auto 10/100BaseTX
Fa0/16 notconnect 1 auto auto 10/100BaseTX
Fa0/17 notconnect 1 auto auto 10/100BaseTX
Fa0/18 connected 20 auto auto 10/100BaseTX
Fa0/19 notconnect 1 auto auto 10/100BaseTX
Fa0/20 notconnect 1 auto auto 10/100BaseTX
Fa0/21 notconnect 1 auto auto 10/100BaseTX
--More--
Copy
Top

PING PC’s:


PC1
Physical
Config
Desktop
Programming
Attributes
Command Prompt
X
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 19ms, Average = 6ms
Control-C
^C
C:\>ping 172.17.10.2
Pinging 172.17.10.2 with 32 bytes of data:
Reply from 172.17.10.2: bytes=32 time<1ms TTL=128
Reply from 172.17.10.2: bytes=32 time=1ms TTL=128
Reply from 172.17.10.2: bytes=32 time<1ms TTL=128
Reply from 172.17.10.2: bytes=32 time=14ms TTL=128
Ping statistics for 172.17.10.2:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 14ms, Average = 3ms
C:\>ping 172.17.20.2
Pinging 172.17.20.2 with 32 bytes of data:
Request timed out.
Ping statistics for 172.17.20.2:
Packets: Sent = 2, Received = 0, Lost = 2 (100% loss),
Control-C
^C
C:\>ping 172.17.30.2
Pinging 172.17.30.2 with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.
Ping statistics for 172.17.30.2:
Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
C:\>
Top


PC2
Physical
Config
Desktop
Programming
Attributes
Command Prompt
X
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 11ms, Average = 3ms
Control-C
^C
C:\>ping 172.17.10.2
Pinging 172.17.10.2 with 32 bytes of data:
Request timed out.
Ping statistics for 172.17.10.2:
Packets: Sent = 1, Received = 0, Lost = 1 (100% loss),
Control-C
^C
C:\>ping 172.17.20.2
Pinging 172.17.20.2 with 32 bytes of data:
Reply from 172.17.20.2: bytes=32 time=1ms TTL=128
Reply from 172.17.20.2: bytes=32 time=12ms TTL=128
Reply from 172.17.20.2: bytes=32 time<1ms TTL=128
Reply from 172.17.20.2: bytes=32 time=1ms TTL=128
Ping statistics for 172.17.20.2:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 12ms, Average = 3ms
C:\>ping 172.17.30.2
Pinging 172.17.30.2 with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.
Ping statistics for 172.17.30.2:
Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
C:\>
Top



1. ***¿Están las mismas VLAN configuradas en todos los switches?***

No.

2. ***¿Por qué S2 y S3 tienen diferentes configuraciones de VLAN en este punto?***

Esto, dado el estado asignado que tienen. Mientras SW2 está en modo cliente, recibe y acepta las configuraciones propagadas por SW1 en modo servidor.

Por otro lado, SW3 al estar en modo transparente, este, no recibe ni acepta ninguna configuración propagada por el SW1 en modo servidor; es decir, está desactivada su escucha activa.

3. ***Desde PC1, intente hacer ping en PC4, PC5 y PC6. ¿Tuvo éxito alguno de los pings?***

Sí, tuvo éxito únicamente hacia PC4.

4. ***¿Por qué falló algún ping?***

Esto, porque únicamente acatan respuesta a los hosts que pertenecen a la misma vlan. Es decir: PC1-PC4, PC2-PC5 y PC3-PC6.

5. ***¿Qué hosts se alcanzaron desde PC3?***

PC6.