

Lab 6.3.3.7 - Configurando 802.1Q Trunk-Based Vlan

Preguntas

Parte 2, paso 1, a:

On S1, configure the VLAN and names listed in the Switch Port Assignment Specifications table. Write the commands you used in the space provided.

```
vlan 10  
name Students  
vlan 20  
name Faculty
```

Parte 2, paso 1, b:

On S1, configure the interface connected to R1 as a trunk. Also configure the interface connected to S2 as a trunk. Write the commands you used in the space provided.

```
int f0/1  
switchport mode trunk  
int f0/5  
switchport mode trunk
```

Parte 2, paso 1, c:

On S1, assign the access port for PC-A to VLAN 10. Write the commands you used in the space provided.

```
int f0/6  
switchport mode access  
switchport access vlan 10
```

Parte 2, paso 2, a:

On S2, configure the VLANs and names listed in the Switch Port Assignment Specifications table.

```
vlan 10  
name Students  
vlan 20  
name Faculty
```

Parte 2, paso 2, c:

On S2, assign the access port for PC-B to VLAN 20.

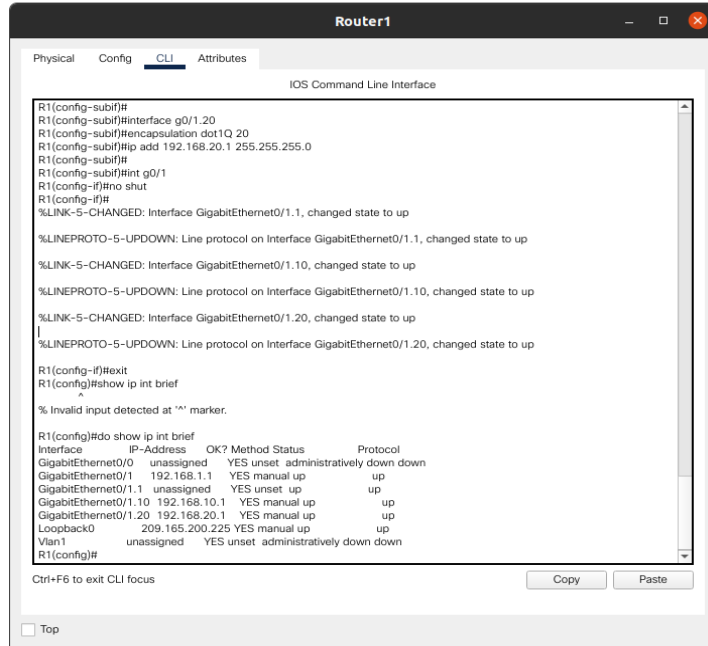
```
int f0/18  
switchport mode access  
switchport access vlan 20
```

Parte 2, paso2, d:**On S2, configure the interface connected to S1 as a trunk.**

int f0/1

switchport mode trunk

Screenshot



Router1

Physical Config CLI Attributes

IOS Command Line Interface

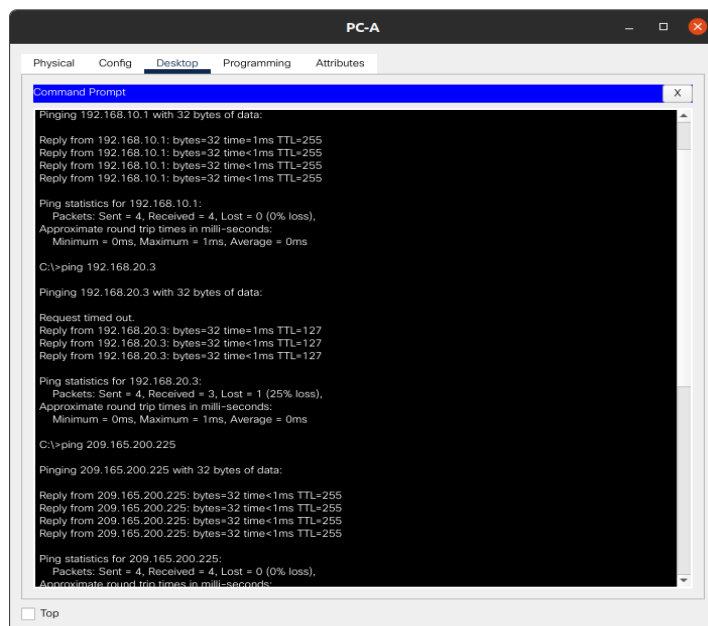
```
R1(config-subif)#
R1(config-subif)#interface g0/1.20
R1(config-subif)#encapsulation dot1Q 20
R1(config-subif)#ip add 192.168.20.1 255.255.255.0
R1(config-subif)#
R1(config-subif)#int g0/1
R1(config-if)#no shut
R1(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/1.1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1.1, changed state to up
%LINK-5-CHANGED: Interface GigabitEthernet0/1.10, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1.10, changed state to up
%LINK-5-CHANGED: Interface GigabitEthernet0/1.20, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1.20, changed state to up
R1(config-if)#exit
R1(config)#show ip int brief
% Invalid input detected at '^' marker.

R1(config)#do show ip int brief
Interface      IP-Address      OK? Method Status      Protocol
GigabitEthernet0/0  unassigned      YES unset  administratively down down
GigabitEthernet0/1  192.168.1.1     YES manual  up          up
GigabitEthernet0/1.1  unassigned      YES unset  up          up
GigabitEthernet0/1.10 192.168.10.1   YES manual  up          up
GigabitEthernet0/1.20 192.168.20.1   YES manual  up          up
Loopback0        209.165.200.225 YES manual  up          up
Vlan1            unassigned      YES unset  administratively down down
R1(config)#
```

Ctrl+F6 to exit CLI focus

Copy Paste

Top



PC-A

Physical Config Desktop Programming Attributes

Command Prompt

```
Pinging 192.168.10.1 with 32 bytes of data:
Reply from 192.168.10.1: bytes=32 time=1ms TTL=255
Reply from 192.168.10.1: bytes=32 time=1ms TTL=255
Reply from 192.168.10.1: bytes=32 time=1ms TTL=255
Reply from 192.168.10.1: bytes=32 time=1ms TTL=255

Ping statistics for 192.168.10.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\>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=1ms TTL=127
Reply from 192.168.20.3: bytes=32 time=1ms TTL=127
Reply from 192.168.20.3: bytes=32 time=1ms TTL=127

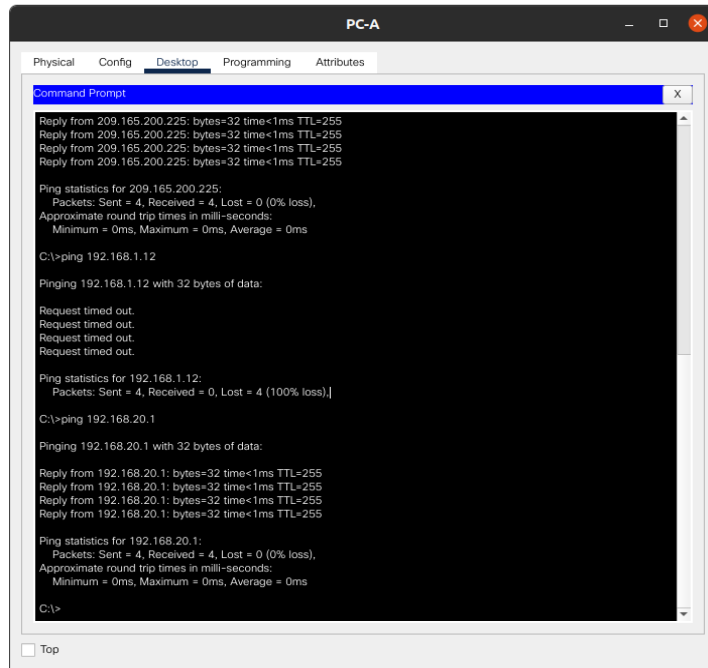
Ping statistics for 192.168.20.3:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\>ping 209.165.200.225

Pinging 209.165.200.225 with 32 bytes of data:
Reply from 209.165.200.225: bytes=32 time<1ms TTL=255
Reply from 209.165.200.225: bytes=32 time<1ms TTL=255
Reply from 209.165.200.225: bytes=32 time<1ms TTL=255
Reply from 209.165.200.225: bytes=32 time<1ms TTL=255

Ping statistics for 209.165.200.225:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
```

Top



The screenshot shows a window titled "PC-A" with tabs for Physical, Config, Desktop, Programming, and Attributes. The "Desktop" tab is active, displaying a Command Prompt window. The Command Prompt shows the results of several ping commands. The first set of pings is to 209.165.200.225, which all succeed. The second set of pings is to 192.168.1.12, which all time out. The third set of pings is to 192.168.20.1, which all succeed.

```
PC-A
Physical Config Desktop Programming Attributes
Command Prompt
Reply from 209.165.200.225: bytes=32 time<1ms TTL=255
Reply from 209.165.200.225: bytes=32 time<1ms TTL=255
Reply from 209.165.200.225: bytes=32 time<1ms TTL=255
Reply from 209.165.200.225: bytes=32 time<1ms TTL=255

Ping statistics for 209.165.200.225:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>ping 192.168.1.12

Pinging 192.168.1.12 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.1.12:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>ping 192.168.20.1

Pinging 192.168.20.1 with 32 bytes of data:

Reply from 192.168.20.1: bytes=32 time<1ms TTL=255
Reply from 192.168.20.1: bytes=32 time<1ms TTL=255
Reply from 192.168.20.1: bytes=32 time<1ms TTL=255
Reply from 192.168.20.1: bytes=32 time<1ms TTL=255

Ping statistics for 192.168.20.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>
```

Configuraciones

R1

enable

config t

hostname R1

no ip domain-lookup

service password-encryption

enable secret class

banner motd #

Personal no autorizado será perseguido por la ley!#

line con 0

password cisco

login

logging synchronous

line vty 0 4

password cisco

login

int g0/1

ip add 192.168.1.1 255.255.255.0

no shut

int lo0

ip add 209.165.200.225 255.255.255.224

no shut

interface g0/1.1

encapsulation dot1Q 1

```
ip add 192.168.1.1 255.255.255.0
```

```
interface g0/1.10  
encapsulation dot1Q 10  
ip add 192.168.10.1 255.255.255.0
```

```
interface g0/1.20  
encapsulation dot1Q 20  
ip add 192.168.20.1 255.255.255.0
```

```
int g0/1  
no shut
```

S1

```
enable  
config t
```

```
hostname S1  
no ip domain-lookup  
service password-encryption  
enable secret class  
banner motd #  
Personal no autorizado será perseguido por la ley!#
```

```
ip default-gateway 192.168.1.1
```

```
line con 0  
password cisco  
login  
logging synchronous  
line vty 0 15  
password cisco  
login
```

```
int vlan 1  
ip add 192.168.1.11 255.255.255.0  
no shut
```

```
int range f0/2-4  
shut  
int range f0/7-24  
shut
```

```
vlan 10  
name Students  
vlan 20  
name Faculty
```

```
int f0/1  
switchport mode trunk  
int f0/5  
switchport mode trunk  
int f0/6  
switchport mode access
```

```
switchport access vlan 10
```

```
end
```

S2

```
enable
```

```
config t
```

```
hostname S2
```

```
no ip domain-lookup
```

```
service password-encryption
```

```
enable secret class
```

```
banner motd #
```

```
Personal no autorizado será perseguido por la ley!#
```

```
ip default-gateway 192.168.1.1
```

```
line con 0
```

```
password cisco
```

```
login
```

```
logging synchronous
```

```
line vty 0 15
```

```
password cisco
```

```
login
```

```
int vlan 1
```

```
ip add 192.168.1.12 255.255.255.0
```

```
no shut
```

```
int range f0/2-17
```

```
shut
```

```
int range f0/19-24
```

```
shut
```

```
vlan 10
```

```
name Students
```

```
vlan 20
```

```
name Faculty
```

```
int f0/1
```

```
switchport mode trunk
```

```
int f0/18
```

```
switchport mode access
```

```
switchport access vlan 20
```

```
end
```