

UNIVERSIDAD LAICA "ELOY ALFARO" DE MANABÍ EXTENSIÓN EN EL CARMEN



CARRERA DE INGENIERIA EN SISTEMAS

TAREA DE REALIDAD SOCIOECONOMICA DEL ECUADOR Y MANABI

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INGENIERO

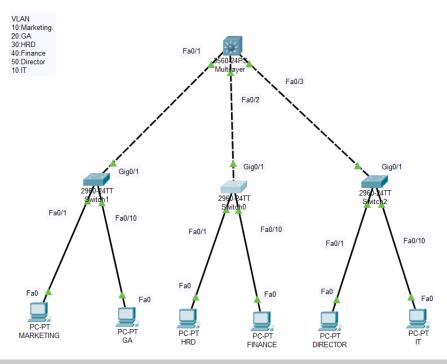
WLADIMIR MINAYA

PERIODO:

2019(2)

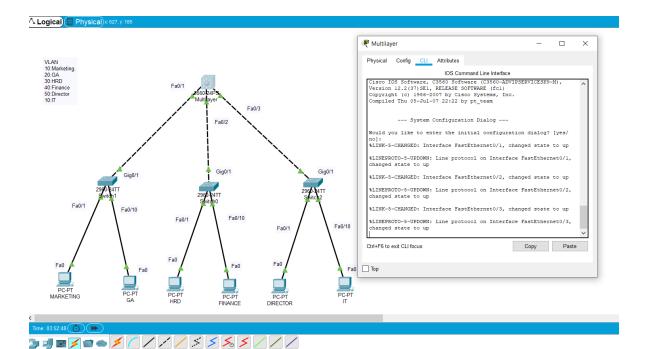
El Carmen, 06 de Diciembre 2019

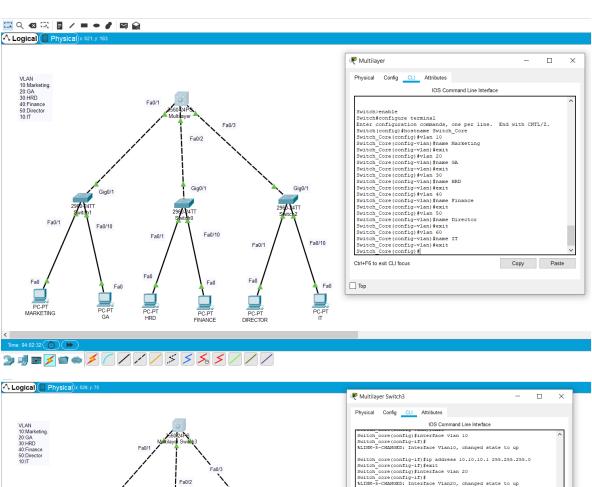
^ Logical Physical x: 1885, y: 106

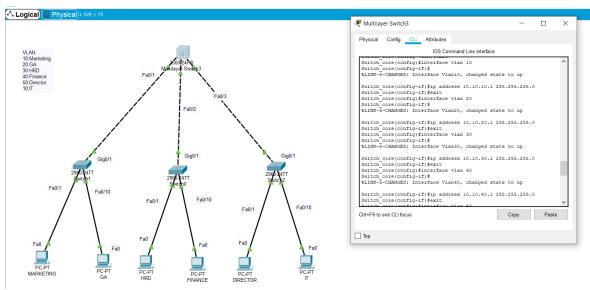


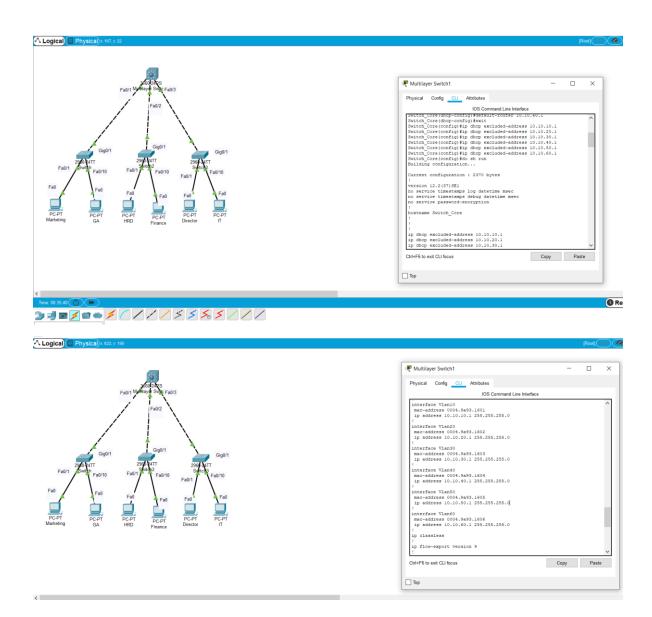
Vlan Marketing Network: 10.10.10.0/24 Vlan GA Network: 10.10.20.0/24 Vlan HRD Network: 10.10.30.0/24 Vlan Finance Network: 10.10.40.0/24 Vlan Director Network: 10.10.50.0/24 Vlan IT Network: 10.10.20.0/24











Swicth Multilayer(Principal)

Switch>enable

Switch#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Switch(config)#hostname Switch_Core

Switch_Core(config)#vlan 10

Switch_Core(config-vlan)#name Marketing

Switch Core(config-vlan)#exit

Switch_Core(config)#vlan 20

Switch_Core(config-vlan)#name GA

Switch_Core(config-vlan)#exit

Switch_Core(config)#vlan 30

Switch Core(config-vlan)#name HRD

Switch_Core(config-vlan)#exit

Switch_Core(config)#vlan 40

Switch_Core(config-vlan)#name Finance

Switch_Core(config-vlan)#exit

Switch_Core(config)#vlan 50

Switch_Core(config-vlan)#name Director

Switch_Core(config-vlan)#exit

Switch_Core(config)#vlan 60

Switch_Core(config-vlan)#name IT

Switch_Core(config-vlan)#exit

Switch_core(config)#interface vlan 10

Switch_core(config-if)#

%LINK-5-CHANGED: Interface Vlan10, changed state to up

Switch_core(config-if)#ip address 10.10.10.1 255.255.255.0

Switch_core(config-if)#exit

Switch_core(config)#interface vlan 20

Switch core(config-if)#

%LINK-5-CHANGED: Interface Vlan20, changed state to up

Switch_core(config-if)#ip address 10.10.20.1 255.255.255.0

Switch_core(config-if)#exit

Switch_core(config)#interface vlan 30

Switch_core(config-if)#

%LINK-5-CHANGED: Interface Vlan30, changed state to up

Switch_core(config-if)#ip address 10.10.30.1 255.255.255.0

Switch_core(config-if)#exit

Switch_core(config)#interface vlan 40

Switch_core(config-if)#

%LINK-5-CHANGED: Interface Vlan40, changed state to up

Switch_core(config-if)#ip address 10.10.40.1 255.255.255.0

Switch_core(config-if)#exit

Switch_core(config)#interface vlan 50

Switch_core(config-if)#

%LINK-5-CHANGED: Interface Vlan50, changed state to up

Switch_core(config-if)#ip address 10.10.50.1 255.255.255.0

Switch_core(config-if)#exit

Switch_core(config)#interface vlan 60

Switch_core(config-if)#

%LINK-5-CHANGED: Interface Vlan60, changed state to up

Switch_core(config-if)#ip address 10.10.60.1 255.255.255.0

Switch core(config-if)#exit

Switch_core(config)#ip dhcp pool vlan_Marketing

Switch_core(dhcp-config)#network 10.10.10.0 255.255.255.0

Switch_core(dhcp-config)#default-router 10.10.10.1

Switch_core(dhcp-config)#exit

Switch_core(config)#ip dhcp pool vlan_Ga

Switch_core(dhcp-config)#network 10.10.20.0 255.255.255.0

Switch_core(dhcp-config)#default-router 10.10.20.1

Switch_core(dhcp-config)#exit

Switch_core(config)#ip dhcp pool vlan_HRD

Switch_core(dhcp-config)#network 10.10.30.0 255.255.255.0

Switch_core(dhcp-config)#default-router 10.10.30.1

Switch_core(dhcp-config)#exit

Switch_core(config)#ip dhcp pool vlan_Finance

Switch core(dhcp-config)#network 10.10.40.0 255.255.255.0

Switch_core(dhcp-config)#default-router 10.10.40.1

Switch_core(dhcp-config)#exit

Switch_core(config)#ip dhcp pool vlan_Director

Switch_core(dhcp-config)#network 10.10.50.0 255.255.255.0

Switch_core(dhcp-config)#default-router 10.10.50.1

Switch_core(dhcp-config)#exit

Switch_core(config)#ip dhcp pool vlan_IT

Switch_core(dhcp-config)#network 10.10.60.0 255.255.255.0

Switch_core(dhcp-config)#ip default-router 10.10.60.1

Switch core(dhcp-config)#exit

Switch_Core(config)#ip dhcp excluded-address 10.10.10.1

Switch Core(config)#ip dhcp excluded-address 10.10.20.1

Switch_Core(config)#ip dhcp excluded-address 10.10.30.1

Switch_Core(config)#ip dhcp excluded-address 10.10.40.1

Switch_Core(config)#ip dhcp excluded-address 10.10.50.1

Switch_Core(config)#ip dhcp excluded-address 10.10.60.1

```
Building configuration...
Current configuration: 2370 bytes
version 12.2(37)SE1
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
hostname Switch Core
ip dhcp excluded-address 10.10.10.1
ip dhcp excluded-address 10.10.20.1
ip dhcp excluded-address 10.10.30.1
ip dhcp excluded-address 10.10.40.1
ip dhcp excluded-address 10.10.50.1
ip dhcp excluded-address 10.10.60.1
ip dhcp pool vlan_Marketing
network 10.10.10.0 255.255.255.0
default-router 10.10.10.1
ip dhcp pool vlan_GA
network 10.10.20.0 255.255.255.0
default-router 10.10.20.1
ip dhcp pool vlan_HRD
network 10.10.30.0 255.255.255.0
default-router 10.10.30.1
ip dhcp pool vlan Finance
network 10.10.40.0 255.255.255.0
default-router 10.10.40.1
ip dhcp pool vlan_Director
network 10.10.50.0 255.255.255.0
default-router 10.10.50.1
ip dhcp pool vlan_IT
network 10.10.60.0 255.255.255.0
default-router 10.10.60.1
!
!
```

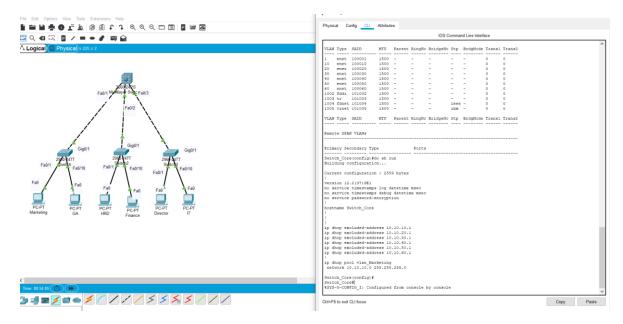
!

```
spanning-tree mode pvst
interface FastEthernet0/1
interface FastEthernet0/2
interface FastEthernet0/3
interface FastEthernet0/4
interface FastEthernet0/5
interface FastEthernet0/6
interface FastEthernet0/7
interface FastEthernet0/8
interface FastEthernet0/9
interface FastEthernet0/10
interface FastEthernet0/11
interface FastEthernet0/12
interface FastEthernet0/13
interface FastEthernet0/14
interface FastEthernet0/15
```

```
interface FastEthernet0/16
interface FastEthernet0/17
interface FastEthernet0/18
interface FastEthernet0/19
interface FastEthernet0/20
interface FastEthernet0/21
interface FastEthernet0/22
interface FastEthernet0/23
interface FastEthernet0/24
interface GigabitEthernet0/1
interface GigabitEthernet0/2
interface Vlan1
no ip address
shutdown
interface Vlan10
mac-address 0004.9a93.1601
ip address 10.10.10.1 255.255.255.0
interface Vlan20
mac-address 0004.9a93.1602
ip address 10.10.20.1 255.255.255.0
interface Vlan30
mac-address 0004.9a93.1603
ip address 10.10.30.1 255.255.255.0
interface Vlan40
mac-address 0004.9a93.1604
ip address 10.10.40.1 255.255.255.0
interface Vlan50
mac-address 0004.9a93.1605
ip address 10.10.50.1 255.255.255.0
interface Vlan60
```

```
mac-address 0004.9a93.1606
ip address 10.10.60.1 255.255.255.0
ip classless
ip flow-export version 9
line con 0
line aux 0
line vty 04
login
!
end
Switch_Core(config)#interface fastEthernet 0/1
Switch_Core(config-if)#switchport trunk encapsulation dot1q
Switch_Core(config-if)#description TO_SWITCH_1
Switch_Core(config-if)#exit
Switch_Core(config)#interface fastEthernet 0/2
Switch_Core(config-if)#switchport trunk encapsulation dot1q
Switch_Core(config-if)#description TO_SWITCH_2
Switch_Core(config-if)#exit
Switch_Core(config)#interface fastEthernet 0/3
Switch_Core(config-if)#switchport trunk encapsulation dot1q
Switch_Core(config-if)#description TO_SWITCH_3
Switch_Core(config-if)#exit
Switch_Core(config)#do sh vlan
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
10 Marketing active
20 GA active
30 HRD active
40 Finance active
50 Director active
60 IT active
1002 fddi-default active
1003 token-ring-default active
1004 fddinet-default active
1005 trnet-default active
VLAN Type SAID MTU Parent RingNo BridgeNo Stp BrdgMode Trans1 Trans2
--More--
Switch_Core(config)#do sh run
Building configuration...
Current configuration: 2559 bytes
version 12.2(37)SE1
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
hostname Switch_Core
ip dhcp excluded-address 10.10.10.1
ip dhcp excluded-address 10.10.20.1
ip dhcp excluded-address 10.10.30.1
ip dhcp excluded-address 10.10.40.1
ip dhcp excluded-address 10.10.50.1
ip dhcp excluded-address 10.10.60.1
ip dhcp pool vlan_Marketing
network 10.10.10.0 255.255.255.0
Switch_Core(config)#
Switch_Core#
```



Switch>enable

Switch#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Switch(config)#hostname SWITCH_1

SWITCH_1(config)#interface gigabitEthernet 0/1

SWITCH_1(config-if)#switchport mode trunk

SWITCH_1(config-if)#

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1, changed state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1, changed state to up

SWITCH_1(config-if)#description TO_SWITCH_CORE

SWITCH_1(config-if)#EXIT

SWITCH 1(config)#vtp mode client

Setting device to VTP CLIENT mode.

SWITCH_1(config)#vtp domain IT_INFRA

Changing VTP domain name from NULL to IT_INFRA

SWITCH_1(config)#do shutdown vlan

shutdown vlan

۸

% Invalid input detected at '^' marker.

SWITCH_1(config)#do sh vlan

VLAN Name Status Ports

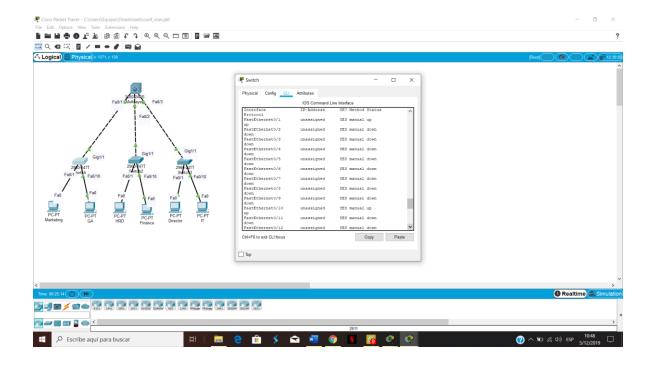
1 default active Fa0/1, Fa0/2, Fa0/3, Fa0/4

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
Gig0/2
1002 fddi-default active
1003 token-ring-default active
1004 fddinet-default active
1005 trnet-default active
VLAN Type SAID MTU Parent RingNo BridgeNo Stp BrdgMode Trans1 Trans2
1 enet 100001 1500 - - - - 0 0
1002 fddi 101002 1500 - - - - 0 0
1003 tr 101003 1500 - - - - 0 0
1004 fdnet 101004 1500 - - - ieee - 0 0
1005 trnet 101005 1500 - - - ibm - 0 0
VLAN Type SAID MTU Parent RingNo BridgeNo Stp BrdgMode Trans1 Trans2
Remote SPAN VLANs
Primary Secondary Type Ports
SWITCH 1(config)#
SWITCH_1(config)#
SWITCH_1(config)#
SWITCH_1(config)#configure terminal
% Invalid input detected at '^' marker.
SWITCH_1(config)#configure terminal
% Invalid input detected at '^' marker.
SWITCH_1(config)#conf t
% Invalid input detected at '^' marker.
SWITCH_1(config)#interface fastEthernet 0/1
SWITCH 1(config-if)#switchport access vlan 10
SWITCH_1(config-if)#exit
SWITCH 1(config)#interface fastEthernet 0/10
SWITCH_1(config-if)#switchport access vlan 20
SWITCH_1(config-if)#exit
SWITCH 1(config)#do show ip interface brief
Interface IP-Address OK? Method Status Protocol
```

FastEthernet0/1 unassigned YES manual up up

FastEthernet0/2 unassigned YES manual down down FastEthernet0/3 unassigned YES manual down down FastEthernet0/4 unassigned YES manual down down FastEthernet0/5 unassigned YES manual down down FastEthernet0/6 unassigned YES manual down down FastEthernet0/7 unassigned YES manual down down FastEthernet0/8 unassigned YES manual down down FastEthernet0/9 unassigned YES manual down down FastEthernet0/10 unassigned YES manual up up FastEthernet0/11 unassigned YES manual down down FastEthernet0/12 unassigned YES manual down down FastEthernet0/13 unassigned YES manual down down FastEthernet0/14 unassigned YES manual down down FastEthernet0/15 unassigned YES manual down down FastEthernet0/16 unassigned YES manual down down FastEthernet0/17 unassigned YES manual down down FastEthernet0/18 unassigned YES manual down down FastEthernet0/19 unassigned YES manual down down FastEthernet0/20 unassigned YES manual down down FastEthernet0/21 unassigned YES manual down down FastEthernet0/22 unassigned YES manual down down FastEthernet0/23 unassigned YES manual down down FastEthernet0/24 unassigned YES manual down down GigabitEthernet0/1 unassigned YES manual up up GigabitEthernet0/2 unassigned YES manual down down Vlan1 unassigned YES manual administratively down down



SWITCH 2>enable

SWITCH_2#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

SWITCH_2(config)#interface fastEthernet 0/1

SWITCH_2(config-if)#switchport access vlan 30

SWITCH_2(config-if)#exit

SWITCH_2(config)#interface fastEthernet 0/10

SWITCH_2(config-if)#switchport access vlan 40

SWITCH 2(config-if)#do show ip interface brief

Interface IP-Address OK? Method Status Protocol

FastEthernet0/1 unassigned YES manual up up

FastEthernet0/2 unassigned YES manual down down

FastEthernet0/3 unassigned YES manual down down

FastEthernet0/4 unassigned YES manual down down

FastEthernet0/5 unassigned YES manual down down

 $FastEthernet 0/6\ unassigned\ YES\ manual\ down\ down$

FastEthernet0/7 unassigned YES manual down down

FastEthernet0/8 unassigned YES manual down down

 $FastEthernet 0/9\ unassigned\ YES\ manual\ down\ down$

FastEthernet0/10 unassigned YES manual up up

FastEthernet0/11 unassigned YES manual down down

FastEthernet0/12 unassigned YES manual down down

FastEthernet0/13 unassigned YES manual down down

FastEthernet0/14 unassigned YES manual down down

FastEthernet0/15 unassigned YES manual down down

FastEthernet0/16 unassigned YES manual down down

FastEthernet0/17 unassigned YES manual down down

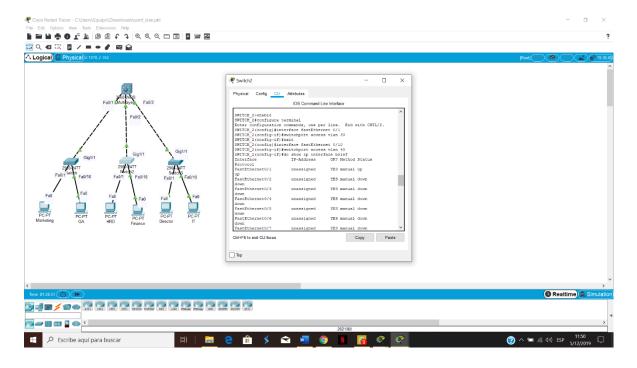
FastEthernet0/18 unassigned YES manual down down

FastEthernet0/19 unassigned YES manual down down

FastEthernet0/20 unassigned YES manual down down

FastEthernet0/21 unassigned YES manual down down

--More--



Switch>enable

Switch# configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Switch(config)#hostname SWITCH_3

SWITCH 3(config)#interface gigabitEthernet 0/1

SWITCH_3(config-if)#switchport mode trunk

SWITCH_3(config-if)#

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1, changed state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1, changed state to up

SWITCH_3(config-if)#description TO_SWITCH_CORE

SWITCH_3(config-if)#exit

SWITCH_3(config)#vtp mode client

Setting device to VTP CLIENT mode.

SWITCH_3(config)# vtp_domain IT_INFRA

% Invalid input detected at '^' marker.

SWITCH_3(config)# vtp domain IT_INFRA

Domain name already set to IT_INFRA.

SWITCH_3(config)#do show vlan

VLAN Name Status Ports

1 default active Fa0/1, Fa0/2, Fa0/3, Fa0/4

Fa0/5, Fa0/6, Fa0/7, Fa0/8

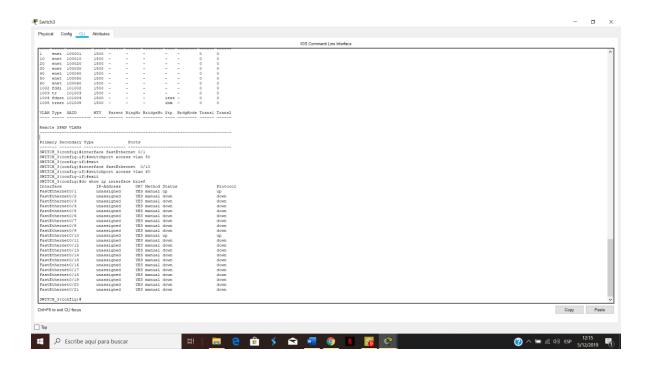
Fa0/9, Fa0/10, Fa0/11, Fa0/12

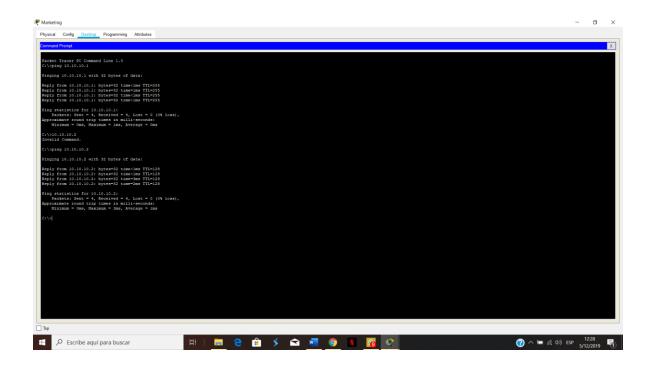
Fa0/13, Fa0/14, Fa0/15, Fa0/16

| Fa0/21, Fa0/22, Fa0/23, Fa0/24 |
|--|
| Gig0/2 |
| 10 Marketing active |
| 20 GA active |
| 30 HRD active |
| 40 Finance active |
| 50 Director active |
| 60 IT active |
| 1002 fddi-default active |
| 1003 token-ring-default active |
| 1004 fddinet-default active |
| 1005 trnet-default active |
| |
| VLAN Type SAID MTU Parent RingNo BridgeNo Stp BrdgMode Trans1 Trans2 |
| 1 enet 100001 1500 0 0 |
| 10 enet 100010 1500 0 0 |
| 20 enet 100020 1500 0 0 |
| 30 enet 100030 1500 0 0 |
| 40 enet 100040 1500 0 0 |
| 50 enet 100050 1500 0 0 |
| 60 enet 100060 1500 0 0 |
| 1002 fddi 101002 1500 0 0 |
| 1003 tr 101003 1500 0 0 |
| 1004 fdnet 101004 1500 ieee - 0 0 |
| 1005 trnet 101005 1500 ibm - 0 0 |
| 1005 tillet 101005 1500 1611 0 0 |
| VLAN Type SAID MTU Parent RingNo BridgeNo Stp BrdgMode Trans1 Trans2 |
| Remote SPAN VLANs |
| |
| Primary Secondary Type Ports |
| |
| SWITCH_3(config)#interface fastEthernet 0/1 |
| SWITCH_3(config-if)#switchport access vlan 50 |
| SWITCH_3(config-if)#exit |
| SWITCH_3(config)#interface fastEthernet 0/10 |
| SWITCH_3(config-if)#switchport access vlan 60 |
| SWITCH_3(config-if)#exit |
| SWITCH_3(config)#do show ip interface brief |
| Interface IP-Address OK? Method Status Protocol |
| FastEthernet0/1 unassigned YES manual up up |
| FastEthernet0/2 unassigned YES manual down down |
| EastEthornat 0/2 unassigned VES manual dayun dayun |
| FastEthernet0/3 unassigned YES manual down down |

Fa0/17, Fa0/18, Fa0/19, Fa0/20

FastEthernet0/4 unassigned YES manual down down FastEthernet0/5 unassigned YES manual down down FastEthernet0/6 unassigned YES manual down down FastEthernet0/7 unassigned YES manual down down FastEthernet0/8 unassigned YES manual down down FastEthernet0/9 unassigned YES manual down down FastEthernet0/10 unassigned YES manual up up FastEthernet0/11 unassigned YES manual down down FastEthernet0/12 unassigned YES manual down down FastEthernet0/13 unassigned YES manual down down FastEthernet0/14 unassigned YES manual down down FastEthernet0/15 unassigned YES manual down down FastEthernet0/16 unassigned YES manual down down FastEthernet0/17 unassigned YES manual down down FastEthernet0/18 unassigned YES manual down down FastEthernet0/19 unassigned YES manual down down FastEthernet0/20 unassigned YES manual down down FastEthernet0/21 unassigned YES manual down down





Switch_Core>enable

Switch_Core#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Switch_Core(config)#ip routing

Switch_Core(config)#do 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

10.0.0.0/24 is subnetted, 6 subnets

- C 10.10.10.0 is directly connected, Vlan10
- C 10.10.20.0 is directly connected, Vlan20
- C 10.10.30.0 is directly connected, Vlan30
- C 10.10.40.0 is directly connected, Vlan40
- C 10.10.50.0 is directly connected, Vlan50
- C 10.10.60.0 is directly connected, Vlan60

