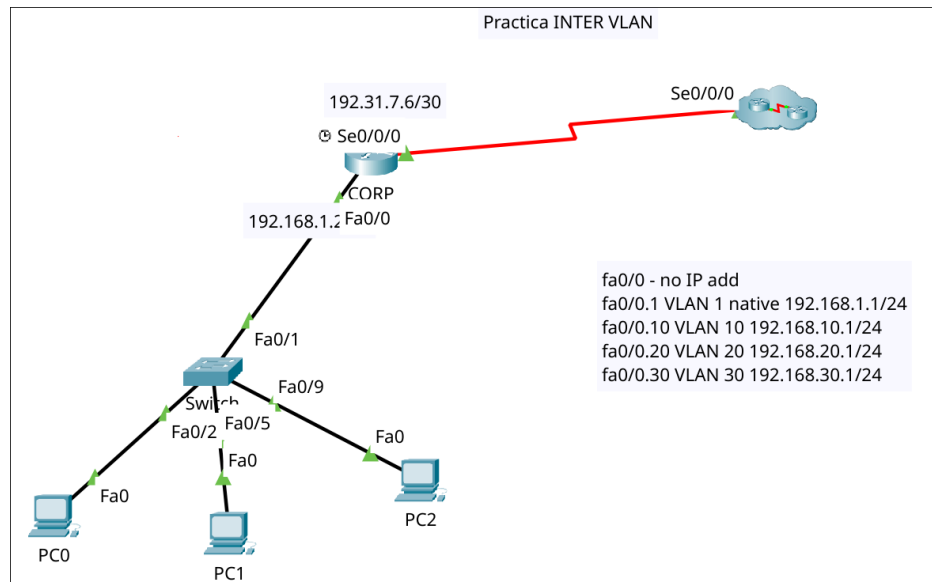# Universidad Veracruzana
Facultad de Ingeniería Eléctrica y Electrónica

REDES DE
COMPUTADORAS

E10 - Inter VLAN
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April 29, 2024

1 Topología de Red

Practica INTER VLAN

192.31.7.6/30

Se0/0/0

Se0/0/0

CORP

192.168.1.2 Fa0/0

fa0/0 - no IP add
fa0/0.1 VLAN 1 native 192.168.1.1/24
fa0/0.10 VLAN 10 192.168.10.1/24
fa0/0.20 VLAN 20 192.168.20.1/24
fa0/0.30 VLAN 30 192.168.30.1/24

Fa0/1

Fa0/9

Switch Fa0/5

Fa0/2

Fa0

Fa0

Fa0

PC2

Fa0

PC0

PC1

2   Información de las VLANs

2.1   Router CORP

```
CORP#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

     192.31.7.0/30 is subnetted, 1 subnets
C       192.31.7.4 is directly connected, Serial0/0/0
C    192.168.1.0/24 is directly connected, FastEthernet0/0.1
C    192.168.10.0/24 is directly connected, FastEthernet0/0.10
C    192.168.20.0/24 is directly connected, FastEthernet0/0.20
C    192.168.30.0/24 is directly connected, FastEthernet0/0.30
D    198.133.219.0/24 [90/2297856] via 192.31.7.5, 00:46:07, Serial0/0/0
```

```
CORP#show ip eigrp topology
IP-EIGRP Topology Table for AS 10/ID(192.168.30.1)

Codes: P - Passive, A - Active, U - Update, Q - Query, R - Reply,
       r - Reply status

P 192.31.7.4/30, 1 successors, FD is 2169856
        via Connected, Serial0/0/0
P 192.168.1.0/24, 1 successors, FD is 28160
        via Connected, FastEthernet0/0.1
P 192.168.10.0/24, 1 successors, FD is 28160
        via Connected, FastEthernet0/0.10
P 192.168.20.0/24, 1 successors, FD is 28160
        via Connected, FastEthernet0/0.20
P 192.168.30.0/24, 1 successors, FD is 28160
        via Connected, FastEthernet0/0.30
P 198.133.219.0/24, 1 successors, FD is 2297856
        via 192.31.7.5 (2297856/128256), Serial0/0/0
CORP#
```

```
CORP#show ip eigrp neighbors
IP-EIGRP neighbors for process 10
H   Address         Interface     Hold Uptime    SRTT   RTO   Q   Seq
                                  (sec)          (ms)         Cnt  Num
0   192.31.7.5      Se0/0/0       14   00:46:57  40     1000  0   18
```

2.2   Switch

```
L2Switch1#show vlan brief

VLAN Name                             Status    Ports
---- -------------------------------- ---------
------------------------------
1    default                          active    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   Sales                            active    Fa0/2, Fa0/3, Fa0/4
20   Engineering                      active    Fa0/5, Fa0/6, Fa0/7,
Fa0/8
30   Marketing                        active    Fa0/9, Fa0/10, Fa0/11,
Fa0/12
1002 fddi-default                     active
1003 token-ring-default               active
1004 fddinet-default                  active
1005 trnet-default                    active
```

```
L2Switch1#show interface trunk
Port        Mode          Encapsulation  Status       Native vlan
Fa0/1       on            802.1q         trunking     1

Port        Vlans allowed on trunk
Fa0/1       1-1005

Port        Vlans allowed and active in management domain
Fa0/1       1,10,20,30

Port        Vlans in spanning tree forwarding state and not pruned
Fa0/1       1,10,20,30
```

```
L2Switch1#show vtp status
VTP Version capable             : 1 to 2
VTP version running             : 1
VTP Domain Name                 :
VTP Pruning Mode                : Disabled
VTP Traps Generation            : Disabled
Device ID                       : 000A.41AE.AD00
Configuration last modified by 0.0.0.0 at 3-1-93 00:32:06
Local updater ID is 192.168.1.2 on interface Vl1 (lowest numbered VLAN
interface found)

Feature VLAN :
--------------
VTP Operating Mode              : Server
Maximum VLANs supported locally : 255
Number of existing VLANs        : 8
Configuration Revision          : 6
MD5 digest                      : 0x95 0xCB 0x6E 0x57 0x15 0xAC 0xC9
0x23
                                  0xE5 0x4C 0x62 0xA0 0xFA 0x11 0x82
0x7E
L2Switch1#
```

2.3   Prueba de comunicación