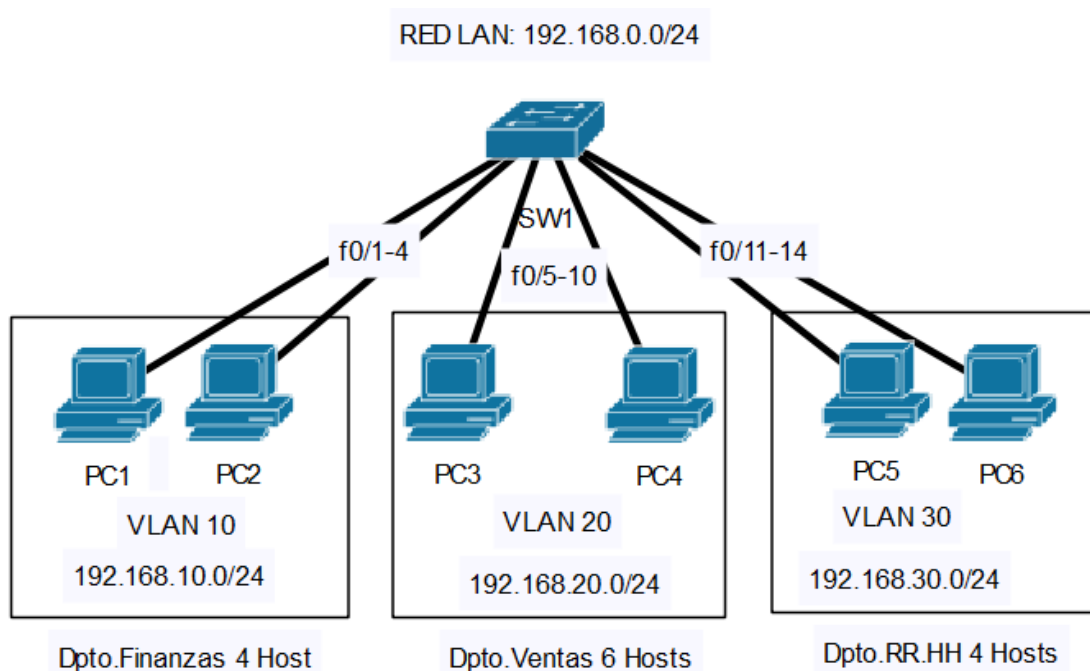


Configuración de VLAN

“Topología de red Implementada”



Descripción: En la siguiente imagen se muestra 1 switch 2960 cisco, segmentado para diferentes departamentos de VLAN.

¿Qué es una VLAN?

Una VLAN (Virtual Local Area Network) es una red local virtual creada dentro de una red física, que permite segmentar y aislar grupos de dispositivos en función de criterios como la ubicación, el departamento o la función. Aunque los dispositivos pueden estar físicamente conectados en la misma red, una VLAN les proporciona una separación lógica, lo que mejora la seguridad, la gestión y la eficiencia de la red al reducir la cantidad de tráfico de difusión.

Configuración de VLAN entre Departamentos.

```
SW1#enable
```

```
SW1#configure terminal
```

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

```
SW1(config)#vlan 10
```

```
SW1(config-vlan)#name VL10
```

```
SW1(config-vlan)#exit
```

```
SW1(config)#vlan 20
```

```
SW1(config-vlan)#name VL20
```

```
SW1(config-vlan)#exit
```

```
SW1(config)#vlan 30
```

```
SW1(config-vlan)#name VL30
```

```
SW1(config-vlan)#exit
```

```
SW1(config)#interface range f0/1-4
```

```
SW1(config-if-range)#switchport mode access
```

```
SW1(config-if-range)#switchport access vlan 10
```

```
SW1(config-if-range)#description DPT0.FINANZAS
```

```
SW1(config-if-range)#exit
```

```
SW1(config)#interface range f0/5-10
```

```
SW1(config-if-range)#switchport mode access
```

```
SW1(config-if-range)#switchport access vlan 20
```

```
SW1(config-if-range)#description DPT0.VENTAS
```

```
SW1(config-if-range)#exit
```

```
SW1(config)#interface range f0/11-14
```

```
SW1(config-if-range)#switchport mode access
SW1(config-if-range)#switchport access vlan 30
SW1(config-if-range)#description DPT0.RR.HH
SW1(config-if-range)#end
```

```
SW1#
```

```
%SYS-5-CONFIG_I: Configured from console by console
```

```
SW1#show vlan brief
```

VLAN Name	Status	Ports
1 default Fa0/17, Fa0/18	active	Fa0/15, Fa0/16, Fa0/19, Fa0/20, Fa0/21, Fa0/22 Gig0/1, Gig0/2
10 VL10 Fa0/3, Fa0/4	active	Fa0/1, Fa0/2,
20 VL20 Fa0/7, Fa0/8	active	Fa0/5, Fa0/6, Fa0/9, Fa0/10
30 VL30 Fa0/13, Fa0/14	active	Fa0/11, Fa0/12,

Tabla de Direccionamiento PC

Nombre	Departamento	VLAN	IP	Red/Mask	Gateway
PC1	Finanzas	10	192.168.10.1	192.168.10.0/24	192.168.0.1
PC2	Finanzas	10	192.168.10.2	192.168.10.0/24	192.168.0.1
PC3	Ventas	20	192.168.20.1	192.168.20.0/24	192.168.0.1
PC4	Ventas	20	192.168.20.2	192.168.20.0/24	192.168.0.1
PC5	RR. HH	30	192.168.30.1	192.168.30.0/24	192.168.0.1
PC6	RR.HH	30	192.168.30.2	192.168.30.0/24	192.168.0.1

Prueba de conectividad de Ping de VLAN 10 a VLAN 10 y hacia IP de la VLAN 20.

The screenshot shows the Command Prompt window for PC1 in Cisco Packet Tracer. The window title is 'PC1' and it has tabs for 'Physical', 'Config', 'Desktop', 'Programming', and 'Attributes'. The 'Desktop' tab is active, showing a 'Command Prompt' window. The output of the ping tests is as follows:

```

Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.10.2

Pinging 192.168.10.2 with 32 bytes of data:

Reply from 192.168.10.2: bytes=32 time<1ms TTL=128
Reply from 192.168.10.2: bytes=32 time<1ms TTL=128
Reply from 192.168.10.2: bytes=32 time<1ms TTL=128
Reply from 192.168.10.2: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.10.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>ping 192.168.20.1

Pinging 192.168.20.1 with 32 bytes of data:

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

Ping statistics for 192.168.20.1:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>ping 192.168.30.2

Pinging 192.168.30.2 with 32 bytes of data:

```

Descarga aquí la topología ([VLAN.pkt](#))