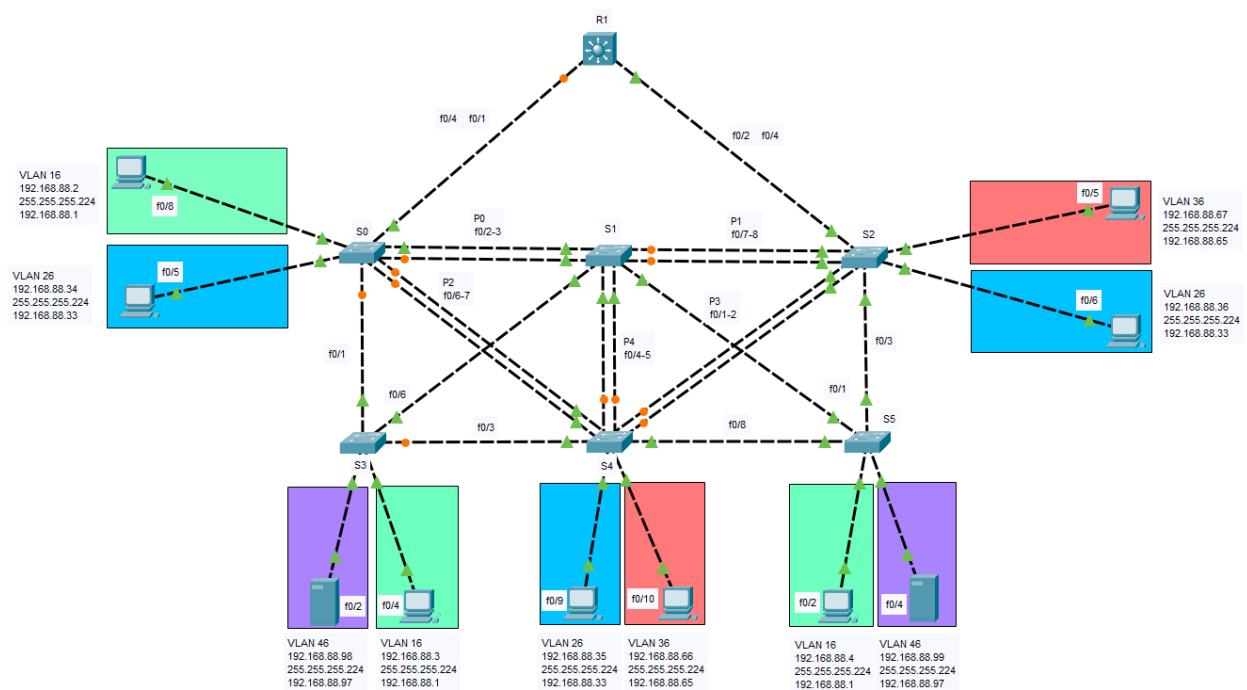




Redes 2 Practica 1

TOPOLOGIA



VTP, Creación de Vlan y Conexión de puertos

R1

```
vtp mode server
vtp version 2
vtp domain g24
vtp password g24

vlan 16
name Ventas
vlan 26
name Distribucion
vlan 36
```

```
name Administracion
vlan 46
name Servidores
vlan 99
name Management&Native
vlan 999
name BlackHole

int range f0/1-2
switchport trunk allowed vlan 1002-1005,16,26,36,46,99,999
```

S0

```
vtp mode client
vtp version 2
vtp domain g24
vtp password g24

int range f0/1-4
switchport mode trunk
switchport trunk allowed vlan 1002-1005,16,26,36,46,99,999

int range f0/6-7
switchport mode trunk
switchport trunk allowed vlan 1002-1005,16,26,36,46,99,999

int f0/8
switchport mode access
switchport access vlan 16

int f0/5
switchport mode access
switchport access vlan 26
```

S1

```
vtp mode client
vtp version 2
vtp domain g24
vtp password g24

int range f0/1-8
switchport mode trunk
switchport trunk allowed vlan 1002-1005,16,26,36,46,99,999
```

S2

```
vtp mode client
vtp version 2
vtp domain g24
vtp password g24
```

```

int range f0/1-4
switchport mode trunk
switchport trunk allowed vlan 1002-1005,16,26,36,46,99,999

int range f0/7-8
switchport mode trunk
switchport trunk allowed vlan 1002-1005,16,26,36,46,99,999

int f0/5
switchport mode access
switchport access vlan 36

int f0/6
switchport mode access
switchport access vlan 26

```

S3

```

vtp mode client
vtp version 2
vtp domain g24
vtp password g24

int range f0/1
switchport mode trunk
switchport trunk allowed vlan 1002-1005,16,26,36,46,99,999

int range f0/3
switchport mode trunk
switchport trunk allowed vlan 1002-1005,16,26,36,46,99,999

int range f0/6
switchport mode trunk
switchport trunk allowed vlan 1002-1005,16,26,36,46,99,999

int f0/2
switchport mode access
switchport access vlan 46

int f0/4
switchport mode access
switchport access vlan 16

```

S4

```

vtp mode client
vtp version 2
vtp domain g24
vtp password g24

int range f0/1-8
switchport mode trunk
switchport trunk allowed vlan 1002-1005,16,26,36,46,99,999

int f0/9
switchport mode access

```

```

switchport access vlan 26

int f0/10
switchport mode access
switchport access vlan 36

```

S5

```

vtp mode client
vtp version 2
vtp domain g24
vtp password g24

int range f0/1
switchport mode trunk
switchport trunk allowed vlan 1002-1005,16,26,36,46,99,999

int range f0/3
switchport mode trunk
switchport trunk allowed vlan 1002-1005,16,26,36,46,99,999

int range f0/8
switchport mode trunk
switchport trunk allowed vlan 1002-1005,16,26,36,46,99,999

int f0/2
switchport mode access
switchport access vlan 16

int f0/4
switchport mode access
switchport access vlan 46

```

Direcciones de red

Utilizando la calculadora de VLSM se obtuvieron las siguientes subredes.

Vlan	Dirección de Red	Primer dirección asignable	Ultima dirección asignable	Dirección de broadcast	Máscara de subred
16	192.168.88.0	192.168.88.1	192.168.88.30	192.168.88.31	255.255.255.224
26	192.168.88.32	192.168.88.33	192.168.88.62	192.168.88.63	255.255.255.224
36	192.168.88.64	192.168.88.65	192.168.88.94	192.168.88.95	255.255.255.224
46	192.168.88.96	192.168.88.97	192.168.88.126	192.168.88.127	255.255.255.224
99	192.168.88.128	192.168.88.129	192.168.88.158	192.168.88.159	255.255.255.224
999	192.168.88.160	192.168.88.161	192.168.88.190	192.168.88.191	255.255.255.224

Seguridad de las interfaces de red

Políticas de puerto compartidas

S0

```
int range f0/9-24
switchport mode access
switchport access vlan 999

int range g0/1-2
switchport mode access
switchport access vlan 999

int range f0/1-4
switchport trunk native vlan 99

int range f0/6-7
switchport trunk native vlan 99
```

S1

```
int range f0/9-24
switchport mode access
switchport access vlan 999

int range g0/1-2
switchport mode access
switchport access vlan 999

int range f0/1-8
switchport trunk native vlan 99
```

S2

```
int range f0/9-24
switchport mode access
switchport access vlan 999

int range g0/1-2
switchport mode access
switchport access vlan 999

int range f0/1-4
switchport trunk native vlan 99

int range f0/7-8
switchport trunk native vlan 99
```

S3

```
int f0/5
switchport mode access
switchport access vlan 999

int range f0/7-24
switchport mode access
switchport access vlan 999

int range g0/1-2
switchport mode access
switchport access vlan 999

int f0/1
switchport trunk native vlan 99

int f0/3
switchport trunk native vlan 99

int f0/6
switchport trunk native vlan 99
```

S4

```
int range f0/11-24
switchport mode access
switchport access vlan 999

int range g0/1-2
switchport mode access
switchport access vlan 999

int range f0/1-8
switchport trunk native vlan 99
```

S5

```
int range f0/5-7
switchport mode access
switchport access vlan 999

int range f0/9-24
switchport mode access
switchport access vlan 999

int range g0/1-2
switchport mode access
switchport access vlan 999
```

```
int f0/1
switchport trunk native vlan 99

int f0/3
switchport trunk native vlan 99

int f0/8
switchport trunk native vlan 99
```

Activación del Port Security

S0

```
int f0/8
switchport port-security
switchport port-security mac-address sticky
switchport port-security maximum 5
switchport port-security violation protect

int f0/5
switchport port-security
switchport port-security mac-address sticky
switchport port-security maximum 1
switchport port-security violation shutdown
```

S2

```
int f0/5
switchport port-security
switchport port-security mac-address 0002.16AA.E89D
switchport port-security maximum 1
switchport port-security violation shutdown

int f0/6
switchport port-security
switchport port-security mac-address sticky
switchport port-security maximum 1
switchport port-security violation shutdown
```

S3

```
int f0/4
switchport port-security
switchport port-security mac-address sticky
switchport port-security maximum 5
switchport port-security violation protect
```

S4

```
int f0/9
switchport port-security
switchport port-security mac-address sticky
switchport port-security maximum 1
switchport port-security violation shutdown

int f0/10
switchport port-security
switchport port-security mac-address 00D0.FF58.2C10
switchport port-security maximum 1
switchport port-security violation shutdown
```

S5

```
int f0/2
switchport port-security
switchport port-security mac-address sticky
switchport port-security maximum 5
switchport port-security violation protect
```

Creación de Intervlan

R1

```
int vlan 16
description interfaz de enlace para vlan 16
ip address 192.168.88.1 255.255.255.224
no shutdown
exit

int vlan 26
description interfaz de enlace para vlan 26
ip address 192.168.88.33 255.255.255.224
no shutdown
exit

int vlan 36
description interfaz de enlace para vlan 36
ip address 192.168.88.65 255.255.255.224
no shutdown
exit

int vlan 46
description interfaz de enlace para vlan 46
ip address 192.168.88.97 255.255.255.224
no shutdown
exit

ip routing
```

Port Channel

```
##### S0-S1 #####
int range f0/2-3
channel-protocol pagp
channel-group 1 mode auto

##### S1-S2 #####
int range f0/7-8
channel-protocol pagp
channel-group 2 mode auto

##### S0-S4 #####
int range f0/6-7
channel-protocol pagp
channel-group 3 mode auto

##### S2-S4 #####
int range f0/1-2
channel-protocol pagp
channel-group 4 mode auto

##### S1-S4 #####
int range f0/4-5
channel-protocol pagp
channel-group 5 mode auto
```