VLAN Routing

Vlan Commands

Creation

For isolate ports in same switch

```
vlan [vlan-number]
name [name]
exit
```

Assigning ports

```
interface [interface]
switchport mode access
switchport access vlan [vlan-number]
```

Show vlans

```
show vlan
```

Assigning ports range to vlan

For connect vlans in different switchs

```
interface range [inter-type] [interface] - [interface]
switchport mode trunk
switchport trunk allowed vlan [vlan-number]
```
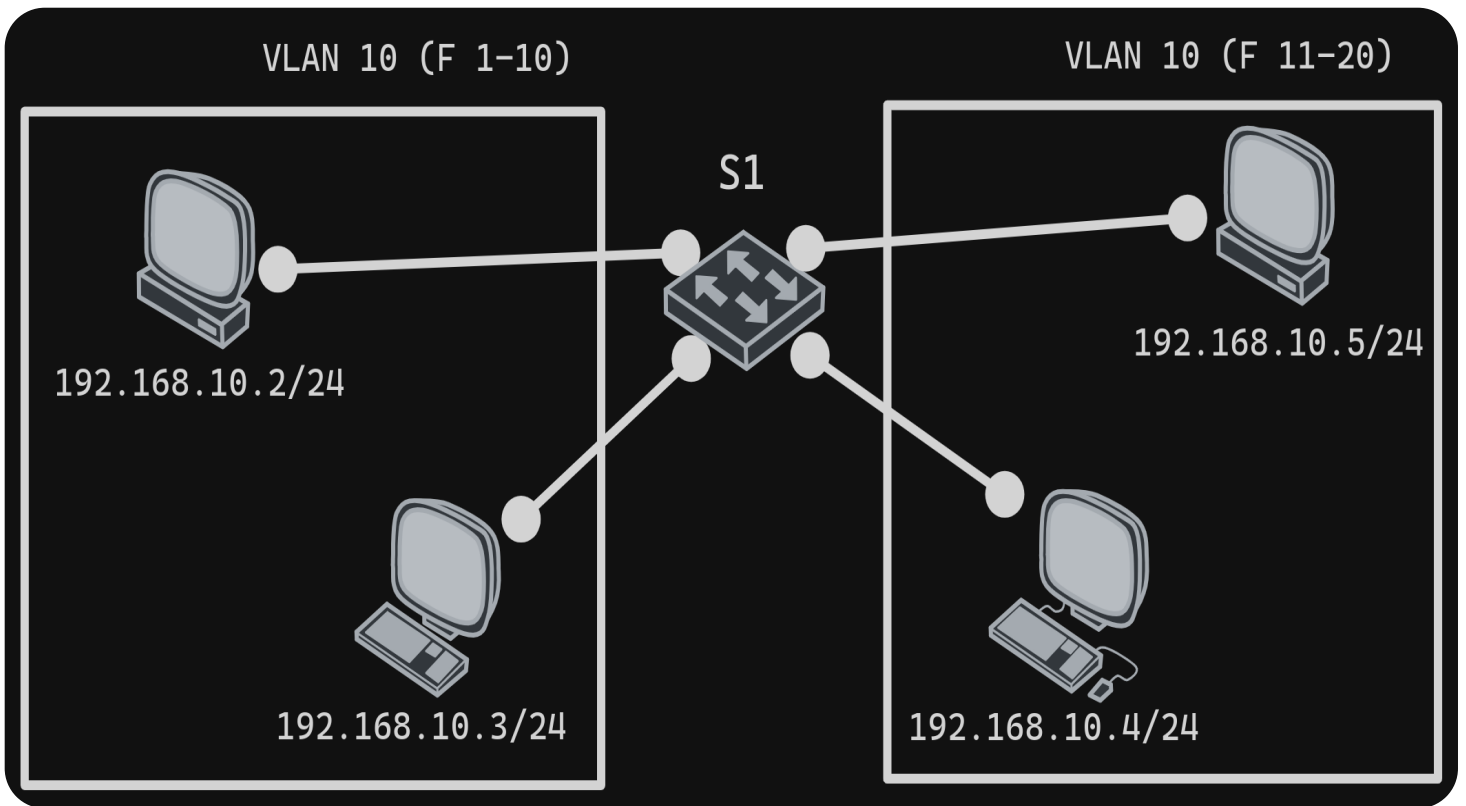
Trunk ports

```
interface [interface]
switchport mode trunk
switchport trunk allowed vlan [vlan-number]
```

Notes

- if you want to allow all vlans, not use the command switchport trunk allowed vlan
- On case allowed multiple vlans, use "," for delimiting the vlan numbers, example: `switchport trunk allowed vlan 10,20,30`
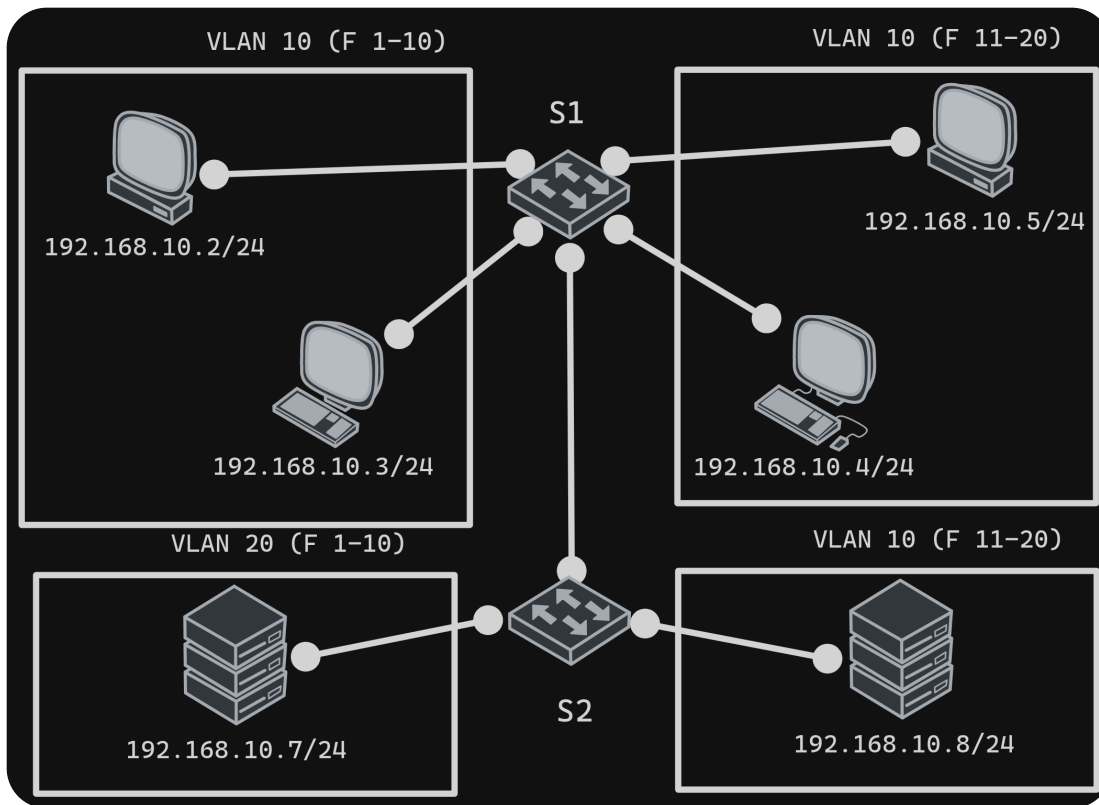
Example basic 1

VLAN 10 (F 1-10)   VLAN 10 (F 11-20)

S1

192.168.10.2/24

192.168.10.5/24

192.168.10.3/24

192.168.10.4/24

Switch 1

```
vlan 10
name VLAN10
vlan 20
name VLAN20
inter f0/1-10
switchport mode access
switchport access vlan 10
shutdown
inter f0/11-20
switchport mode access
switchport access vlan 20
shutdown
```

Example basic 2

VLAN 10 (F 1–10)
192.168.10.2/24
192.168.10.3/24

VLAN 10 (F 11–20)
192.168.10.5/24
192.168.10.4/24

S1

VLAN 20 (F 1–10)
192.168.10.7/24

VLAN 10 (F 11–20)
192.168.10.8/24

S2

Switch 1

```
vlan 10
name VLAN10
vlan 20
name VLAN20
inter f0/1-10
switchport mode access
switchport access vlan 10
no shutdown
inter f0/11-20
switchport mode access
switchport access vlan 20
no shutdown
inter f0/24
switchport mode trunk
```

Switch 2

```
vlan 10
name VLAN10
vlan 20
name VLAN20
inter f0/1-10
switchport mode access
switchport access vlan 10
no shutdown
```

```
inter f0/11-20
switchport mode access
switchport access vlan 20
no shutdown
inter f0/24
switchport mode trunk
```