



VLAN

chenshh

VLAN (802.1q)

Virtual LAN

Provide Abstraction for Physical LAN

Broadcast Controls

Security

Bandwidth Sharing

VLAN IDs

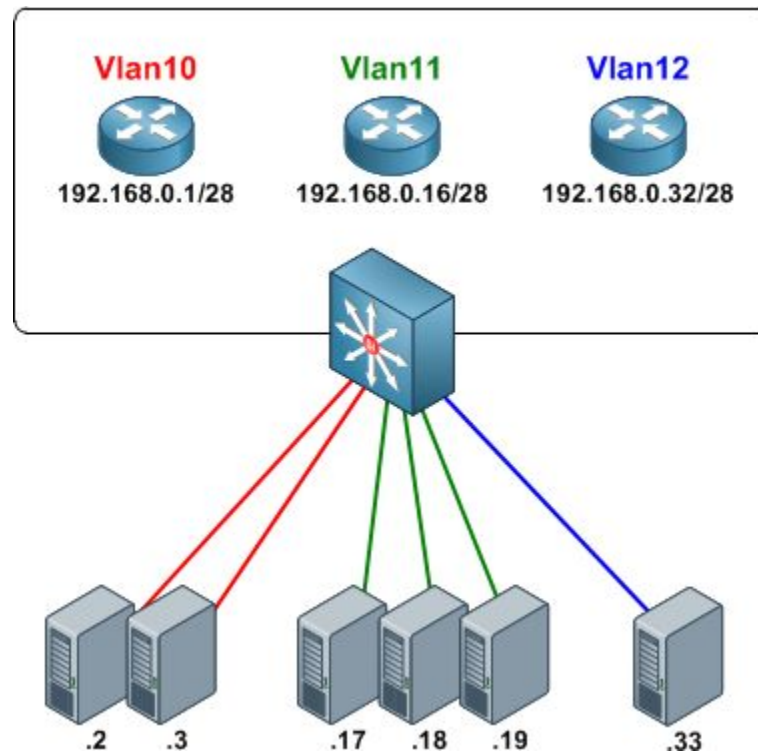
1~4094 (0x00,0xFF reserved)

1 is for Default VLAN

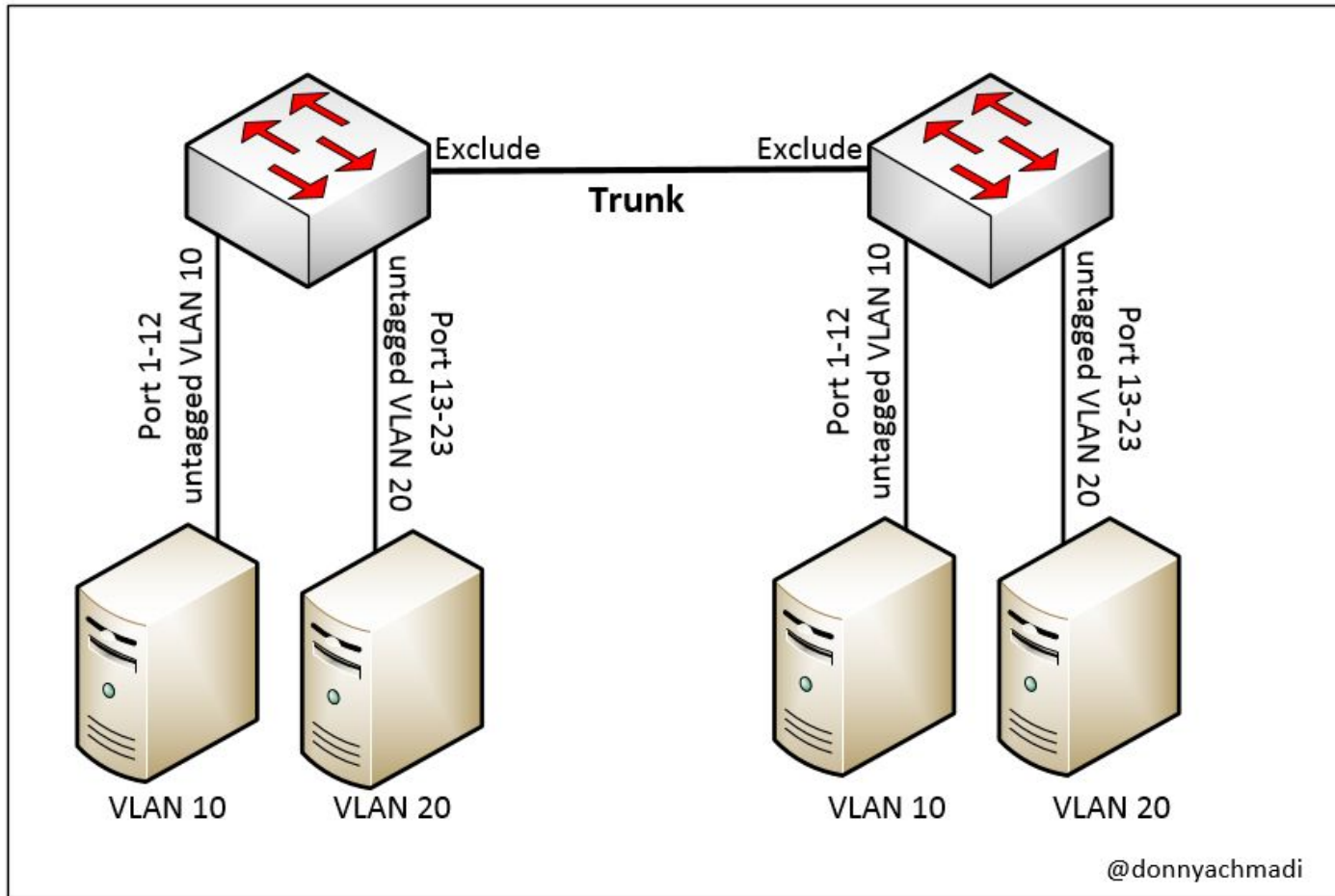
Enough for small networks

Huge Networks(Data Center)? VxLAN

VLAN (802.1q)



Trunk and Access (tag&untag)



VLAN on linux

```
#ip link add link wlp3s0 name wlp3s0.100 type vlan id 100
#ip a
2: wlp3s0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
   link/ether a4:5e:60:cd:0e:2f brd ff:ff:ff:ff:ff:ff
   inet 172.17.14.84/21 brd 172.17.15.255 scope global wlp3s0
       valid_lft forever preferred_lft forever
   inet6 fe80::a65e:60ff:fe2f:64 scope link
       valid_lft forever preferred_lft forever
3: wlp3s0.100@wlp3s0: <BROADCAST,MULTICAST> mtu 1500 qdisc noop state DOWN group default qlen 1000
   link/ether a4:5e:60:cd:0e:2f brd ff:ff:ff:ff:ff:ff
```