

VLAN

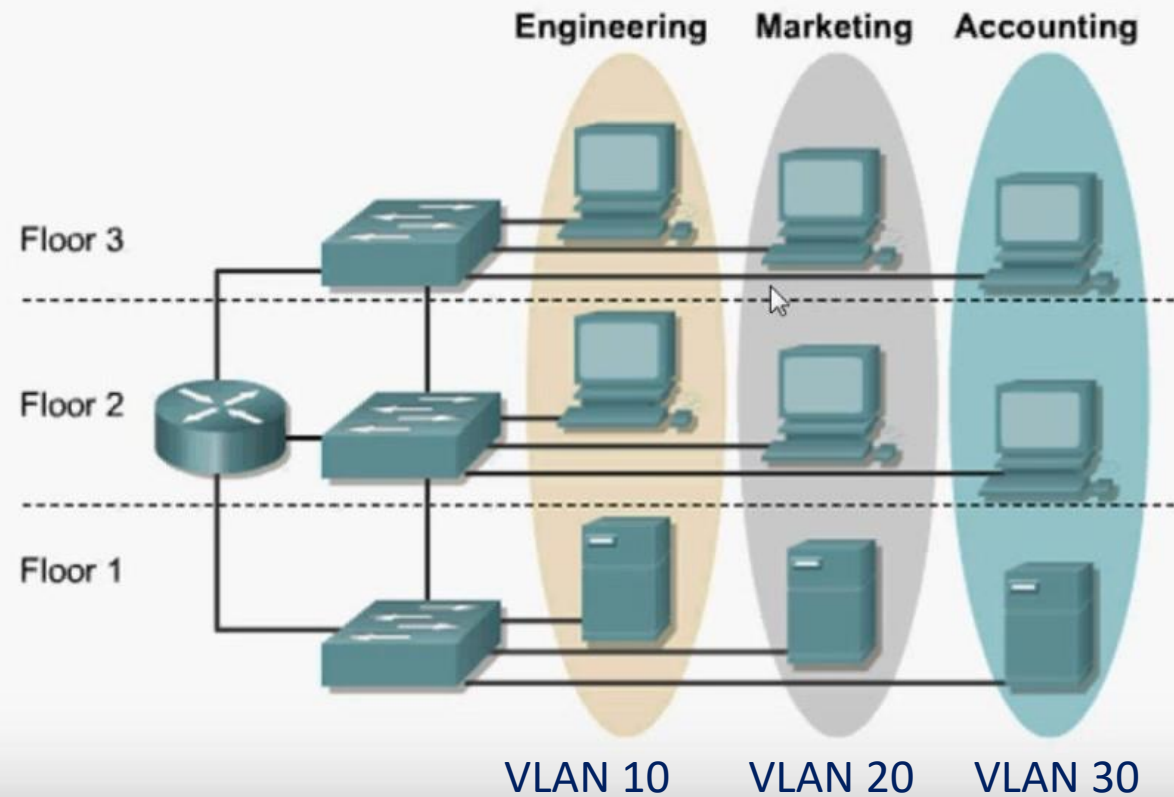
- VLAN is a group of devices on one or more LANs that are configured to communicate. It seems that they are attached to the same wire, when they are actually located on a number of different LAN segments. Because VLANs are based on logical instead of physical connections, they are extremely flexible.
- Using a switch we can create more than one network which depends upon the network.

VLAN

- Benefits and of VLAN : -
 - > Ease of management and troubleshooting.
 - > Minimization of errors
 - > Reduce number of routing table entries

VLAN

Vlan Implementation



VLAN

- In the previous figure the computers in VLAN 10 can communicate with themselves without using the router.
- But if they want to communicate with other devices in VLAN 20/30 they'll communicate via router.

VLAN

- Types of VLAN : -
 - > Static VLAN : -
Based on port.
 - > Dynamic VLAN : -
Based on MAC address

VLAN

- Assigning Access Ports to a VLAN :-

Via which ports the switch is connected to PC is called Access Port and with port is used for connecting other switch is called Trunk Port.

- Enter interface configuration mode

```
Switch#configure terminal
```

```
Switch(config)#interface fastEthernet 0/1
```

- Configure the interface as an access port

```
Switch(config-if)#switchport mode access
```

- Assign the access port to a VLAN

```
Switch(config-if)#switchport access vlan 1
```

VLAN

- How to configure a Trunk Port : -
- Enter interface configuration mode
`Switch(config)#interface FastEthernet0/4`
- Configure the interface as Trunk port
`Switch(config)#switchport mode trunk`



END OF DAY 9

NETWORKING (CCNA TRAINING)

INDIAN CYBER SECURITY SOLUTIONS

[HTTP://INDIANCYBERSECURITYSOLUTIONS.COM](http://indiancybersecuritysolutions.com) (CONTACT - +919831165046)