

VLAN

- **Vlan** stands for “Virtual Local Area Network”
- It is a broadcast domain that is partitioned into and isolated into in a computer network.
- The main purpose of Vlan is to break large broadcast domains into smaller broadcast domains. It is also used for improving the performance of a network or apply appropriate security features.
- There are 2 different subnets which cannot communicate with each other without routers.

Advantages:

- ✓ Solve Broadcast problem.
- ✓ Easy for administration.
- ✓ Enable for logical grouping.

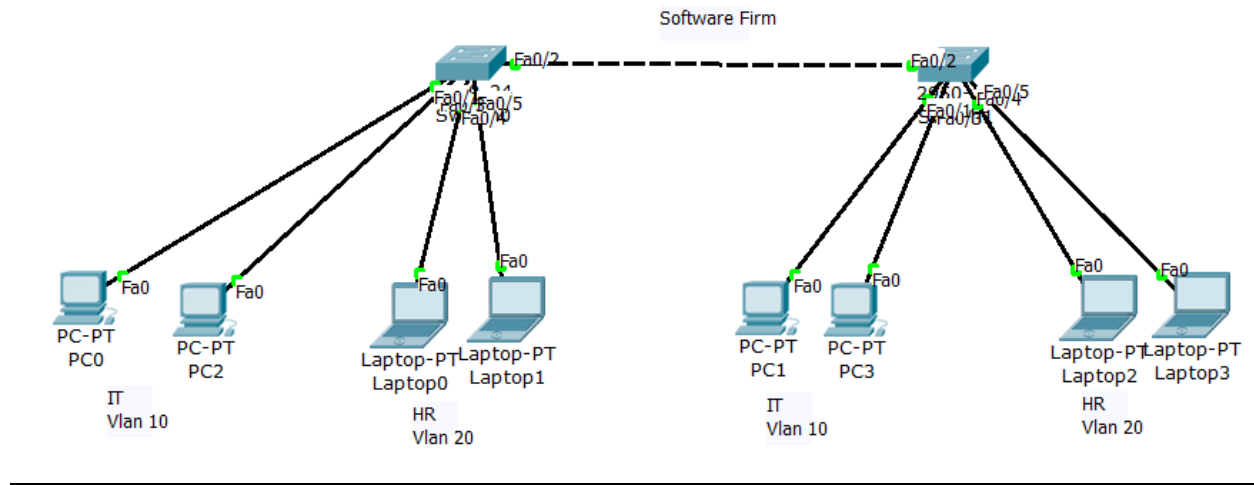
Types:

- ✓ **Static:** Manually assign Vlan to switch port.
- ✓ **Dynamic:** Automatic assign Vlan to switch port.

In Vlan connection, 2 types of switches supports for linking towards the network.

1. **Access Link** – Connection between Switch to Host.
2. **Trunk Link** – Connection between Switch to Switch

Example:



Here we see that a software firm has two departments: IT and HR. The IT and HR dept. are in same lan but has different network.

Still HR and IT will get access between them if we don't use VLAN as they are in same Lan which clearly notify in the above figure.

So, if we use track number of Vlan between them like Vlan10 for IT and Vlan20 for HR that will strong the network and also they cannot get access between them then.

Vlan Command:

We work on switch here in case of Vlan. In Switch CLI mode, we configure our command.

To check the status of Vlan in switch CLI Mode:

Switch# show vlan brief