

# SYSNET NOTES

*System And Networking Notes With Interview Questions*

## Static VLAN and dynamic VLAN

**Static VLANs** are also referred to as port-based VLANs. In static VLAN switch-ports must be manually assigned to a VLAN. Any device connecting to that switch-port(s) becomes a member of that VLAN. The client device is unaware that it belongs to a specific VLAN. Static VLAN is easy to configure.

In static VLAN, as a device enters the network, the device automatically assumes the VLAN of the port. If the user changes ports and needs access to the same VLAN, the network administrator must manually make a port-to-VLAN

In **dynamic VLAN** devices are automatically assigned into a VLAN based on its MAC address. This allows a client device to remain in the same VLAN, regardless of which switch port the device is attached to. VLAN membership of a user always remains the same even when he/she is moved to another location.

Dynamic VLANs are created through the use of software. With a VLAN Management Policy Server (VMPS), an administrator can assign switch ports to VLANs dynamically based on information such as the source MAC address of the device connected to the port or the username used to log onto that device. As a device enters the network, the switch queries a database for the VLAN membership of the port that device is connected to.

*Static VLAN assignment provides a simple way to assign VLAN to a port while Dynamic VLANs allow a great deal of flexibility and mobility for end users but require more administrative overhead.*