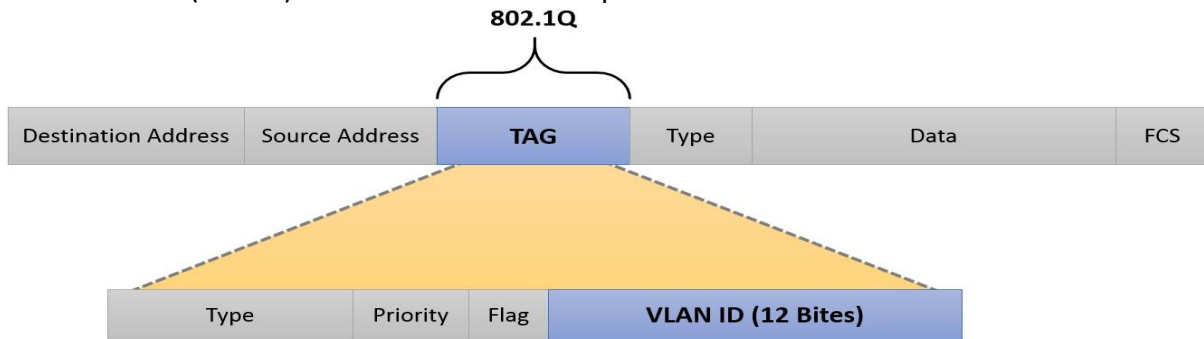


## Dot1Q (IEEE 802.1Q):

- o Dot1Q is IEEE 802.1Q, the standard for trunking encapsulation.
- o Common trunking protocol, standard and supported by many vendors.
- o On Cisco Switches, you configure IEEE 802.1Q (dot1q) on trunk ports.
- o Dot1Q allow tagged frames to be transported on a trunk link or ports.
- o Dot1Q allowing multiple VLANs to traverse through one link or ports.
- o IEEE 802.1Q (Dot1Q) extends the VLANs across the whole network.
- o IEEE 802.1Q (Dot1Q) trunks use VLAN 1 as the default native VLAN.
- o VLAN tagging is usually done based on the standard IEEE 802.1Q.
- o Tag includes info related to particular VLAN which frame belongs to.
- o Its indicate VLAN membership within a frame going across the network.
- o 802.1Q also adds a 4-byte tag into the Ethernet frame for VLAN tagging.
- o IEEE 802.1Q (Dot1Q) Supports both Normal and Extended range VLANs.
- o IEEE 802.1Q (Dot1Q) Inserts tag into existing Switches Ethernet header.
- o IEEE 802.1Q (Dot1Q) Understands the concept of a the Native VLAN.



Commands	Description
S1(config)# interface GigabitEthernet 0/0	Configure a VLAN trunk interface
S1(config-if)# switchport trunk encapsulation dot1q	Configure VLAN encapsulation
S1# show interfaces GigabitEthernet 0/0 switchport	Verify the trunk configuration
S1# show interfaces GigabitEthernet 0/0 trunk	Verify the trunk configuration
S1# show interfaces trunk	Verify the trunk configuration

