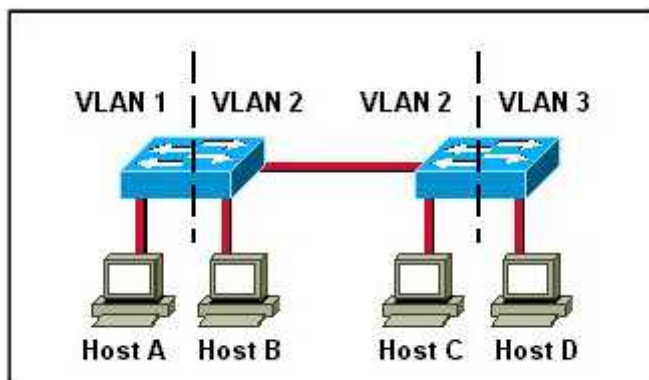


Chapter 3 - QUIZ – VLANs

- Switch1 and Switch2 are both configured with ports in the Marketing, Sales, Production, and Admin VLANs. Each VLAN contains 12 users. How many different subnetworks are needed to address VLANs?
 - 1
 - 2
 - 4
 - 8
 - 12
 - 24
- What mechanism is used to achieve the separation between different VLANs as they cross a trunk link?
 - VLAN tagging using 802.1Q protocol
 - VLAN tagging using 802.1p protocol
 - VLAN multiplexing
 - VLAN set as native VLAN.
- What are two options to consider when configuring a trunk between two switches? (Choose two.)
 - The **switchport nonegotiate** command must be configured for trunks that use DTP.
 - Port security cannot be configured on the trunk interfaces.
 - The native VLAN must be the same on both ends of the trunk.
 - Different encapsulation types can be configured on both ends of the trunk link.
 - Trunk ports can only be configured on the Gigabit Ethernet ports.
- A 12-port switch has been configured to support three VLANs named Sales, Marketing, and Finance. Each VLAN spans four ports on the switch. The network administrator has deleted the Marketing VLAN from the switch. What two statements describe the status of the ports associated with this VLAN? (Choose two.)
 - The ports are inactive.
 - The ports are administratively disabled.
 - The ports become trunks to carry data from all remaining VLAN's.
 - The ports remain part of the Marketing VLAN until reassigned to another VLAN.
 - The ports are released from the Marketing VLAN and automatically reassigned to VLAN 1.
- Which three statements are true about hosts configured in the same VLAN? (Choose three.)
 - Hosts in the same VLAN must be on the same IP subnet.
 - Hosts in different VLAN's can communicate with the aid of only the Layer 2 switch.
 - Hosts in the same VLAN share the same broadcast domain.
 - Hosts in the same VLAN share the same collision domain.
 - Hosts in the same VLAN comply with the same security policy.
 - Hosts in the same VLAN must be on the same physical segment.
- Refer to the exhibit. Host C is unable to transfer data because it does not have the MAC address of the destination host. If Host C sends out an ARP request, which of the other hosts will see this message?



- Host A
- Host B
- Hosts A and B
- Hosts A and D
- Hosts B and D
- Hosts A, B, and D

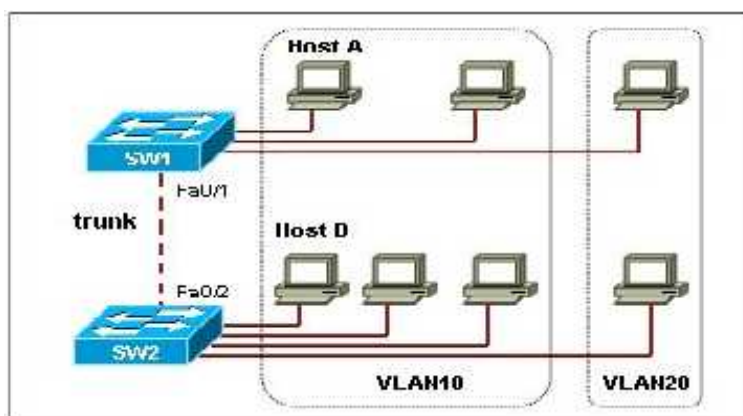
7. Match the characteristics listed on the left to the type of VLAN, static VLAN or dynamic VLAN.

- | | | |
|--|---|--------------|
| A. Each port is associated with a specific VLAN. | ➔ | Static VLAN |
| B. Manual configuration of port assignments required. | ➔ | Static VLAN |
| C. Ports work out their own configuration. | ➔ | Dynamic VLAN |
| D. Less administrative overhead when users are moved. | ➔ | Dynamic VLAN |
| E. Requires administrator interaction when users move. | ➔ | Static VLAN |
| F. Configuration based on database. | ➔ | Dynamic VLAN |

8. Match the VLAN related option listed on the left to the appropriate VLAN category:
Normal range VLAN, Extended range VLAN, VLAN 1

- | | | |
|---|---|---------------------|
| A. 1-1005 | ➔ | Normal range VLAN |
| B. 1006-4094 | ➔ | Extended range VLAN |
| C. Not learned by VT | ➔ | Extended range VLAN |
| D. Default management VLAN | ➔ | VLAN 1 |
| E. All ports are a member by default | ➔ | VLAN 1 |
| F. Contains reserved VLAN's for Token Ring and FDDI | ➔ | Normal range VLAN |

9. Refer to the exhibit. Brand new switches with empty CAM tables are interconnected via a trunk link. All hosts on both switches are configured with the VLAN memberships shown. How is a frame sent from Host A forwarded to Host B?



- A. Switch SW1 floods the message from Host A to all hosts attached to SW1.
 B. Switch SW1 floods the message from Host A to all hosts attached to both switches.
 C. Switch SW1 tags the frame with VLAN ID 10 and floods the frame to all hosts on switch SW2.
 D. Switch SW1 tags the frame with VLAN ID 10 and floods the frame to all hosts on switch SW2 that are members of VLAN10.

10. Match the command on the left to the associated description on the right. (Not all options are used.)

- | | | |
|---|---|---|
| A. show vlan | ➔ | Displays detailed information about all VLAN's on the switch. |
| B. show interface Fa0/1 switchport | ➔ | Displays VLAN information about a specific port. |
| C. show vlan id | ➔ | Displays information about a specific VLAN. |
| D. show vlan brief | ✗ | |
| E. show interface Fa0/1 | ✗ | |

11. Match the command on the left to the associated description on the right.

- | | | |
|---|---|--|
| A. switchport mode dynamic desirable | ➔ | Configures the port to negotiate a trunk. |
| B. switchport nonegotiate | ➔ | Configures the trunk to not send DTP packets. |
| C. switchport mode trunk | ➔ | Configures the port as a permanent 802 dot 1q trunk. |
| D. switchport mode access | ➔ | Disables trunk mode. |

12. Refer to the following configuration commands issued on Switch_A to answer the question:
 Host1 is connected to port F0/4 with an IP address of 192.168.1.22 /28.
 Host2 is connected to port F0/5 with an IP address of 192.168.1.33 /28. Host3 is connected to port F0/6 with an IP address of 192.168.1.30 /28.
 Select the three statements that describe the success of pinging from one host to another. (Choose three.)

```
Switch_A#configure terminal
Switch_A(config)#vlan 10
Switch_A(config-vlan)#name Accounting
Switch_A(config-vlan)#vlan 20
Switch_A(config-vlan)#name Marketing
Switch_A(config-vlan)#exit
Switch_A(config)#interface fastethernet 0/4
Switch_A(config-if)#switchport mode access
Switch_A(config-if)#switchport access vlan 10
Switch_A(config-if)#interface fastethernet 0/5
Switch_A(config-if)#switchport mode access
Switch_A(config-if)#switchport access vlan 20
Switch_A(config-if)#interface fastethernet 0/6
Switch_A(config-if)#switchport mode access
Switch_A(config-if)#switchport access vlan 10
```

- A. Host1 can ping Host2.
 - B. Host1 cannot ping Host2.
 - C. Host1 can ping Host3.
 - D. Host1 cannot ping Host3.
 - E. Host2 can ping Host3.
 - F. Host2 cannot ping Host3.
13. Match the term on the left to the associated description on the right.
- | | | |
|-------------------------|---|---|
| A. Trunk mode mismatch | ➔ | Both switches are configured to dynamic auto and will not negotiate a link. |
| B. Incorrect VLAN list | ➔ | Not all the VLAN's needed are allowed to transverse a trunk. |
| C. VLAN subnet conflict | ➔ | Two VLAN's are sharing the same address space. |
| D. Native VLAN mismatch | ➔ | The VLAN configured for untagged frames is not the same on two switches connected by a trunk. |
14. Match the VLAN port membership statement on the left to the correct option on the right.
- | | | |
|---|---|------------------------------|
| A. Port on a switch that maintains its assigned VLAN configuration until it is changed manually. | ➔ | Static VLAN port membership |
| B. Port on a switch using VMPS and associates a port to a VLAN based on the source MAC address. | ➔ | Dynamic VLAN port membership |
| C. Access port attached to an IP phone, configured to use one VLAN for voice traffic and another VLAN for data traffic. | ➔ | Voice VLAN port membership |
| D. Port on a switch that can change the manually assigned VLAN configuration dynamically. | ✗ | |
| E. Port on a switch using VMPS and associates a port to a VLAN based on the destination MAC address. | ✗ | |
| D. Access port attached to a PC, configured to use one VLAN for voice traffic and another VLAN for data traffic. | ✗ | |