

Lab 3.1.1.1: VLAN Planning

Objective

Implement VLANs to segment a small- to medium-sized network. This activity focuses students' thoughts on how VLANs are designed. Groups of two or three students should be created to complete this class activity.

Scenario

ABC Co. Inc., hired you to design a VLAN switched network for their small- to medium- sized business. The company business rent a two floors space on a high-rise building. The following elements need VLAN consideration and access for planning purposes:

- Management
- Finance
- Sales
- Human Resources
- Network administrator
- General visitors to your business location

You have two Cisco 2900-24PS switches. Use a word processing software program to design your VLAN-switched network scheme.

Section 1 of your design should include the regular names of your departments, suggested VLAN names and numbers, and which switch ports would be assigned to each VLAN.

Department	Assigned VLAN Name and Number	Switchport Number
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Section 2 of your design should list how security would be planned for this switched network. Once your VLAN plan is finished, complete the reflection questions from this activity.

Save your work. Be able to explain and discuss your VLAN design with another group or with the class.

Required Resources

Word processing program

Reflection

1. What criteria did you use for assigning ports to the VLANs?

2. How could these users access your network if the switches were not physically available to general users via direct connection?

3. Could you reduce the number of switch ports assigned for general users if you used another device to connect them to the VLAN network switch? What would be affected?