Switching to Local-Network Channels

Objective

Configure routing between VLANs in a small to medium-sized business network.

Scenario

You work for a small- to medium-sized business. As the network administrator, you are responsible for ensuring that your network operates efficiently and securely.

Several years ago, you created VLANs on your only switch for two of your departments, Accounting and Sales. As the business has grown, it has become apparent that sometimes these two departments must share company files and network resources.

You discuss this scenario with network administrators in a few branches of your company. They tell you to consider using inter-VLAN routing.

Research the concept of inter-VLAN routing. Design a simple presentation to show your manager how you would use inter-VLAN routing to allow the Accounting and Sales departments to remain separate, but share company files and network resources.

Resources

- Internet connection
- Software presentation program

Directions

Work with a partner to complete this activity.

Step 1:   Use your Internet connection to research how inter-VLANs operate.

a. Use a search engine to locate a few basic articles, or short videos, that discuss the concept of inter-VLAN routing.

b. Read the articles, or view the videos, and take notes about how VLANs operate.

c. Make sure you record where the information was found so that you can include the sources in Step 2 of this activity.

Step 2:   Create a presentation for your manager.

a. Design a small presentation for your manager listing how you would set up an inter-VLAN routing-based network for your small- to medium-sized business, using no more than five slides.

b. Include slides which focus on:

1) A synopsis of reasons you would change your current network to an inter-VLAN-switched network. Restate what you are trying to accomplish in your design proposal.

2) A basic, easily understood definition and benefits of using inter-VLAN routing.

3) A graphic depicting how you would modify your current network to use inter-VLAN routing.

   a) Your current network utilizes one Cisco 2960 switch and one Cisco 1941 series router.

   b) Funding for new equipment is not negotiable.

4) How inter-VLANs could continue to assist with network traffic yet allow departments to communicate with each other.

5) How inter-VLAN routing would scale for the future.

c. Make sure you quote the sources upon which you are basing your presentation.

Step 3:   Present your proposal to the entire class.