

CCNA Discovery

Designing and Supporting Computer Networks

Cisco Networking Academy®

# Lab 6.2.6 Diagramming the Network

# Stadium Network FilmCompany Enterprise Edge2 Network Internet Frame Relay DSL ISP4 FC-CPE-1 FC-ASW-1 FC-ASW-2 Servers Servers 11 ProductionSW 12 **Building F**

Proposed FilmCompany Physical Layout

# **Objective**

 Diagram selected portions of the new FilmCompany network, including devices, device names, and IP addressing.

## 640-802 CCNA Exam Objective

This lab contains skills that relate to the following CCNA exam objective:

Describe security recommended practices including initial steps to secure network devices.

#### **Expected Results and Success Criteria**

Before starting this lab, read through the tasks that you are expected to perform. What do you expect the result of performing these tasks will be?			

## **Background / Preparation**

Network device names are sometimes assigned without a unified plan. Without a good network naming scheme, the network can become difficult to manage.

However, it must also be recognized that device names that display their function and location can present a security issue.

In this lab, you will develop a naming convention and apply labels using this convention to selected devices. You should use the planning information from the previous three labs to complete this lab. The naming scheme will be documented in the topology above and in the table at the end of the lab.

#### Step 1: Identify the appropriate VLAN

In the previous labs, you identified VLANs and subnets to be used in the FilmCompany network expansion. For each device listed in the table in the final section of this lab, assign each host the appropriate VLAN based on its description. Record these VLAN assignments in the third column of the table in Step 5.

#### Step 2: Assign addresses to the devices

In the previous lab, an address range was established for each subnet and VLAN. Using these established ranges and the VLAN assignments to the devices in the previous step, assign a host address to each of the selected hosts. Record this information in the last column of the table in Step 5 of this lab.

#### Step 3: Define the codes for device naming

From the device information, develop and apply a naming convention for the hosts.

A good naming scheme follows these guidelines:

- Keep the names as short as possible; using fewer than twelve characters is recommended.
- Indicate the device type, purpose, and location with codes, rather than words or abbreviations.
- Maintain a consistent scheme. Consistent naming makes it easier to sort and report on the devices, and to set up management systems.
- Document the names in the IT department files and on the network topology diagrams.
- Avoid names that make it easy to find protected resources.

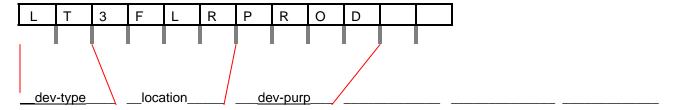
For each naming criteria, assign a code for type. You will use these codes in different combinations to create device names. In the tables below, create codes for the elements of the device names. Use as many or as few codes as needed.

Device Type	Type code	Device Purpose	Purpose code	Device Location	Location code

Device Type	Type code	Device Purpose	Purpose code	Device Location	Location code

### Step 4: Establish the naming convention

In the spaces below, indicate the order and the number of letters to be used in the device naming. Again, use as many or as few letters as necessary. List the criteria in the blanks and draw a line to indicate the number of letters used. You may also choose to use hyphens (-) or underscores (\_) to separate fields.



### Step 5: Apply a naming convention

For each of the twelve devices shown in this table, apply the naming convention. Then add these device names in the appropriate boxes in the topology at the beginning of the lab.

Number	Device Name	VLAN	Description	IP Address
1			Server for capturing raw video feeds from stadium	
2			Server for storing finished (post production) video	
3			Public web server for on demand video access	
4			Branch manager's computer	
5			Live event production worker (switched)	
6			Human resource clerk	
7			Payroll Manager	
8			Live event mobile worker (audio producer)	
9			Live event mobile worker (camera coordinator)	
10			Receptionist's computer	
11			Financial Manager's computer	
12			Information Technology manager's computer	

Important: File this information in your design portfolio; it is an essential part of your design documentation.

Re	eflection / Challenge
	If you developed additional criteria to add to the naming convention, discuss why these criteria were used. If you did not use additional criteria, discuss what other criteria might need to be used and why they would be used.