

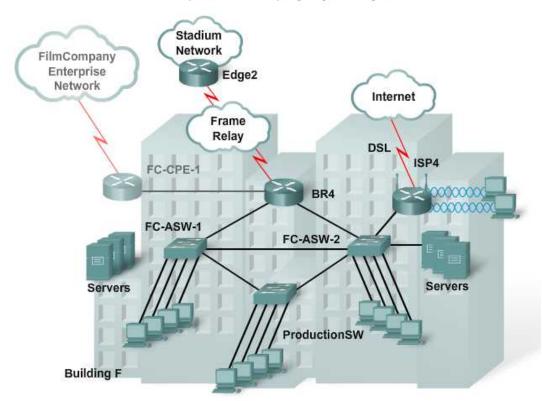
CCNA Discovery

Designing and Supporting Computer Networks



# Lab 5.1.5.2 Identifying Security Requirements

#### Proposed FilmCompany Physical Layout



### **Objectives**

- Research different security options and make a recommendation.
- Select an appropriate design strategy to meet the requirements.

## 640-802 CCNA Exam Objectives

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

- Explain general methods to mitigate common security threats to network devices, hosts, and applications.
- Describe recommended security 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?

How is an understanding of the potential security threats beneficial to the network design?
How will a network administrator know if the security recommendations are adequate?
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## **Background / Preparation**

FilmCompany is an expanding, small advertising company moving into interactive advertising media, including video presentations. This company has just been awarded a large video support contract by the StadiumCompany. With this new contract, FilmCompany expects to see their business grow approximately 70 percent.

To facilitate this growth, the FilmCompany has decided to significantly upgrade its data network. You have the role of network design consultant. Your job is to develop network design and project documents for the FilmCompany that will meet the requirements of this upgrade.

This lab is one of a series of labs that explore the FilmCompany existing network and its upgrade requirements.

## Step 1: Identify potential security weaknesses within the FilmCompany topology

- Use word processing software to create a new document called "Security Strategies."
- b. Using the documents created in previous labs and the existing topology; identify potential weaknesses in the existing design.
- Create a list of recommended security practices that should be employed in the FilmCompany network.
- d. Save your Security Strategies document.

#### Step 2: Create a security practices list

- a. Using the list developed from the brainstorming session, create a finalized list of recommended security practices for the FilmCompany.
- b. Identify what devices and software will need to be purchased to facilitate the recommended security practices.
- c. Save your Security Strategies document.

### Step 3: Create a security strategy

- a. Use word processing software to create an addition to the Security Strategies document.
- b. Using the list of identified equipment, develop a chart of costs and features of the recommended devices.
- Using the list of identified software needed, develop a chart of costs and features of the recommended software.
- d. Save your Security Strategies document.

## Step 4: Create a security design

- a. Use word processing software to create an addition to the Securities Strategies document.
- b. Identify which types of access to the network should be secured by incorporating VPNs.
- c. Identify methods for controlling physical security at the FilmCompany building and at the stadium.
- d. Identify potential ACLs that can be created to filter unwanted traffic from entering the network.
- e. Identify methods for securing the wireless Access Points. Determine the best method for the FilmCompany network.
- f. Save your Security Strategies document.

### Step 5: Reflection

The creation of a security strategy creates many challenges for the designer. What were a few of the more difficult challenges you encountered?
Consider and discuss the identified challenges. Do all of the proposed strategies accomplish the task the same way?
Would one be less expensive or less time-consuming than the other?
How could implementing a physical security plan into an existing company be difficult?