# Make Mine Wireless (Instructor Version)

Instructor Note: Red font color or Gray highlights indicate text that appears in the instructor copy only.

### **Objective**

Explain how wireless LAN components are deployed in a small- to medium-sized business.

Instructor Notes: This activity can be completed individually, in small groups, or as a class.

#### Scenario

As the network administrator for your small- to medium-sized business, you realize that your wireless network needs updating, both inside and outside of your building. Therefore, you decide to research how other businesses and educational and community groups set up their WLANs for better access to their employees and clients.

To research this topic, you visit the <u>Customer Case Studies and Research</u> website to see how other businesses use wireless technology. After viewing a few of the videos, or reading some of the case study PDFs, you decide to select two to show to your CEO to support upgrading to a more robust wireless solution for your company.

To complete this class modeling activity, open the accompanying PDF for further instructions on how to proceed.

#### Resources

Internet access to the WWW

### Step 1: Open your browser and the URL specified for this activity.

- a. Choose two case studies about wireless LAN upgrades from the list to read, located on the <a href="Customer Case Studies and Research">Customer Case Studies and Research</a> website.
- b. As you view the media or read the PDFs, write notes for the following categories:
  - 1) The WLAN *challenge* that the company sought to mitigate
  - The solution that was found to the challenge
  - 3) The *results* that were gained by WLAN updates

#### Step 2: Share your findings.

- a. Share your findings with the class or a classmate.
- b. Play the media or show the PDF for one of the case studies you chose from the URL page.
- c. In your own words, explain the challenge, solution, and results learned from the media or PDF.
- d. Explain how the results you found could be applied to improve your company's network.

### **Instructor Suggested Example**

### **Barrick Gold Corporation**

### Challenge

Provide continuous access and updates to the Caterpillar Minestar software for fleet management, drilling and blasting, loading, hauling, dozing, and truck management.

#### **Solutions**

Created an outdoor mesh wireless network, deployed on solar-powered trailers across the mine and inside the mining pit.

#### **Results**

- Closely monitored dispatch process and managed operational efficiency.
- Improved productivity and safety.
- Cut costs by implementing single network for communications and data sharing of new applications.

## Identify elements of the model that map to IT-related content:

- Wireless topologies
- Inside-building wireless solutions
- Outside-building wireless solutions
- Wireless LAN devices
- Wireless LAN communication