

# 1. CyberCIEGE Physical Security

CyberCIEGE is an information assurance (IA) training tool that illustrates computer and network security principles through simulation and resource management trade-offs. CyberCIEGE players construct computer networks and make choices affecting the ability of these networks and the virtual users to protect valuable assets from attack by both vandals and well-motivated professionals.

The CyberCIEGE “Physical Security” scenario is intended to introduce players to CyberCIEGE zones and methods of physically protecting assets. The scenario also introduces players to assets having a high attacker motive.

As with all CyberCIEGE scenarios, students are encouraged to explore the effects of “wrong” choices as well as trying to select the correct choices. Plan on playing the scenario several times before finally going through it making what you believe are the correct choices.

This scenario explores the following CyberCIEGE concepts:

- Understanding the meaning of security labels (e.g., “SECRET”) in terms of the value of the asset to the enterprise and the value of the asset to attackers.
- Ensuring suitable policies and protection mechanisms are in place before going operational (i.e., before pressing the play  button).
- Physically limiting access to assets to those users who are cleared to access the asset based on its security label.
- Enforcing physical access limitations using mechanisms having a strength that is consistent with the asset attacker motive.
- Within some environments, not all users are cleared to access all assets, and within such environments steps should be taken to protect assets from insufficiently cleared users.
- There are zones that are within the entire site. These zones can have stricter access restrictions than the site.

## 1.1 Preparation

Open the CyberCIEGE icon from the desktop or the CyberCIEGE folder. This will start the “Campaign Player” seen in figure 1.



Figure 1: Select Physical Security and Click Play

Select the “Physical Security” scenario and then click the “Play” button.

## 1.2 Play

### 1.2.1 Fly Around and Explore the Office

- Click the OK button in the initial briefing.
- Press the “k” key to view keyboard shortcuts

- Pan around the office. Zoom in and zoom out.
- Press the “Tab” key several times to iterate through a series of birds-eye views.

### **1.2.2 Read the GAME Briefing and View Objectives**

- Follow the pop-up help to view the briefing and the objectives
- Then return to the GAME screen receive advice from one of your users

### **1.2.3 Establish Physical Security to Protect SECRET Assets**

- In the ZONE screen, follow the pop-up help to limit access to the site to users having a SECRET clearance
- Go to the ASSET screen and click on the SECRET label to see what kind of protection is needed by such assets.
- Purchase enough physical security (per the help tip) to achieve this amount of security.
- Return to the OFFICE screen and press the play button per the pop-up help

### **1.2.4 Establish Physical Security to Protect TOP SECRET Assets**

- The game will automatically pause when Jerry begins work on TOP SECRET assets
- Check your objectives and go to the ASSETS screen, select “Intel Summary” and then click on the TOP SECRET label to learn what kind of protection is needed by this asset.
- Go to the ZONE screen and click on the floor plan to find a suitable zone for protecting TOP SECRET assets. Purchase enough security for this zone and limit access to users who are cleared to TOP SECRET.
- Drag Jerry and his computer to the desk in the selected zone.
- Press the play button to go “operational” again.

## **1.3 Clean Up**

Exit the scenario by clicking the “Quit” button in the GAME screen.

Note you have saved versions of the game from each completed phase. You can select and restart from any of them. Also, during the game you can select “Save” from the Game tab and save the current state for future play.

# **END OF LAB**