Lesson 13

Cyber Attacks Part 2 - Attack & Defend

Lesson Overview

This lesson takes a deeper dive into the evolving cybersecurity attack and defense methods. The chapter reading describes recent trends in attack methods including ransomware, customized malware, and DDoS attacks - as well as trends in defense methods for mobile devices, multi-factor authentication, machine learning, and honey pots. A case study involving a large company with significant impact highlights the need for defense in depth. The supplemental videos provide additional details on various types of cyber attacks including ransomware, malware, DNS attack, and DDoS.

Learning Objectives

- Identify and describe various types of cyber attacks including ransomware, malware, DNS, and DDoS
- Explain how attack and defense methods are evolving
- Analyze a case study that highlights how human and technical factors can combine to create devastating consequences

Lesson Material

📖 CFB Reading: Chapter 9 - Evolving Attack and Defense Methods (p. 103-116)

📖 CFB Reading: Chapter 10 - Case Study - Sony 2014 (p. 117-122)

Watch: DDoS Attack Explained [5:42]

Watch: Professor Messer videos on:
- An Overview of Malware [4:01]
- DNS Attacks [8:19]

Student Assignment

- Attack & Defend
- Discussion Prompt #4

Teacher Resources

- Grading Rubric
- Answer Key