Introduction to Distributed Denial of Service (DDoS) Attacks

Course Information

Jim is a seasoned Network Engineer at any given business. He is responsible for the corporate network and the availability of company online services. Suddenly, Jim is flooded with urgent emails and phone calls telling him that all services are down, and the network has been overrun with anomalous traffic! Sounds like this company is being hit with a Distributed Denial of Service (DDoS) attack!

This course pulls back the curtain to show you a glimpse of the dark world of DDoS attacks. What are they? How do you know when you are being attacked? What can you do if you find yourself the target of a DDoS attack? Through this course you will discover the different types of DDoS attacks in use today and their characteristics. You will also get a taste of some of the actions that you can take to mitigate these attacks.

If you see a little of yourself in Jim, and you are new to the network security game, this course is for you! Learn what you are up against and how to start your path towards dominating the DDoS game.

Course Objectives

• Describe what a DDoS attack is and why you should care about them
• List the four main types of DDoS attacks and their characteristics
• Choose the best mitigation strategy for simulated DDoS attack scenarios
• Review a list of additional DDoS attack information resources
Course Syllabus:

Module 1: Facing a DDoS Attack
- What is a DDoS Attack (and why do I care?)
- Clues of an attack
- Verifying your traffic patterns
- Gathering information
- Call to action!

Module 2: Types of DDoS Attacks
- Volumetric attacks
- TCP state exhaustion attacks
- Application layer attacks
- Multi-vector attacks

Module 3: Mitigating Attacks
- Using ACLs
- Blackhole malicious traffic
- Using Flow Specification (FlowSpec)
- Diverting malicious traffic
- Testing your skills – DDoS attack scenarios

Module 4: Continuing Your Learning
- Arbor Threat Horizon / Digital Attack Map
- Semi-Annual Worldwide Infrastructure Security Report (WISR)
- ASERT Threat Intelligence Bulletin / Blog
- Arbor Security Academy Training