

## **Lab - Visualizing the Black Hats**

### **Objectives**

**Research and analyze cyber security incidents.**

**In this lab, we will create three hypothetical cyber attackers, each with an organization, an attack, a motive. In addition, suggest a method by which an organization could prevent or mitigate the attack**

### **Scenario 1:**

#### **Who is the attacker?**

Attacker is from a hacking group specializing in DDOS attacks.

#### **What organization or group is the attacker associated with, if any?**

The attacker is associated from a hacking group where all the group are trained or skilled specially for performing DDOS attacks.

#### **What is the motive of the attacker?**

Their motive is to extort money from businesses by threatening to continue the attack unless a ransom is paid.

#### **What method of attack was used?**

They have developed a network of compromised computers and use them to flood target websites or online services with overwhelming traffic, rendering them inaccessible to legitimate users

#### **What was the target and vulnerability used against the business?**

They exploited the vulnerabilities in their Intrusion Detection System (IDEs) and firewalls which will filter or monitors the incoming requests.

#### **How could this attack be prevented or mitigated?**

This attack can be prevented or mitigated by applying new set of rules on the incoming traffic and monitoring the threats and requests and processing accordingly.

### **Scenario 2:**

#### **Who is the attacker?**

Attacker is from a state sponsored hacking group.

#### **What organization/group is the attacker associated with?**

The attacker is from a organization which is a state-sponsored hacking group focused on corporate espionage.

**What is the motive of the attacker?**

Their motive is to gain a competitive advantage by providing the stolen information to rival companies or state entities, thereby undermining their targets and potentially disrupting industries.

**What method of attack was used?**

Method of attack used was Advanced Persistent Threat (APT)

**What was the target and vulnerability used against the business?**

They employ sophisticated techniques, including zero-day exploits and social engineering, to gain unauthorized access to target organizations' networks

**How could this attack be prevented or mitigated?**

To prevent or mitigate this attack company or businesses could have applied more principles/rules and maintaining security principles and strong authentication needed.

**Scenario 3:****Who is the attacker?**

Attacker is from a group of Hacktivism.

**What organization/group is the attacker associated with?**

Attacker is from a organization which is a loosely affiliated group of hackers with a strong focus on hacktivism

**What is the motive of the attacker?**

Their motive is to expose wrongdoing, raise awareness about social justice issues, and exert pressure on their targets to change their practices.

**What method of attack was used?**

Hacktivist groups may use botnets or other techniques to launch coordinated DDoS attacks, disrupting the target's operations and causing inconvenience or financial loss

**What was the target and vulnerability used against the business?**

They target organizations or individuals whom they perceive as engaging in unethical activities or contributing to societal harm.

**How could this attack be prevented or mitigated?**

Strong authentication and access controls, Website security and DDOS mitigation