## Overview



In this activity, you will create an incident report using the knowledge you’ve gained about networks throughout this course to analyze a network incident. You will analyze the situation using the National Institute of Standards and Technology's Cybersecurity Framework (NIST CSF). The CSF is a voluntary framework that consists of standards, guidelines, and best practices to manage cybersecurity risk. Creating a quality cybersecurity incident report and applying the CSF can demonstrate a proactive approach to security, improving communication and transparency with stakeholders, and improve security practices within your organization.

## Scenario



You are a cybersecurity analyst working for a multimedia company that offers web design services, graphic design, and social media marketing solutions to small businesses. Your organization recently experienced a DDoS attack, which compromised the internal network for two hours until it was resolved.

During the attack, your organization’s network services suddenly stopped responding due to an incoming flood of ICMP packets. Normal internal network traffic could not access any network resources. The incident management team responded by blocking incoming ICMP packets, stopping all non-critical network services offline, and restoring critical network services.

The company’s cybersecurity team then investigated the security event. They found that a malicious actor had sent a flood of ICMP pings into the company’s network through an unconfigured firewall. This vulnerability allowed the malicious attacker to overwhelm the company’s network through a distributed denial of service (DDoS) attack.

To address this security event, the network security team implemented:

* A new firewall rule to limit the rate of incoming ICMP packets
* Source IP address verification on the firewall to check for spoofed IP addresses on incoming ICMP packets
* Network monitoring software to detect abnormal traffic patterns
* An IDS/IPS system to filter out some ICMP traffic based on suspicious characteristics