



Incident report analysis

Summary	DDoS using ICMP Flooding
Identify	External malicious actor exploiting an unconfigured firewall.
Protect	Immediate Action Plan: 1. Firewall Configuration: <ul style="list-style-type: none">○ Implement rate-limiting rules for ICMP traffic to prevent flooding.○ Enable source IP address verification to detect and block spoofed IP addresses.
Detect	Monitoring and Detection Improvements: 1. Network Monitoring Software: <ul style="list-style-type: none">○ Deploy advanced network monitoring tools to detect abnormal traffic patterns in real-time. 2. Intrusion Detection and Prevention Systems (IDS/IPS): <ul style="list-style-type: none">○ Use IDS/IPS to filter out suspicious ICMP traffic and other malicious activity. 3. Log Analysis: <ul style="list-style-type: none">○ Implement a Security Information and Event Management (SIEM) system to analyze network logs and identify potential threats. 4. User Activity Monitoring: <ul style="list-style-type: none">○ Track authorized and unauthorized user activity to detect

	<p>unusual behavior.</p> <hr/>
Respond	<ol style="list-style-type: none"> 1. Containment: <ul style="list-style-type: none"> ○ Immediately isolate affected systems to prevent the spread of the attack. ○ Block malicious traffic at the firewall level. 2. Neutralization: <ul style="list-style-type: none"> ○ Disable non-critical services to restore critical operations. ○ Use IDS/IPS to filter out malicious traffic. 3. Analysis: <ul style="list-style-type: none"> ○ Collect and analyze network logs, firewall logs, and IDS/IPS alerts to understand the attack vector and impact. ○ Document the incident for future reference and improvement. 4. Improvement: <ul style="list-style-type: none"> ○ Update incident response procedures based on lessons learned. ○ Conduct post-incident reviews to identify gaps in the response process.
Recover	<p>Recovery Steps:</p> <ol style="list-style-type: none"> 1. System Restoration: <ul style="list-style-type: none"> ○ Restore affected systems to normal operation using backups and redundancy measures. 2. Data Recovery: <ul style="list-style-type: none"> ○ Ensure all critical data is recovered and verified for integrity. 3. Process Improvement: <ul style="list-style-type: none"> ○ Update recovery processes to reduce downtime in future incidents.

	<ul style="list-style-type: none">○ Implement automated backup and recovery solutions. <p>4. Communication:</p> <ul style="list-style-type: none">○ Notify stakeholders of the incident and the steps taken to resolve it.○ Provide regular updates on recovery progress. <hr/>
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Reflections/Notes:

- The incident highlighted the importance of proper firewall configuration and network monitoring.
- Implementing rate-limiting rules and IP address verification significantly reduced the risk of similar attacks.
- Regular security audits and employee training are essential to maintaining a strong security posture.
- The organization should invest in advanced monitoring tools and automated response systems to improve detection and recovery times.