



# Incident report analysis

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Summary	<p>Our organization recently experienced a <b>Distributed Denial-of-Service (DDoS) attack</b>, which compromised the internal network for <b>two hours</b> before it was mitigated. During the attack, network services became unresponsive due to an overwhelming flood of <b>ICMP packets</b>, preventing normal internal traffic from accessing network resources.</p> <p>The <b>incident management team</b> responded by:</p> <ul style="list-style-type: none"><li>• Blocking incoming <b>ICMP packets</b></li><li>• Taking <b>non-critical network services</b> offline</li><li>• Restoring <b>critical network services</b></li></ul> <p>A subsequent investigation revealed that the <b>firewall was unconfigured</b>, allowing the malicious actor to exploit this vulnerability and flood the network with traffic.</p>
Identify	<p>The <b>incident response team</b> conducted an audit to assess system vulnerabilities. They identified that:</p> <ul style="list-style-type: none"><li>• The <b>firewall was not configured</b> to limit the rate of incoming ICMP packets.</li><li>• The <b>internal network</b> was <b>overwhelmed and became unresponsive</b> due to the attack.</li></ul>

Protect	<p>To enhance security and prevent future occurrences, the <b>network security team</b> implemented:</p> <ul style="list-style-type: none"> <li>• <b>Firewall rules to limit ICMP packet rates.</b></li> <li>• <b>Source IP address verification</b> to detect and block <b>spoofed ICMP packets.</b></li> <li>• <b>Network monitoring software</b> to identify <b>abnormal traffic patterns.</b></li> <li>• An <b>Intrusion Detection/Prevention System (IDS/IPS)</b> to filter ICMP traffic based on suspicious characteristics.</li> </ul>
Detect	<p>To ensure early detection of unauthorized access attempts in the future, the cybersecurity team will:</p> <ul style="list-style-type: none"> <li>• Utilize <b>network monitoring software</b> to identify anomalies.</li> <li>• Deploy an <b>IDS/IPS system</b> to detect <b>suspicious network traffic patterns.</b></li> </ul>
Respond	<p>The <b>incident management team</b> took the following steps to mitigate the attack:</p> <ul style="list-style-type: none"> <li>• <b>Blocked all ICMP packets</b> to stop the ongoing DDoS attack.</li> <li>• <b>Took non-critical services offline</b> to prevent further damage.</li> <li>• <b>Restored critical services</b> within <b>two hours</b> after the initial outage.</li> </ul>
Recover	<p>The organization successfully recovered by:</p> <ul style="list-style-type: none"> <li>• <b>Configuring the firewall</b> to limit ICMP packet rates.</li> <li>• Implementing <b>Source IP address verification</b> to block <b>spoofed traffic.</b></li> <li>• Deploying <b>network monitoring software and IDS/IPS</b> for real-time</li> </ul>

	<p>detection and prevention.</p> <ul style="list-style-type: none"><li>• Ensuring the <b>incident response team is better prepared</b> for future attacks.</li></ul>
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