

## Enhancing Security in the Shipping Industry with Vulnerability Management

**Client:** A global shipping company providing cargo transportation and logistics services.  
**Services Provided:** Container shipping, freight forwarding, and supply chain management.

### Business Challenge

The shipping company faced several challenges in managing and securing its IT infrastructure, including:

- **Cyber Threats:** Increasing frequency and sophistication of cyber attacks targeting the shipping industry.
- **Vulnerability Management:** Identifying and mitigating vulnerabilities in a complex and distributed IT environment.
- **Compliance:** Meeting industry-specific regulatory requirements such as the International Maritime Organization (IMO) guidelines.

### Solution

- Signiminds implemented a comprehensive Vulnerability Management solution tailored to the shipping company's needs. The solution included the following components:
- **Vulnerability Assessment:** Conducted regular vulnerability scans across the entire IT infrastructure. Identified and prioritized vulnerabilities based on risk and impact.
- **Patch Management:** Implemented automated patch management processes to ensure timely updates and fixes. Coordinated with IT teams to minimize downtime and disruption.
- **Threat Intelligence:** Integrated threat intelligence feeds to stay updated on emerging threats and vulnerabilities. Used threat intelligence to enhance vulnerability prioritization and response.
- **Security Information and Event Management (SIEM):** Deployed a SIEM solution to monitor and analyze security events in real-time. Automated incident detection and response to quickly address potential threats.
- **Compliance Management:** Ensured compliance with IMO guidelines and other relevant regulations. Conducted regular audits and assessments to maintain compliance.

### Technology and Tools Stack

- **Vulnerability Assessment:** Tenable Nessus
- **Patch Management:** Microsoft System Center Configuration Manager (SCCM)
- **Threat Intelligence:** Recorded Future
- **Security Information and Event Management (SIEM):** Splunk
- **Compliance Management:** Qualys Compliance Suite
- **Cloud Integration:** AWS Security Hub for centralized security management

### Results Data

- **Number of Critical Vulnerabilities:**
  - Before Implementation: 150 critical vulnerabilities
  - After Implementation: 30 critical vulnerabilities
  - Reduction: 80%
- **Patch Compliance Rates:**
  - Before Implementation: 60%
  - After Implementation: 95%
  - Improvement: 35%
- **Time to Apply Critical Patches:**
  - Before Implementation: 7 days
  - After Implementation: 24 hours
  - Reduction: 86%
- **Average Time to Detect Threats:**
  - Before Implementation: 48 hours
  - After Implementation: 12 hours
  - Reduction: 75%
- **Average Time to Respond to Threats:**
  - Before Implementation: 24 hours
  - After Implementation: 6 hours
  - Reduction: 75%
- **Compliance Audit Scores:**
  - Before Implementation: 70%
  - After Implementation: 98%
  - Improvement: 28%
- **Time Spent on Vulnerability Assessments:**
  - Before Implementation: 200 hours per month
  - After Implementation: 80 hours per month
  - Reduction: 60%
- **Security Incident Tickets:**
  - Before Implementation: 100 tickets per month
  - After Implementation: 30 tickets per month
  - Reduction: 70%