Security Summary Report

Overview

This document summarizes the key security operations and risk management activities performed as part of the Cybersecurity Manager Home Lab.

Key Accomplishments

- Implemented a SIEM solution (Splunk) for centralized log monitoring.
- Conducted vulnerability scans using OpenVAS and Nmap.
- Managed and remediate findings based on CVSS prioritization.
- Automated alert triaging using Python scripts.
- Performed incident response simulation and documentation.

Tools Used

- Splunk: Event monitoring and correlation.
- OpenVAS & Nmap: Vulnerability and network scanning.
- Cisco Firewall: Access control and network segmentation.
- Microsoft AD: User authentication and policy enforcement.
- Linux (Ubuntu): Web and server management.

Compliance Reference

Aligned with security best practices based on **NIST CSF** and **ISO 27001** standards.

Future Improvements

- Integrate Threat Intelligence feeds predictive detection.
- Expand automation scripts for faster response.
- Perform regular phishing awareness and user training.