Title : Assessment and Pilot Implementation of Open Source Tools for Security Management in Technology Enterprises.

Author(s) : **1.** Prakit Buathong **Student ID :** 650510669
2. **Student ID :**
3. **Student ID :**

Major : Computer Science

Advisor(s) : **1.** Asst. Prof. Dr. Prapaporn Techa-Angkoon
2.
3.

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ABSTRACT

This cooperative education project aims to study, evaluate, and perform pilot implementations of opensource tools that enhance cybersecurity management within technology enterprises. The study focuses on three categories of security solutions:SafeLine (Web Application Firewall: WAF), GLPI (IT Asset and Service Management:ITAM/ITSM), and Wazuh (Security Information and Event Management: SIEM/SOAR).All systems were deployed and tested under a Docker Compose environment tosimulate real-world operational conditions while maintaining isolation between components.

The results show that each system functions effectively according to its intended purpose. SafeLine demonstrates high accuracy in detecting and preventing web-based attacks such as SQL Injection and Cross-Site Scripting (XSS). GLPI provides comprehensive functionality for managing IT assets and service tickets, while Wazuh offers real-time event monitoring and alerting capabilities for endpoint security. These findings confirm that opensource tools can serve as reliable and cost-effective options for organizations seeking to improve their security posture or evaluate system performance before large-scale deployment.

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