

IT Infrastructure / Software Development

Cybersecurity Management

across the EU



Summary

Through the development and implementation of E-MAT and SAREP, the ECHO project was able to establish a unified cybersecurity platform (EWS) that not only facilitated efficient and structured cybersecurity information management and analysis across various sectors and partners but also enabled automated, rule-based data analysis and notifications to enhance cybersecurity response and management. This approach not only streamlined the cybersecurity efforts across the EU but also ensured that critical cybersecurity information was efficiently managed, analyzed, and communicated among all partners involved.



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Background

The ECHO project, a European consortium, aimed to consolidate and optimize fragmented cybersecurity efforts across the EU through the creation of a unified cybersecurity platform known as the Early Warning System (EWS). The project spanned 48 months and involved 30 partners from 15 countries, focusing on organizing cybersecurity efforts and creating a central hub for cybersecurity-related information sharing and analysis among partners.

Scenario

The ECHO project faced the challenge of efficiently analyzing and managing cybersecurity threats, vulnerabilities, and other related information across multiple sectors and partners. The EWS platform needed to be accessible by each partner under their own "hub," where they could keep and manage cybersecurity-related information. Additionally, a structured method for multi-dimensional analysis of various cybersecurity disciplines and sector - specific use cases was required.

Solution

TWO KEY SOLUTIONS WERE DEVELOPED TO ADDRESS THESE CHALLENGES:

1. ECHO Multi-sector Assessment Tool (E-MAT):

A tool that presents a security assessment framework in a user-friendly manner, based on the E-MAF methodology. It allows organizations to conduct security assessments efficiently by presenting controls in a convenient way and enabling progress saving and resuming to reduce fatigue and increase accuracy.

2. Smart Agent Rule-based EWS Plugin (SAREP):

A rule engine developed as a plugin for the EWS platform, allowing users to define custom rules based on the information within the EWS and to be notified whenever a rule is triggered.



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Benefits

FOR E-MAT:

USER-FRIENDLY PRESENTATION: Enhanced, comprehensive presentation of the framework's controls compared to traditional Excel files.

TIME EFFICIENCY: Significant time savings due to a faster and more readable presentation of controls.

REDUCED HUMAN ERROR: Minimized fatigue and human error by enabling progress saving and resuming of assessments.

ENHANCED RESULT SHARING: Streamlined and organized assessment results, easily shareable and comparable through PDF exports.

FOR SAREP:

EFFICIENT DATA MANAGEMENT: Swiftly sifts through large data volumes, extracting only valuable user-specific data.

CUSTOMIZATION: Enables the configuration of custom rules with potentially complex conditions and trigger points.

TIMELY NOTIFICATIONS: Ensures users are promptly notified of critical events through various channels, including system, email, and SMS notifications.

ERROR MITIGATION: Reduces the risk of overlooking critical events by automating rule-based data analysis.

AUTOMATION FACILITATION: Allows automatic notifications to serve as triggers for further automated actions upon meeting certain conditions.

COMPLEX SCENARIO HANDLING: Enables the management of complex rule-based scenarios through configurable rules and condition correlations.