Topic: N163-D02

ObjectSecurity LLC

Supply Chain Risk Analysis & Management System (SCRAMS)

ObjectSecurity, a small company in downtown San Diego traditionally focused on cybersecurity, has branched out into data analytics and Artificial Intelligence (AI). ObjectSecurity's award-winning, patented security product is OpenPMF, employs cool models and algorithms to make it easy to author and maintain fine-grained, dynamic access control policies. ObjectSecurity is engaged in exciting product development to include a supply chain risk analysis product which integrates legacy SAP data dumps and into a graph database, suitable to run risk data analytics. Another, ObjectSecurity project is "AI hacker", which leverages AI to simulate a hacker. ObjectSecurity is a spin-off of the University of Cambridge Computer Laboratory. ObjectSecurity's focus is to transfer the results of academic research to consulting and industrial research and development, and bundle the abilities of several experienced scientists, consultants, programmers and security technology specialists. ObjectSecurity is fully employee-owned.

Technology Category Alignment:

Human/Autonomous System Interaction and Collaboration
Machine Perception, Reasoning and Intelligence
Cyber
Engineered Resilient Systems (ERS)
Protection, Sustainment, and Warfighter Performance

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SYSCOM: NAVWAR
Contract: N68335-17-C-0540

Corporate Brochure: https://navystp.com/vtm/open_file?type=brochure&id=N68335-17-C-0540

Department of the Navy SBIR/STTR Transition Program

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SPAWAR SBIR PM 28 Dec 2018

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WHO

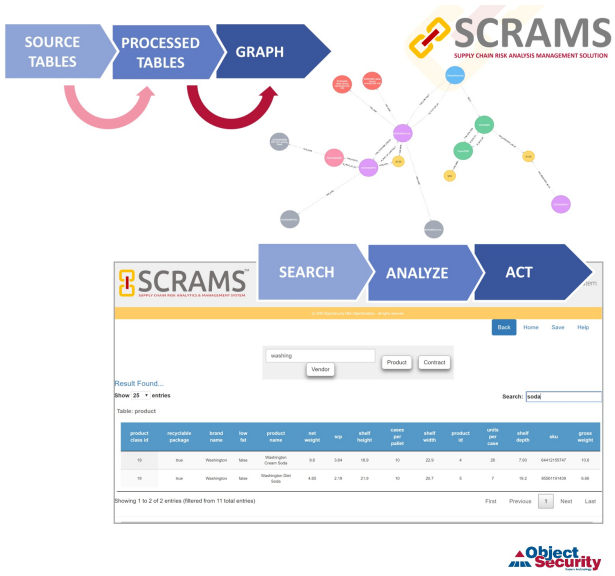
SYSCOM: SPAWAR

Sponsoring Program: Navy Modernized Hybrid Solution (NMHS)

Transition Target: PEO C4I supply chain data processes - Navy Enterprise Resource Planning (ERP) or others

TPOC:
(619)221-7918

Other transition opportunities: Other Navy SYSCOM supply chain (Navy ERP) processes. DoD and government SAP-based enterprise solutions.



SCRAMS Prototype Copyright ObjectSecurity, 2018

WHAT

Operational Need and Improvement: Navy's information systems need to function as expected. Employment of components that are counterfeit, tampered with, or otherwise compromised can have catastrophic effects. The Navy needs broader and deeper visibility into supply chain information in order to be able to identify potential supply chain risks. Automated supply chain risk analytics are required because there is too much information for humans to process.

Specifications Required: Supply chain data sources need to be made available as a data dump, for example from Navy ERP, an SAP installation, SCRAMS ingests the data dump into a graph database to enable advanced search and risk analytics. There is an upfront cost for non-SPAWAR customers because Navy ERP data is not 100% identical across the Navy enterprise. However, ObjectSecurity has developed an in-house data ingestion service that leverages automation to keep cost low.

Technology Developed: SCRAMS helps identify and analyze procurement supply chain risks across internal and external supply chain information. SCRAMS ingests information using state-of-the-art graph analytics. SCRAMS identifies risks automatically, providing risk managers the capability to search, inspect analytics, and produce reports. SCRAMS leverages a graph database to store information, allowing for advanced relationship-based searches. Under the hood, SCRAMS runs automated analytics to be enhanced by artificial intelligence (AI) during the Phase II option, to identify risks from the data graph.

Warfighter Value: Lower supply chain procurement risk provides the warfighter high confidence that equipment will function as expected (reduced failures or system compromises). For procurement professionals (especially contract managers), SCRAMS identifies risks before, during and after procurement. At the same time, SCRAMS is low-risk in that it does not need to be connected online with Navy ERP - it can be used as a standalone tool accessed through a web browser.

WHEN

Contract Number: N68335-17-C-0540 **Ending on:** March 24, 2019

Milestone	Risk Level	Measure of Success	Ending TRL	Date
First partial prototype developed (ingestion, visualization, searching)	Med	prototype demonstrated & accepted	3	March 2019

HOW

Projected Business Model: SCRAMS will be offered for purchase to any organizations that use SAP as an ERP, especially for procurement. ObjectSecurity's proposed business model includes licensing, annual maintenance, and support contracts (configuration/customization and data services). While SCRAMS is cloud-ready, ObjectSecurity does not foresee a public cloud service offering as viable because SCRAMS stores highly sensitive organization-internal information. ObjectSecurity foresees a private cloud-style deployment for customers. The value proposition is that SCRAMS will find risks humans often miss, at a much lower cost.

Company Objectives: Offer SCRAMS as one of the main pillars of ObjectSecurity's future product portfolio. Sell SCRAMS to the government, prime contractors, and commercial manufacturers (automotive and semiconductor). Seek partnerships with Prime contractors to deliver SCRAMS to the DoD. ObjectSecurity plans to rebrand SCRAMS under its ObjectAnalytics product line - which focuses on analytics, AI, and supply chain risks.

Potential Commercial Applications: The commercial application is clear - SCRAMS automatically identifies supply chain risks and lets users manually search and discover potential risks. For the commercial sector, ObjectSecurity would include additional risk analytic indicators to address specific business sectors e.g. for manufacturing, potential analytic indicators may include loss of production, reputational damage, inefficiencies, the potential for optimization, etc. ObjectSecurity is actively targeting the automotive industry as a potential market for SCRAMS.

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