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Final Performance Report

Cyber Secure Open Source Information and Analytics (CSOSIA) Project

Submitted to:

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4555 Overlook Avenue, SW
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Award Number: N00178-19-2-C005

Submitted by:

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1. ACCOMPLISHMENTS

1.1 Goals and Objectives

The major goals and objectives of the project were for Stephenson Technologies Corporation (STC) to provide Systems Engineering, Systems Integration, Information Systems Security Engineering (ISSE), and Risk Management Framework (RMF) services to the Naval Research Laboratory (NRL).

1.2 Accomplishments

During the period, STC completed 326 Stories in JIRA and accomplished the stated goals and objectives by:

- Adding data sources to the Repository of Open Source Tracks and Events Reports (ROOSTER), including Protected Seas Marine Monitor (M2) Radar and National Maritime Intelligence-Integration Office (NMIO) Inter VTS Exchange Format (IVEF) Vessels.
- Making major improvements to ROOSTER system stability, including migrating all data sources from legacy Tomcat application to Apache Camel based data processing and consolidating/cleaning up Extensible Markup Language (XML) file distribution services (by removing an app fanout architecture).
- Improving ROOSTER system security by developing Splunk alerts for abnormal user activities on ROOSTER systems and developing Advanced Intrusion Detection Environment (AIDE) alerts for regular system integrity checks.
- Making improvements in ROOSTER system instrumentation and alerting, including developing an administrative server service responsible for cleanup, metrics, diagnostics, and monitoring of the system; creating Splunk alerts for absent and slow delivery of all active data sources; and adding Nagios resource and service monitoring on all ROOSTER systems.
- Moving NRL's RMF accreditation process from Step 1 to being on the verge of an Authority to Operate (ATO) in Step 5.
 - Step 1 was approved on August 5, 2019.
 - Step 2 was approved on December 18, 2019.
 - Step 3 was approved on March 27, 2020.
 - Step 4 was approved on June 2, 2020.

1.3 Training and Professional Development Opportunities

The project did not offer the opportunity for formal training and professional development activities to be undertaken by the project staff; however, through the performance of tasks, the staff was able to expand its knowledge of NRL systems, productivity tools, and data sources.

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1.4 Dissemination of Results to Communities of Interest

Results were verbally disseminated within NRL communities of interest during various management and team meetings.

1.5 Plans for the Next Reporting Period

As this is the Final Performance Report, there are no plans for the next reporting period under this contract.

1.6 Honors

STC did not receive any awards or honors during the period.

2. TECHNOLOGY TRANSFER

STC did not perform any technology transfer activities, such as completing patent applications or disclosing inventions or licenses during the course of the project.

3. PARTICIPANTS

The following table includes all STC participants on the project.

Table 1. STC CSOSIA Project Participants

Type	First Name	Last Name
Principal Investigator	Jeffrey	Moulton
Project Manager	Stephen	Tomasko
Other Professional	Matthew	Schmouder
Other Professional	Zachary	Harshaw
Other Professional	Joseph	Nibert
Other Professional	Gregory	Novak
Other Professional	Amy	Migyanka
Other Professional	April	Danos
Other Professional	Jill	DeRubis
Undergraduate Student	Jake	Baumbaugh

4. STUDENTS

This is not applicable, as STC is not a Historically Black College and University (HBCU) or Minority-Serving Institution (MSI).

5. PRODUCTS

Nothing to Report.

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APPENDIX A: SF 289 (CLICK ON ICON TO VIEW ACTUAL PDF)



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Report.pdf**

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14. ABSTRACT Stephenson Technologies Corporation (STC) provided Systems Engineering, Systems Integration, Information Systems Security Engineering (ISSE), and Risk Management Framework (RMF) services to the Naval Research Laboratory (NRL) during the period.					
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a. REPORT	b. ABSTRACT	c. THIS PAGE			Stephen Tomasko
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