Statement of Work – Enterprise Level License for Data Science Packages

Scope

The Canada Boarder Services Agency (CBSA) has a requirement to procure an enterprise level license to access enterprise package repository of data science packages for data analysis, scientific computing, and machine learning in a unified package management system in support of various in-house data science solutions and technologies.

This commercial repository will allow CBSA to efficiently and safely develop a range of data science solutions, including machine learning applications, predictive analytics and will allow for large-scale data processing projects. The work will involve the supplier providing curated packages and libraries relevant to the data science community where the packages must be vetted and verified, providing security screening, validation and compatibility.

The contract is for a period of one (1) year from June 1, 2023 to May 31, 2024, without any additional option years.

Objective

The objective of the CBSA is to increase its strategic strategy of its data science tool box by enabling the Agency's data analytics capability. This requires the procurement of an enterprise level license to access security verified enterprise package repository of data science packages.

Requirements

- The supplier must be able to provide a package ecosystem, simplifying package management and deployment by providing a solution of pre-compiled binary packages of the most common scientific computing libraries.
- The supplier must have advanced knowledge of the core working material of the Python, R languages and package management to eliminate packaging and dependency problems.
- The solution must have the ability to support native environment management of cross-platform differences, cross-language difference and dependency differences.
- The supplier must be able to provide enterprise level support with a minimum of 5 designated support contacts.
- The supplier must be able to respond to organizational enquiries and problem resolution within a defined service level agreement (SLA)
- The supplier must be able to provide the ability to have a custom private mirroring capability
- The supplied solution must include security tokenization to access and download packages (Python, R, etc.) from a commercial level repository.
- The supplier will supply packages which are built, maintained, containing security verification and metadata to ensure packages are free from security vulnerabilities.
- The supplier will provide verified packages as they were built on a secure build network by verifying package artifacts and metadata against a chain of trust.
- The supplier will verify vulnerabilities which have been reported by the National Vulnerability Database.
- Packages will be curated and relevant to the data science community. These open-source packages must be vetted for their widespread adoption and community support, which allows any security vulnerabilities to be addressed quickly and completely.

- Source code and built artifacts are maintained with strict chain-of-control and are built, scanned, and hashed on a separate secure network.
- Quality Assurance is performed and exhaustive testing is completed on each release, including all installers and packages. This includes the use of multiple commercial anti-malware products, and security tools, for all supported operating systems - Windows, Linux and Mac OS.
- The supplier will have a team which monitors all active security events and provide quick response times to the client.

Deliverables, Acceptance Criteria and Delivery Schedule

The supplier will deliver an enterprise level license for a period of one (1) year, commencing on June 1, 2023 to the CBSA data science community, which will allow the secure access to a commercial repository of data science packages (Python, R).