No. 1000111222

# **REQUEST FOR INFORMATION (RFI)**

### **ENTERPRISE TESTING SOLUTION (ETS)**

#### **RFI PURPOSE:**

**This is not a bid solicitation.** This RFI will not necessarily result in any procurement action. A contract will not result from this activity.

The Canada Revenue Agency (CRA) is working towards an enterprise approach to application software testing and, as such, has a requirement for an Enterprise Testing Solution (ETS). The purpose of this RFI is to gather the most current information possible from industry to assist in determining what enterprise testing solutions are available in the marketplace.

Vendors are requested to provide responses to the questions in the RFI. Vendors are requested to provide solution whitepapers if available.

#### **KEY OBJECTIVES:**

This RFI seeks to determine if there are vendor software products that can improve the efficiency and effectiveness of the Agency's testing practices. This would serve to further enhance the CRA's reputation for delivering secure high quality applications, while providing the ability to produce faster testing in support of more frequent releases.

The ETS will meet the following requirements:

1. Vendor software user interface must support both English and French languages.

### 2. Business Requirements and Test Case Integration

 Provide a way to document and link both business requirements and test cases together with version control that can support both Agile/Iterative and Waterfall development project.

### 3. Integration with Defect Management

 Integrate with the current Agency defect tracking system (JIRA – version 7.1.9), and production incident (BMC Remedy 7.6) reporting systems. The integration



No. 1000111222

will link test cases to defects and incidents and also mitigate the duplication of defects and incidents.

### 4. Test Case Repository, Execution and Automation

- Test cases and associated metadata are stored centrally with version control.
- Test cases can be executed automatically on a schedule.

### 5. Service Virtualization

Ability to deploy a virtual asset within a testing environment that simulates a
production service earlier in the development cycle, prior to the service being
available.

## 6. Test Process Visibility

 Notify interested parties via email when tests are executed/completed; display proof of tests; and print test results.

## 7. Workload/Testing Task Management

- Assign testing workload / tasks to a tester; notify via email when testing tasks have been assigned; and display the testing task assignment history. Ability to monitor tester workloads, progress, productivity, completion percentages, metrics. Management reporting/dashboard of Key Performance Indicator's (KPI's).
- Ability to notify release coordinators when application code can be migrated upon completion of testing. Also notify testers when testing can commence upon the migration of code.

## 8. Test Data Management

- The ability to fabricate test data, mask data, compare data between sources, and automate the execution of test data scripts on a set schedule and/or as a batch process.
- The ability to store scripts in a centralized repository that can be searched, easily updated and reused to refresh test data.

## 9. Reliability (Performance and Load) Testing

- The ability to execute reliability tests manually or on a set schedule, with simulated users for various types of applications: Web, Java, mainframe, mobile platform, multimedia, web services, and cloud applications, including simulating load in a Citrix environment.
- The capability to script/automate virtual users using the following technologies:
   AJAX (Asynchronous JavaScript And XML), JavaScript, Java Applets, Terminal
   emulation for IBM mainframe terminals, Web Services, Rich Internet Applications.



No. 1000111222

## 10. Vulnerability Assessment (VA) Security Scanning

 Perform proactive VA scans as regression tests for web applications and databases. Databases include: Mainframe-IBM DB2 z/OS; Oracle; Sybase; MySQL; Microsoft SQL Server; IBM DB2.

### 11. Integration with Release, Change and Configuration Management System

 The test management solution can be integrated with the Agency's Information Technology Service Management (ITSM) System (BMC Remedy 7.6) to coordinate and manage system and development releases through the testing lifecycle.

### 12. Mobile Browser Testing

- Testing of web applications through the mobile web browser.
- Provide the capability to test through mobile browser platform emulators for iOS, Android, and Blackberry devices.

### 13. Cloud Testing

- Cloud based Testing as a Service (TaaS). Provide brokered usage models for a TaaS. On premises vs Off premises / managed or unmanaged.
- Have the capability to host and test web (java swing and browser) applications in the cloud. Have the capability to test externally from the cloud to internally hosted web (java swing and browser) applications.

#### 14. User Experience (UX) Testing

 Perform moderated or unmoderated User Experience (UX) testing. Moderated testing would include the capability to video record a user experience test executed by a tester.

### 15. Beta Testing

Provide a solution to facilitate Beta Testing with integration to the test
management solution for reporting and managing of Beta Tests. Ability to develop
survey/questionnaires that can be delivered/released to the beta test site. Beta
Test results to be tracked and reported on within the test management solution.

### **SOLUTION OFFERING QUESTIONS:**

### Please provide detailed responses

- 1. What is the proposed ETS?
- 2. Describe the architecture of the solution.
- 3. Describe how the solution is scalable to the cloud.



No. 1000111222

- 4. Elaborate on how the solution meets all 15 requirements identified in the Key Objectives.
- 5. Describe licensing options for the solution (numbers of users, CPU, server, device based, enterprise wide, etc.)
- 6. Describe what standard application programming interfaces the solution supports to ensure successful integration with CRA line of business applications/solutions.
- 7. Describe the auditing and journaling capabilities of the solution.
- 8. Is all related technical support provided directly to CRA by the Original Equipment Manufacturer (OEM)?
- Describe the authentication and access control abilities of the solution.
- 10. What kind of post-purchase service could be made available? This can include implementation support, training support, frequency of upgrades, customizing and opting in or out for upgrades.

#### INTERACTIVE PRESENTATION SESSIONS:

CRA may request meetings at their sole discretion with the interested respondents who clearly answer the questions set out above. The intent is to provide the interested respondents with the opportunity to present / discuss their capabilities in relation to this RFI via on-site at CRA premises.

If CRA decides to have interactive presentations, respondents will be contacted within 4 to 6 weeks of the RFI closing date to schedule the presentation. An Invite Agenda will be provided to the interested respondents. Specific questions or areas of interest to be covered during the session may also be provided and will be based on responses received.

The on-site presentation session will be located in the National Capital Region. The exact location and timeframe will be detailed in the Invite Agenda. However, at no time will the session exceed 3 hours in length. Vendors will also be asked to provide an electronic version of their presentation material after the presentation session. The vendor sessions will cover specific details relevant to the key objectives stated within this RFI. As such, representatives attending the session must include Subject Matter Expert(s) in these areas in order to meaningfully respond to questions at the session. CRA senior technical personnel with extensive experience in IT will attend the presentations.

#### **RESPONSES AND ENQUIRIES**

Vendors are advised to clearly identify which portion of their response is proprietary. The confidentiality of each Vendor's response will be maintained. Due to the nature of an RFI activity, respondents must be aware that aspects (that have not been labelled confidential) of their responses may be used as a basis for any subsequent Request for



No. 1000111222

Proposal (RFP), if and when the CRA decides to prepare for any future procurement initiative.

Information provided in response to this RFI will be divulged only to individuals authorized to participate in this pre-procurement activity.

Responses to this RFI will not be used to pre-qualify or otherwise restrict participation in any future procurement process (e.g. an RFP). Responses will not be formally evaluated.

CRA will not reimburse any expenditure incurred in preparing responses and participating in the presentation sessions related to this RFI.

The vendor must provide a contact name, email address and telephone number when submitting their response.

In the event that a response is not sufficiently clear, CRA reserves the right to seek additional information at their sole discretion.

Respondents are requested to submit responses by **December 14**<sup>th</sup>, **2016, 2 p.m.** Eastern Standard Time. The review of responses will begin after the date and time mentioned above. Responses received after that date may not be reviewed.

Vendors are requested to submit responses to this RFI using the following facsimile number, e-mail or delivery address:

Canada Revenue Agency Contracting Division IT Contracting Section 250 Albert Street, 8<sup>th</sup> Floor Ottawa, ON K1A 0L5 ATT: Shawn Woods

Telephone No: (613) 291-9615 Facsimile No: (613) 957-6655

E-mail: shawn.woods@cra-arc.gc.ca

For delivery by hand or by courier, Monday to Friday 8:30am to 3:00pm, please contact Shawn Woods to arrange a drop off time.

**Electronic submissions are preferred.** 



No. 1000111222

Only enquiries which clarify the questions asked or feedback requested may be answered with respect to this RFI.

All enquiries must be submitted via email to the attention of Shawn Woods at shawn.woods@cra-arc.gc.ca or by phone at 613-291-9615.