



REQUEST FOR INFORMATION (RFI)

Application Performance Monitoring (APM) Data Analytics Solution

PURPOSE OF THE REQUEST FOR INFORMATION:

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 seeking feedback from the vendor community on the availability of a Data Analytics solution to augment application performance monitoring capabilities. Vendors are requested to provide specific responses to the product questions outlined herein. Vendors are requested to provide product whitepapers if available.

The objective of this Request for Information (RFI) is to gather the most current information possible from industry on the different Data Analytics solutions as it relates to the CRA's application performance monitoring (APM) requirements.

The key objectives of the RFI include:

1. Receive responses from the vendor community about available solutions; and
2. Get a better understanding of the current and future trends; and
3. Vendors who establish via their response to the RFI how their products(s) meet the detailed solution requirements may be invited to provide an interactive demonstration and discuss in detail how their solutions meet the listed requirements.

Introduction

The Canada Revenue Agency (CRA) Strategic Engineering & Technology Integration (SETI) Division in the Information Technology Branch is the Agency's lead for investigating a comprehensive, effective and efficient data analytics solution for the Agency that can seamlessly integrate with CRA's distributed and mainframe platforms and application performance monitoring products.

Objective of Request For Information

The purpose of this Request for Information (RFI) is to determine if there are vendors who can provide a suitable application performance monitoring Data Analytics solution (or subset) that can meet the CRA's business requirements.

The CRA is exploring the possibility of acquiring application performance monitoring data analytics tool(s) to improve our ability to detect and analyze complex events through analysis of log data and to proactively monitor all components of the user experience. Mainframe and distributed APM related information must be integrated to provide a unified picture providing measures for applications with the ability to guide developers through the analysis. The solution should provide sophisticated end-user path analysis in addition to providing log analytic capabilities aggregating information from multiple sources, indexing, complex searches and data visualization from multiple information sources captured on the mainframe and distributed environments. It should also be capable of correlating unstructured data with identified events.

The solution must integrate with, and augment the capabilities of, existing application performance monitoring products in use at CRA. The solution should be able to efficiently and continuously correlate



events across applications, software and environments for analysis, and be able to present information in text and in a visual manner. A highly configurable rule based event notification capability is required. The solution should provide users with the ability to define an event criteria, based on the occurrence of complex string patterns/expressions and trigger the desired actions to be taken as a result of the event being realized. These capabilities will facilitate rapid root-cause triage of performance issues while providing insight into the components along the path and provide the capability to proactively identify and address degradation of services before they escalate into an incident.

Background Information

The CRA is committed to enhancing digital service options to respond to the increasing expectations of Canadians for modern end-to-end digital interactions that are easy to use, fast, secure and reliable. Providing the Agency with a robust application performance monitoring solution is a key component in minimizing the potential for, and duration of, slowdowns or outages to CRA's critical internal and external facing systems.

The CRA application suite is complex and interdependent, incorporating both mainframe and distributed components. CRA is looking to enhance data analytics capabilities for identifying mainframe application inefficiencies, end-user path analysis, and log analysis. The CRA wants a more sophisticated and interactive end-user path analysis capability to provide a better window into the user experience. The current log monitoring efforts are more focused on identification of simple log events and are not actively monitoring for trending information. It is difficult and time consuming to pinpoint application inefficiencies (causing excessive mainframe CPU consumption, elongated elapsed times, and other performance related issues) using the information from various application performance monitoring tools, application logs, and system logs.

CRA Mainframe Environment

IBM z/OS, CICS (including DPL/remote invocation functionality and CICSplex), Enterprise COBOL, DB2 and MQSeries.

Note: There is limited use of IDMS.

CRA Distributed Environment

Oracle WebLogic servers running on Solaris and RedHat Linux accessing mainframe components:

1. CICS applications on z/OS using CICS Transaction Gateway (CTG),
2. WebSphere MQ (MQ Series), and
3. DB2 via JDBC.

Application Performance Monitoring Environment

CA APM (Introscope and CEM)
BMC Patrol
Intellinx
Adobe Analytics
Compuware Strobe



Appendix A – General Questions

A. 1 - General Information	
1.	Does your company offer software as a service (SaaS) and/or on premise data analytics solutions? If both solutions are offered highlight the differences.
2.	Does your solution support a cloud computing model and/or hybrid on premise/cloud model? How? Is your product available in a Canadian cloud?
3.	Is your solution compliant with Web Content Accessibility Guidelines (WCAG) 2.0?
4.	What other products or services does your solution integrate with?
5.	Do other components/products need to be in place to fully realize all of the features of your solution? If yes, identify and describe them.
6.	What are the available licensing models, including ongoing costs such as licensing or maintenance and support?
7.	List and describe all the various features / components / repositories that comprise your solution.
8.	Identify which application performance monitoring products your solution can integrate with.
9.	Provide the system requirements of your solution. E.g.: CPU/cores, RAM, HDD capacity, O/S version(s), network.
10.	Describe in what capacity your solution provides user interfaces functionality and documentation in English and French.
A. 2 - Training, Documentation and Support	
1.	Describe the training services that your company offers (types of training and resources) as it pertains to your solution.
2.	In general, how much time would it take for a user to become self-sufficient in using the solution?
3.	Describe your maintenance and support offerings (e.g. pre-deployment, post-deployment, consulting, after-hours support, 7/24 on-call support) and how you provide them.
4.	What are the activities and the type/level of expertise CRA would require in order to maintain the solution on an on-going basis? (E.g. administrator)

Appendix B – Technical Questions

B. 1 – Metrics & Limitations	
1.	List the sources your solution is able to collect/use data from.
2.	List and describe any limitations of the solution. (E.g. total volume capacity, types of data sources, data retention, etc.)
3.	What mechanisms does the software use to collect and integrate data?
B. 2 – Distributed/Mainframe integration	
1.	On which platform(s) and O/S(s) is the software solution capable of executing?
2.	What software and/or repositories (proprietary or open source) can your software solution interact with (e.g., automatically import and/or extract log information). Describe how this is done.
3.	Describe all ways APM, Log and unstructured data can be imported to and exported from the software solution (Excel, CSV, XML, etc.).
4.	Does the software solution allow programmatic access (e.g., an Application Programming Interface - API) to the information managed by the software solution? Describe how this is done.
5.	How does the solution correlate unstructured data with performance events?
6.	Describe how the software solution consolidates data from the various sources?
B. 3 - Manage Access/Repository	
1.	Does the software solution have customizable role based access to the functionality and the management of information? Describe how this is done.
2.	Does the software solution provide a security management interface that allows authorization and access control to information within the repository? Describe how this is done.
3.	Does the software solution provide audit features that track changes made to the objects the tool makes available to perform custom tasks (view dashboards, run canned reports, searches, etc)? Describe how this is done.



4.	Does the software solution provide versioning of objects (e.g. tailored searches, reports, etc.)? Describe how this is done.
5.	Does the software solution allow for customizable standards to be applied? (E.g. standard abbreviations, controlled vocabularies, naming standards, taxonomies) Describe how this is done.
6.	Which control activities (e.g., archiving, backup/recovery, configuration modifications, versioning, etc.) can you implement in order to manage the repository?
7.	Are there limitations on the retention of data? Describe the limitations.
B. 4 – Log analysis	
1.	List and describe the features supporting log analytics?
2.	Describe how this information is presented for viewing and how does this portion of the solution integrate with the other aspects of the solution?
3.	Does this solution support and integrate both mainframe and distributed system logs? Application logs?
4.	How does the solution correlate unstructured data with performance events?
5.	List and describe any limitations of this portion of the solution.
B. 5 – User path analysis	
1.	List and describe the features supporting end-user path analysis.
2.	List and describe the built-in user path metrics (e.g. page and page component load times, response time, bounce point, entry point, etc.) and user session information that the solution captures/aggregates.
3.	Describe how this information is presented for viewing (e.g. interactive GUI or static reports) and how does this portion of the solution integrate with the other aspects of the solution.
4.	How does the software capture end-user path information (network tap/sniffing, java script injection, etc.)?
5.	List and describe any limitations of this portion of the solution.
B. 6 - Query, report and analyze data	
1.	Describe all ways the software solution can be used to access data. This description should be in relation to attributing, grouping, viewing and exporting data out of the software solution.
2.	Describe how the software solution can distribute information to business and technical analysts who may not have access to the software solution (e.g. automatically scheduled reports formatted in Adobe's Portable File Document (PDF) format)
3.	Does the solution provide a search feature that searches all data within the repository? Describe how this is done.
4.	Does the solution provide analysis and trending features? Describe how this is done.
5.	Does the solution provide pre-defined reports and the ability to create custom reporting? Describe how this is done.
6.	Does the solution provide customized dashboards with data visualization?
7.	Does the solution provide the ability to create custom fields for reporting and dashboards?
8.	Describe how information is presented for viewing and how does this portion of the solution integrate with the other aspects of the solution?
9.	Does the solution use a rule based event notification? If yes, are users able to define an event criteria using complex string patterns/expressions to trigger a specific actions to be taken? What types of actions are supported? (SMS, Email, customized actions, etc.)
10.	Can the solution schedule automatically generated reports?
11.	Does the solution provide a facility to perform "What If" analysis to determine the impact of potential changes?

INTERACTIVE PRESENTATION SESSIONS:

CRA may at its sole discretion request meetings with interested respondents who have clearly addressed the Solution Requirements in their response to CRA to provide them with the opportunity for a follow-up to their written response and to present /discuss their capabilities in relation to this RFI.

Respondents may be contacted within 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 2 hours in length. Respondents will also be asked to provide an electronic version of their presentation material after the presentation session.

The respondent sessions must 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.

RESPONSES AND ENQUIRIES:

Respondents are advised to clearly identify which portions of their response are 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 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 RFI 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 **Wednesday, March 21, 2018**, 2 p.m. Eastern Daylight Time. The review of responses will begin after the date and time mentioned above. Responses received after that date may not be reviewed.

Electronic submissions are preferred.

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

Canada Revenue Agency
Contracting Division
IT Distributed Section
250 Albert, Room 8090
Ottawa, ON K1A 0L5
Attn: Chris Zaremba
Telephone No: (613) 697-0718
E-mail: chris.zaremba@cra-arc.gc.ca

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



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Agency

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Canada

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