**STATE OF MAINE**

**Department of Education**

**Data Team**



**REQUEST FOR INFORMATION**

**RFI# 202203046**

**Business Rules Engine**

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| --- | --- |
| **RFI Coordinator** | *All communication regarding this RFI must be made through the RFI Coordinator identified below*.  **Name:** Kathy Warren **Title:** Education Data Systems Manager  **Contact Information:** [katherine.warren@maine.gov](mailto:katherine.warren@maine.gov) |
| **Submitted Questions Due** | *All questions must be submitted to the RFI Coordinator identified above by:*  **Date:** April 21, 2022, no later than 5:00 p.m., local time |
| **Response Submission** | **Submission Deadline:** May 12, 2022, no later than 5:00 p.m., local time  **Submit to:** [katherine.warren@maine.gov](mailto:katherine.warren@maine.gov) |

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# **PUBLIC NOTICE**

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**State of Maine**

**Department of Education**

**RFI# 202203046**

**Business Rules Engine**

The State of Maine, Department of Education Data Team, is seeking information regarding automated business rules solutions that may be implemented across multiple applications managed by MDOE.

A copy of the RFI, as well as the Question & Answer Summary and all other related documents to this RFI, can be obtained at the following website: http://www.maine.gov/dafs/bbm/procurementservices/vendors/rfis

Responses must be submitted to: [katherine.warren@maine.gov](mailto:katherine.warren@maine.gov) and be submitted by 5:00 pm, local time, on May 12, 2022.

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**RFI DEFINITIONS/ACRONYMS**

The following terms and acronyms shall have the meaning indicated below as referenced in this Request for Information:

|  |  |
| --- | --- |
| **Term/Acronym** | **Definition** |
| **RFI** | Request for Information |
| **Business Domains** | Specific areas of business competence. At the Department these include nutrition, transportation, students, staff, finance, and more. |
| **BRE** | Business Rules Engine |
| **RFP** | Request for Proposal |
| **State** | State of Maine |
| **Department** | Department of Education |
| **FOAA** | Maine Freedom of Access Act |
| **Respondent** | Any individual or organization submitting a response to this RFI. |

**State of Maine - Department of Education**

**RFI# 202203046**

**Business Rules Engine**

# **PART I INTRODUCTION**

## A. Purpose and Background

This Request for Information (RFI) is an information gathering and market research tool, not a formal solicitation of a specific requirement (such as in a “Request for Proposals” document). The Department of Education (“Department”) is seeking information from interested parties as defined in this RFI document regarding automated business rules solutions that may be implemented across multiple applications managed by the Department. This is an opportunity for interested parties to help the Department better understand the marketplace and/or specific subject matter.

The Department’s Data Team is responsible for ensuring statutory compliance in the collection and reporting of educational data. Data collected encompasses staff, students, school facilities, revenues, expenditures and budgets, and more. Data from these collections is used for both State and federal reporting requirements, as well as calculating and issuing state funds to school administrative units.

In order to fulfill these responsibilities, data collected must be complete, accurate, and timely. To fully meet these criteria, data must first pass-through multiple validations. It then has differing levels and types of business logic applied. All of these rules vary across business domains.

## B. Current Conditions

Data is currently received by the Department from a variety of sources, including interfaces from Student information systems, other departments, etc. and by a variety of methods including manual entry, flat-files, and automated uploads.

Some of our current pain points are as follows:

**Time-intensive**. Current collections can be difficult to complete correctly. Entire datasets can be rejected because of a single error. Manual processing of data is a normal business scenario.

When issues are found, the fixes often require time-intensive manual intervention by a variety of highly trained staff across a wide range of State organizations.

**Manual**. Many business rules are currently captured as text descriptions. These rules are then compared by hand in contradiction of data sets manually extracted from the databases (ex. Manually checking that values in the database are within ranges described in the spreadsheet). These checks have to be done repeatedly. Others are run through SQL validations applied after collection that require data to be “uncertified” and adjusted and “recertified”.

**Scattered**. Business rules are currently stored and executed in multiple parts of the system and across applications, for example, some at the point of data collection/submission, some are run during data processing stages, and some are run during preparation and execution of reporting requirements.

**Inadequately Documented**. Currently there is inconsistency in degree and locations of documentation and poor understanding of entire ecosystem of all business rules. The Department is currently identifying where, when, and how business rules are applied. Years of “just in time” development and lack of release and enhancement planning has resulted in insufficient, missing and out of date documentation of an inconsistently modularized system.

**Poorly understood at point of collection by users in the field**. Feedback to business users is limited, inconsistently applied, and occasionally misleading. It is not always clear to the people submitting data where there are problems prior for Department staff who will be manually validating it.

**C. Challenge Statement**

The RFI is intended to explore an overarching question:

Are there business rules engine solutions available that meet the needs that the Department has identified? More specifically, do the available Business Rules Engines:

1. Have the ability to be managed by non-programming staff?
2. Work with automated data feeds as well as applications with manual entry?
3. Work across multiple applications managed by the Department – both internally and externally hosted and managed?

## D. General Provisions

1. All contact with the State regarding this RFI must be made through the aforementioned RFI Coordinator. No other person/ State employee is empowered to make binding statements regarding this RFI.
2. This is a non-binding Request for Information. Therefore, no award shall be made as a result of the RFI process.
3. Issuance of this RFI does not commit the Department to pay any expenses incurred by a Respondent in the preparation of their response to this RFI. This includes attendance at personal interviews or other meetings and software or system demonstrations, where applicable.
4. Issuance of this RFI in no way constitutes a commitment by the State of Maine to issue a Request for Proposal (RFP).
5. All responses should adhere to the instructions and format requests outlined in this RFI and all written supplements and amendments, such as the Summary of Questions and Answers, issued by the Department.
6. All submissions in response to this RFI will be considered public records available for public inspection pursuant to the State of Maine Freedom of Access Act (FOAA) (1 M.R.S. §§ 401 et seq.): [State of Maine Freedom of Access Act](http://www.mainelegislature.org/legis/statutes/1/title1sec401.html)
7. All applicable laws, whether or not herein contained, shall be included by this reference. It shall be Proposer’s/Vendor’s responsibility to determine the applicability and requirements of any such laws and to abide by them.

**PART II INFORMATION SOUGHT**

The Department seeks information regarding automated business rules solutions that may be implemented across multiple applications managed by MDOE.

MDOE welcomes responses to this RFI, including creative suggestions and feedback to enhance and expedite all future processes while providing efficient, reliable, and high-quality outcomes. Respondents are not required to submit responses pertaining to every question, but the Department encourages interested parties to respond to any or all relevant aspects of the RFI.

The Department seeks detailed yet succinct responses that demonstrate the Respondent’s experience and/or familiarity with the subject matter. **As this is not a competitive RFP process,** **Respondents must not provide any specific cost or customized pricing documentation in their response.**

1. **General Information**

Provide a brief overview of yourself and your organization.

* 1. Please identify yourself and any organization you represent in this RFI.
     1. Name of respondent
     2. Organization and affiliation
     3. Address (organizational, if responding on behalf of an entity)
     4. Contact information (phone number(s) and email address)
  2. Please identify your experiences in providing automated business rules solutions implemented across multiple applications managed by an organization.

1. **Feedback Requested**

**Please address the Challenge Statement (Part I. C.) paying particular attention to the following questions.**

* 1. The Department would like an automated business rules engine that can be managed by staff that do not have programming skills.
     1. Explain how the BRE that allows non programming staff use an interface to edit, update, and create new validations and business rules.
     2. Explain how the BRE allows non programming staff to deprecate business rules and validations that are no longer needed.
  2. The Department would like an automated business rules engine that can be implemented to work with APIs bringing data in from school units

Explain how the BRE works with automated data feeds.

* 1. The Department would like an automated business rules engine that can be implemented to work with applications with manual data entry

Explain how the BRE works with applications that have manual data entry screens.

* 1. The Department would like an automated business rules engine that can be implemented to work with multiple software applications. The Department has multiple applications that collect data. Some of these applications are built internally and some of the applications are built and hosted by vendors. The Department would like an “enterprise” solution that can be utilized by all data collection applications managed by the Department.

Explain how the BRE can work with multiple different data systems with different hosting requirements and different business rules and validations

Explain how pricing would be determined across the disparate data systems and requirements.

* 1. The data sets the Department works with include Personally Identifiable Information and are bound by multiple federal, State, and department laws, regulations, policies, and standards.
     1. Describe ideas or approaches to meeting applicable security and compliance requirements.
  2. The Department would like to mine the usage of rules to find patterns and other business intelligence. Including:
     1. Tracking usage and rolling that into reports that show history;
     2. Tracking of which rules are failing with higher frequency;
     3. Which rules are being heavily utilized and which aren’t used at all;
     4. Being able to export these usage reports is also needed; and
     5. Business rules would need to have a change log to capture how rules evolve over time and which users are making the changes.
  3. Describe ideas or approaches to reporting, analytics, and audit tracking.
  4. Describe what other challenges or issues the Department may need to consider.

# **PART III KEY RFI EVENTS AND PROCESSES**

## Questions

**1. General Instructions**

1. It is the responsibility of each interested party to examine the entire RFI and to seek clarification, in writing, if they do not understand any information or instructions.
2. Interested parties should use **Appendix B** – Submitted Questions Form – for submission of questions.
3. The Submitted Questions Form must be submitted by e-mail and received by the RFI Coordinator, identified on the cover page of this RFI, as soon as possible but no later than the date and time specified on the RFI cover page.
4. Submitted Questions must include the RFI Number and Title in the subject line of the e-mail. The Department assumes no liability for assuring accurate/complete/on time e-mail transmission and receipt.

**2. Question & Answer Summary**

Responses to all questions will be compiled in writing and posted on the following website: http://www.maine.gov/dafs/bbm/procurementservices/vendors/rfis. It is the responsibility of all interested parties to go to this website to obtain a copy of the Question & Answer Summary. Only those answers issued in writing on this website will be considered binding.

## Submitting the Response

1. **Responses Due**

Responses must be received no later than the date and time listed in the timeline above.

1. **Delivery Instructions**

Responses must be submitted to the RFI Coordinator, via e-mail, listed on the cover page of this RFI document.

1. **Response Format**

Responses to this RFI may be developed in a manner that suits the respondent. A list of key questions is included within the RFI and all submissions, regardless of format will be reviewed. Respondents are asked to be brief and to respond to as many questions as possible within the RFI. Number each response to correspond to the relevant question or instruction of the RFI to allow comparison and clarity.

# **PART IV REVIEW OF RESPONSES RECEIVED**

# **General Information**

1. The Department will review responses received for the purpose of gathering information and market research only. The Department will not score, or rate responses received.
2. The Department reserves the right to communicate and/or schedule interviews/presentations with Respondents, if needed, to obtain clarification of information contained in the responses received and/or additional information to enhance marketing research efforts.

**APPENDIX A**

**STATE OF MAINE**

**Department of Education**

## RESPONSE COVER PAGE

**RFI# 202203046**

**Business Rules Engine**

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| **Lead Point of Contact - Name/Title:** | | |  | | |
| **Organization Name (if applicable):** | | |  | | |
| **Tel:** |  | | **Fax:** |  | |
| **E-Mail:** |  | | **Website:** | |  |
| **Street Address:** | |  | | | |
| **City/State/Zip:** | |  | | | |

**APPENDIX B**

**State of Maine**

**Department of Education**

**SUBMITTED QUESTIONS FORM**

**RFI# 202203046**

**Business Rules Engine**

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| --- | --- |
| **Organization/Responder’s Name:** |  |

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| **RFI Section & Page Number** | **Question** |
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*\* If a question is not related to any section of the RFI, state “N/A” under “RFI Section & Page Number”.*

*\*\* Add additional rows, if necessary.*