Los Angeles Unified School District

REQUEST FOR INFORMATION

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INFORMATION TECHNOLOGY DIVISION
Application Programming Interface (API)
Management and Integration
RFI No. 202102

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1.1 Overview

1.1. The Los Angeles Unified School District ("District") is seeking information from interested parties who can provide comprehensive API Management and Integration solution. The desired features are listed within this request. The provider shall also have experience providing implementation and user support services. In addition, the provider should be experienced in environments that support API Management and Integration.

1.2. THIS IS A REQUEST FOR INFORMATION (RFI) ONLY. This RFI is issued solely for information and planning purposes – it does not constitute a Request for Proposal (RFP), an Invitation for Bid (IFB) or a promise to issue an RFP or IFB in the future. This request for information does not commit the District to contract for any supply or service whatsoever. Any and all costs associated with or arising from the RFI process incurred by the Interested Party shall be absorbed by the Interested Party, without reimbursement by the District.

1.3. Further, the District is not at this time seeking proposals and will not accept unsolicited proposals. Interested parties are advised that the District will not pay for any information or administrative costs incurred in response to this RFI; all costs associated with responding to this RFI will be solely at the interested party's expense. Not responding to this RFI does not preclude participation in any future RFP, if any is issued. If a solicitation is released, it will be synopsized on the LAUSD Procurement website at https://psd.lausd.net/Vendors/. It is the responsibility of the interested parties to monitor these sites for additional information.

2.0 Background and Requested Information

2.1 ABOUT LAUSD

As the second-largest school district in the nation, the Los Angeles Unified School District (LAUSD) enrolls more than 500,000 students in kindergarten through 12th grade at over 900 schools and 224 public charter schools. The District also enrolls approximately 90,000 adult students at 11 adult schools. The District's boundaries extend across more than 710 square miles and include the mega-city of Los Angeles as well as several unincorporated sections and all or parts of 31 smaller municipalities in Southern California.

2.2 ABOUT THE INFORMATION TECHNOLOGY DIVISION

The Information Technology Division, led by the Chief Information Officer, is responsible for supporting the District's instructional mission and operations through the deployment of the most current, robust, user -friendly, and cost-effective technology solutions.

2.3 ABOUT THE LAUSD APPLICATION DATA ENVIRONMENT

The following information lists some general characteristics about LAUSD ITD's data environment. It provides a diagram of Whole Child, one of LAUSD's student information systems. In addition to the Enterprise Data Management group, which includes Whole Child and Focus teams) ITD consists of an Enterprise Resource Planning (ERP) that maintains SAP systems, Enterprise Applications team, which creates and maintains custom. NetCore applications, and a MiSiS group that maintains a large-scale custom-

developed student information system. These are the primary API Management tool users within LAUSD. LAUSD supports approximately 240 applications. Most are hosted within the LAUSD Data Center, and a handful (approximately 20) are cloud-hosted Software on a Service (SaaS) subscription basis. The applications are written in a variety of languages (JAVA, .Net, PL/SQL, etc.). The two primary relational database management systems in use are Microsoft SQL Server and Oracle, but a variety of other data formats exist as well. There is also an extensive Enterprise Reporting / Data Warehouse environment and associated user access applications that pertain to this data. The Data Warehouse uses the Oracle Database as the primary target for the data. The Focus dashboards and reports access the data via Oracle Business Intelligence Enterprise Edition (OBIEE). Below I have listed an example of an LAUSD system by providing a Whole Child applications diagram. Whole Child extracts data through Elastic Search for presentation users.

The diagram below illustrates an overarching view of the Whole Child system, including its sources and eventual audience. The data sources initially start in various formats, including Oracle, SQL Server, Pick legacy systems, Xls, and others. These sources are inputs into an ETL Transformation Layer and eventually are sent to a target data warehouse in Oracle. These sets of data are then extracted into JSON documents to be presented via a proprietary tool called Elastic Search (for the purposes of being presented in Whole Child). Some of these sources are also read as items for another reporting system called FOCUS. The latter tool utilizes OBIEE.
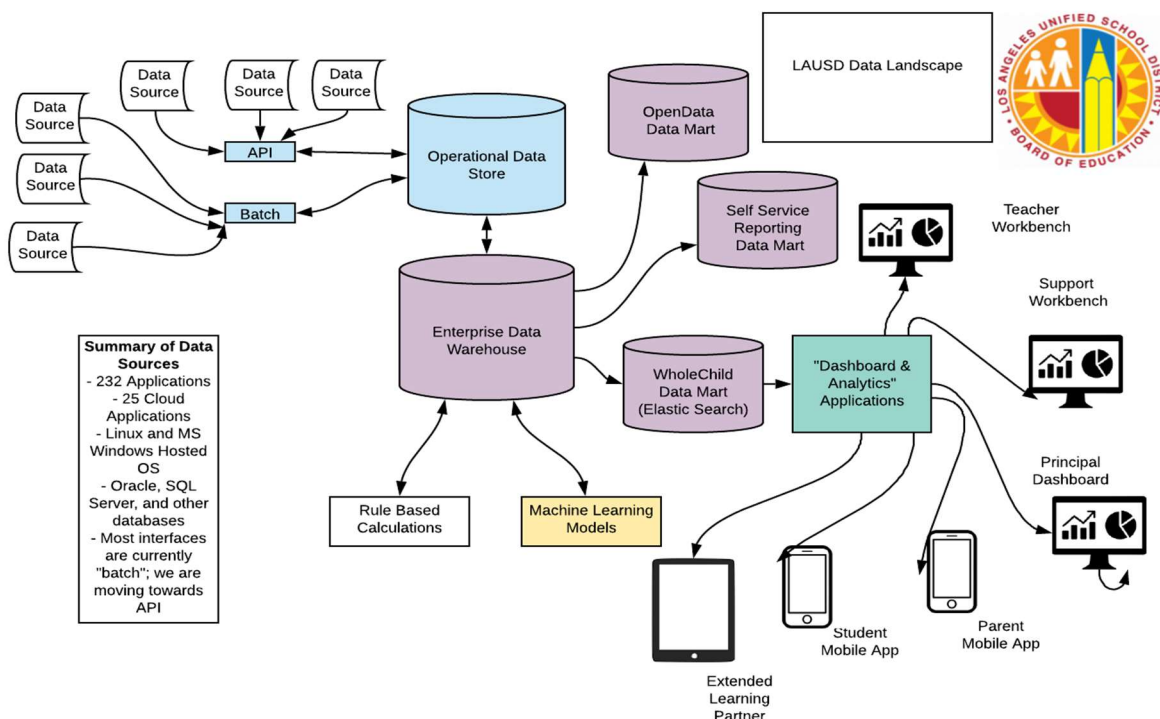
2.4 FUNCTIONAL REQUIREMENTS

Please see:

Appendix A: Table includes District inquiry questions related to an API Management solution.

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3.0 Questions

Questions regarding this announcement shall be submitted in writing by email to the assigned Analyst via ITD-Bids@lausd.net. Verbal questions will NOT be accepted. Questions shall NOT contain proprietary or classified information. The District does not guarantee that questions received after **August 13th**, **2020, 5:30 PM** Pacific Time will be answered.

4.0 Submission Date and Instructions

Submittals must be in an Adobe Acrobat compatible format and are due no later than **August 24th, 2020, at 3:30 PM** Pacific Time.

Responses (not including additional optional submittals) shall be submitted via email with the subject heading "**RFI No. 202102**" to **ITD-Bids@lausd.net.** Proprietary information, if any, shall be minimized and MUST BE CLEARLY MARKED. To aid the District, please segregate proprietary information. Please be advised that all submissions become District property and may not be returned.

Submittal requirements must include the following:

I.   Cover letter
II. Description of the Organization
III. Answers to the questionnaires in Appendix A
IV. Based on submittals, the District may select a group of respondents to this RFI and schedule corresponding interviews and/or product demonstrations. Presentations may be scheduled after October 5th, 2020.

4.1 Errors and Omissions in the RFI Document
If the Interested Party discovers any discrepancy, ambiguity, error, or omission in this RFI or any related documents, the Interested Party shall notify the District's Analyst immediately and request clarification or correction. Any such errors or omissions, if verified by the District, will be corrected by a written addendum to the RFI.

5.0 Communications

5.1 All communications with the District regarding this RFI shall be governed by the District's "Contractor's Code of Conduct" using the link (https://achieve.lausd.net/site/handlers/filedownload.ashx?moduleinstanceid=42034&dataid=58773&FileName=Contractor_Code_of_Conduct_2018.pdf).

5.2 All communications regarding this RFI between Interested Parties and the staff of the DISTRICT and consultants engaged by the DISTRICT shall be addressed only to the Analysts identified in the Request for Information Letter. At no time "PRIOR" to the DISTRICT'S Notice of Award, during the RFI or RFP phase, shall Proposer(s) contact DISTRICT officials or personnel regarding this RFI or RFP or any contract(s) to be awarded in response hereto. To do so may subject the Proposer to disqualification during the RFP phase.

6.0 Demonstrations/Proof of Concept

Responses provided by Interested Parties shall be reviewed and evaluated by the District's Information Technology Division (ITD). As a result of this RFI, respondents to this RFI may be invited to present supplemental information on package/s they provide and/or to give a demonstration. All applicable District terms and conditions will apply.

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As a result of the evaluation of this RFI, respondents to this RFI <u>may be</u> invited to perform the proof of concept and must acknowledge and provide strict adherence to all provisions of the District's Code of Conduct:
(https://achieve.lausd.net/site/handlers/filedownload.ashx?moduleinstanceid=42034&dataid=58773&FileName=Contractor_Code_of_Conduct_2018.pdf). There will be no cost reimbursement provided by LAUSD for the Proof of Concept.

7.0 Marketing
Making any reference to the District in any literature, promotional material, brochures, or sales presentations is strictly prohibited without the express written consent of the District.

8.0 Future Request for Proposal (RFP) or Request for Quote (RFQ)
The District reserves the option to issue a solicitation based on information gathered through this RFI. In the event a solicitation is issued, the District anticipates soliciting proposals through open competition and shall then select one firm to provide a solution that will meet the requirements of the District.

The submission of a response to this RFI is not a precondition for submitting a proposal in response to a future solicitation. Such interested parties or participants shall have no priority in consideration of responses to future solicitations.

Los **A**ngeles **U**nified **S**chool **D**istrict
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Appendix A

The Los Angeles Unified School District ("District") is seeking information from interested parties who can provide a comprehensive Application Platform Interface (API) Management System. The attributes of vendor-provided solutions are to be assessed based on a comprehensive process. The table below is an introductory opportunity for vendors to provide information related to their submission.

#	Question
A	Vendor Information
A.1	Contact details of the person responsible for the information contained in this RFI: Name Telephone number Fax number Email address Web page
A.2	Organization size (number of employees)
A.3	How many years has your organization been in business?
A.4	How many customers do you have within the education and public-sector/government space?
B	Training
B.1	Do you offer formal user training? If yes: 1. What types of courses do you run, and what is their duration? 2. What level of training would you recommend? 3. Describe any training materials offered.
B.2	What is your anticipated learning curve for administrators, developers, and end-user administrators/approvers?
C	Infrastructure Requirements
C.1	Is the software installed on-premises or on-cloud? Please describe any "hybrid" setup.
C.2	Recommended Client PC/Laptop requirements.
D	Capabilities & Requirements
D.1	Does your product have a multi-cloud support function for the deployment of components on Docker, AWS, Azure, IBM Cloud, Hybrid, and on-premises private cloud solutions? If so, please describe your software's multi-cloud support function for such a purpose.
D.2	Does your solution have a self-service developer portal for documentation of APIs, registration, usage reporting, analysis, and community support? If so, please describe your self-service developer portal for the above-mentioned purpose.
D.3	Describe the security and protection functions of your API and Integration solutions from the perspective of preventing misusage.
D.4	Does your solution have API services that act as a "Proxy"? These services safeguard the back end of services from malfunctions that may arise from a high number of queries. If you have these "Proxy" API services, please describe them.
D.5	Does your solution publish APIs for internal and external customers?

D.6	Please describe the functionality of how your solution publishes APIs for internal and external customers. If so, how does it complete this function?
D.7	Can your product ensure the uniformity of multiple API implementations and versions? If so, how does your product ensure uniformity?
D.8	Does your product include support for the purposes of API testing and monitoring? If so, please provide a brief description of the support that your solution provides for the purposes of API testing and monitoring.
D.9	Is your product horizontally scalable, so that large and variable workloads can be supported? If so, please describe the scalability of your solution.
D.10	Does your solution provide a low code development platform for API creation, API maintenance and life cycle management? If so, please describe the functionality of this platform.
D.11	Does your solution publish and manage micro-services architectures? If so, please give a brief description of how your solution publishes and manages micro-services architectures.
D.12	Does your solution provide a wide variety of standard connectors to connect applications, databases, devices and more regardless of whether they are on-premises, in the cloud, or a combination of both? (For example, you might have an External Rest API on one end and an Oracle Database on the other.)
D.13	Does your solution manage end-to-end data flows or pipelines that ensure data quality and provide notifications when problems or errors are encountered?
D.14	Does your solution provide no or low-code solutions to build integrations using application connectors, webhooks, and Rest APIs?
D.15	Does your solution provide "A Set of Automatic Logic" that performs multiple requests when required? For example, if a Rest API only allows 50 records to be retrieved at a time and there are a 1000 records to be retrieved, then the platform should be able to send properly formatted requests to "Call the API to Retrieve 1000 records".
D.16	Does your solution provide LAUSD with the flexibility to schedule and run data pipelines based on a customized set of events?
D.17	Does your solution provide LAUSD with flexible tools to source "Mapping Data" between its source and destination layers?
D.18	Does your solution provide full support for a Swagger Open API specification?
D.19	Does your solution fully support authentication through OAuth and other available methods?
D.20	Does your product provide us with support in general as related to microservices?
D.21	Could your solution provide us with an "API Management Tool that uses an open standard data interchange format in order to validate that each "Content Element" that has been submitted meets current API schema parameters (Otherwise, the "Content Element" should be rejected)"?
D.22	Does your solution ensure that all internal and external connections to an API must be encrypted with TLS 1.2 or a more advanced version of TLS?
D.23	Does your system ensure that communication with the API tool is restricted to authorized servers only? (e.g. ACL, white/blacklist)

D.24	Does or can your solution authenticate API users according to the following requirement: (e.g. Auth token, Json token, Basic HTTP authentication cannot be permitted; Only in the scenario that an ACL is used should API Keys be acceptable for use and authorization)?
D.25	Does your solution ensure that API keys and tokens are **NOT** hard coded into the application?
D.26	With regards to your product do tokens expire? For LAUSD timing will be considered critical depending on the use-cases involved.
D.27	Does your system ensure that, if there are files to be uploaded an API gateway must pass them to an SDK or ICAP compliant scanning engine?
D.28	Does your system ensure that the API gateway is based on the results mentioned in "D27" to determine if the API transaction should continue?
D.29	An API tool must be configured to limit the number of connections per second- based on a server's capacity and expected use projections. Does your system subscribe to this requirement?
D.30	Does your system ensure that "Logs within the tool must be maintained for no less than 180 days and include"? - Access Logs - Transaction Logs - Management Changes (Configuration, topology, login) - Diagnostics (for example "Trace-logs" for "Start/Stop" service events and messages.
E	**Third-Party Integration**
E.1	Describe how your software integrates with other applications?
F	**Consulting Services**
F.1	Describe your experience in implementing your software at a public-sector organization comparable (size, amount of managed data assets) to LAUSD?
F.2	Describe your experience in implementing your software at a private-sector organization comparable (size, amount of managed data assets) to LAUSD?
F.3	What type of consulting services do you provide (requirement gathering, API development, data migration, application integration, etc.)?
G	**Detailed Cost Model**
G.1	What is your licensing model (named users, concurrent users, server, etc.)?
G.2	What is the list price of your product, annual maintenance, and training to support the requirements in this RFI?
G.3	Is there anything that will require an additional or third-party purchase to meet the capabilities and requirements outlined in this RFI? If yes, provide third-party details.
G.4	Provide a sample high-level project timeline for implementation of the API Management capabilities of your product.
H	**Security Requirements**
H.1	Ability to create and deactivate accounts in the application.
H.2	Ability to assign user roles and privileges.
H.3	Ability to integrate with LAUSD's Single Sign-on.