Ministry of Community Development
Information Technology Department

UNITED ARAB EMIRATES
MINISTRY OF COMMUNITY DEVELOPMENT

الإمارات العربية المتحدة
وزارة تـنـمـيـة الـمـجـتـمـع

Request for Proposal
MOCD - API Hub Solution
07th April 2019

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IT Department

REQUEST FOR PROPOSAL

Document Control

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Request for Proposal (RFP)

1. Introduction

1.1.   Ministry Of Community Development (Herein referred to as "**MOCD**" or the "**Customer**") works on policies, strategies and programs for the development and advancement on social welfare of the community in the UAE. MOCD comprises of different departments, which works on development and improvement for community welfare. MOCD has current most of it Information Technology Operations to an Incumbent along with application support services.

1.2.   The purpose of this Request for Proposal (RFP) is to solicit proposals from various candidate organizations; conduct a fair and extensive evaluation based on criteria listed herein, and select the candidate who best represents the direction MOCD wishes to go.

1.3.   MOCD wishes to evaluate available API Management Hub that focus on delivering tools and applications that are self-service in nature allowing MOCD IT to get access to all information and execute everyday tasks without the need to wait on anything else

1.4.   The RFP has been structured to assist a comparable evaluation of responses on return. It contains background and management information to help the process. Any assumptions used must be clearly stated within each response.

2. Project Description & Objectives

2.1.   **Description**

Vendor is required to propose us with on-premise solution that shall support inbound, outbound service integrations like SOAP, REST API's etc. The solution should adhere to complex integration procedures and continuous support. The API Hub solution should help us in publishing, promoting and governing APIs, in a secure and scalable environment.

2.2.   **Objectives `**

- ❐ Design API Hub Architecture
- ❐ Enhance IT User Experience and align with MOCD branding
- ❐ Enable social collaboration through API Gateways
- ❐ Cost savings
- ❐ Hassle Free maintenance
- ❐ Implementation of Industry Best Standard practices
- ❐ Simple Approval workflow management for Sharing API's
- ❐ Open API Support (via Portal)
- ❐ Optimizing Inbound & Outbound API's
- ❐ Analytics & Troubleshooting

3. Current landscape

3.1.   The SOAP, REST API's etc. are currently flown through different internal systems and managed by different system owners.

3.2.   Current application/API are hosted in Windows & Linux Server Platforms.

3.3.   We have different channels from which our services/API are being utilized like through website, Mobile and centres.

3.4.   We also have external integrations with different government bodies. Currently 25 are active and 40 in pipeline.

4. Scope of Work

The scope of work involves the solution provider tool/product that should manage all our API Hub requirements that will meet our objectives, deliverables, timeline and budget. Further, the solution provider have to analyze, design, develop, implement, test and integrate all API's irrespective of domain and technology.

5. Project Timelines

5.1.   The timetable MOCD estimates for the RFP selection process is as follows. Please note MOCD may at its discretion vary the dates shown below.

5.2.   Vendor is expected to meet the Go-live date of project within three months from the project kick-off date

Description	Due Date
Time to submit the pre-bid queries	To be decided
Time-period for discussions to address RFP/Solution queries	To be decided
RFP Responses Due by	To be decided
Negotiations with short-listed Vendor completed by	To be decided
Final Vendor selection (for contracting) during week commencing	To be decided
Contract negotiations and signature complete by	To be decided
From Requirement gathering and finalization	To be decided
UAT and other deliverables	To be decided
Planned Project Go-live	To be decided

6. Support

- Vendor is expected to support MOCD in installation, implementation, launch and rollout of API Management Hub.

- Vendor is also expected to provide post-implementation support for 3 months

- Vendor is responsible for providing the necessary documentation while requirement gathering, design, and implementation and rollout phases wherever it is applicable.

- Vendor is responsible for providing training to IT/End users with necessary documentation

- Vendor should handover the system and deliverables to MOCD IT team

- Vendor should plan to provide the services from Dubai or partly from Dubai (as proposed as per the solution), with the option to propose local services as appropriate.

7. Confidentiality

7.1. The terms of this RFP and all related information provided to Vendor by MOCD in connection with the RFP are to be treated by Vendor as strictly confidential and proprietary. Such materials are to be used solely for the purpose of responding to the RFP.

7.2. Access to the RFP materials and related information shall not be granted to third parties sub-vendors without MOCD's prior consent and the prior written agreement of the recipient to treat the materials as confidential.

7.3. Any information disclosed by the Vendor in response to MOCD's RFP will be treated as confidential and will not be used by MOCD in any manner that identifies the source of the information provided.

8. Sub-contracted or out-sourced solutions

MOCD would prefer the vendor not to contract the services mentioned in this RFP to any third party/sub-vendor under the period of the contract. The Vendor is to ensure that majority of personnel deployed for the engagement with MOCD are on roles of the vendor during the entire duration of the contract.

9. Presentation of Proposal

9.1. MOCD may request shortlisted Vendor to give a formal presentation on their proposals post submission. In the event that a presentation is required, MOCD will contact the vendor to arrange a specific time, location and suggested content. MOCD requires that the Vendor have the key individuals present who will actually be assigned to the project if they are successful.

9.2. Should a presentation be requested, this would be the Vendor's opportunity to expand more clearly on specific experience and provide clarification on its proposal. Any presentation will be limited to 60 minutes.

10. Evaluation Criteria

10.1. Evaluation of the solution shall be determined based on below list of criteria :

- ❒ Vendor Experience
- ❒ Deployment, Architecture & Administration
- ❒ API Creation & Deployment
- ❒ API Gateway
- ❒ API Management & Analytics
- ❒ API Socialization (Developer Portal)
- ❒ Security
- ❒ Training and Support

❏ Industry Experience

Note :- Please refer to Annexure A for detailed Evaluation Criteria

10.2. Each Recipient acknowledges and accepts that the MOCD may, in its sole and absolute discretion, apply whatever criteria it deems appropriate in the selection of organizations, not limited to those selection criteria set out in this RFP document.

10.3. Project delivery

❏ Expertise in Domain and Application knowledge

❏ Capability to meet the primary constraints such as scope, time, quality and budget defined within this RFP

❏ Ability to demonstrate Application implementation experience with respect to the case studies provided

❏ Ability to demonstrate best approaches to structuring and operating the support model

❏ Alignment with Project management process and standards

❏ Similar project implementation in Federal/Local government entities of UAE.

11. Instructions for response

11.1. Your responses and any immediate questions you may have should be sent <u>electronically</u> to:

Kidar Muhamed

kidar.muhamed@mocd.gov.ae

11.2. A hard copy and a soft copy in 1 No of your response must be handed over to our Finance Department (This will go through a Tendering process from MOF - Refer MOF site)

12. Project Approach & Definition of Responsibilities

12.1. Please define clearly the approach that you will take in managing, implementation and delivering services, including but not limited to the following aspects:

❏ Your Statement of Work and Deliverables (e.g. provide a sample or outline steps / deliverables)

❏ **Infrastructure requirements (In terms of server memory / CPU utilization / storage and network utilization) for successfully launching and managing the application**

❏ Roles: Project Management, Project Governance

❏ Review Meetings

❏ Sign Off / Acceptance

❏ Invoicing

13. Price

13.1.   The terms of any subsequent contractual agreement will be mutually agreed dependent on the response to this document and any further negotiation. However, please confirm your quotation in full for the products and services contained within this RFP.

13.2.   The rates quoted by the Vendor are expected to remain constant for the entire duration of the contract.

13.3.   Vendor solution should be for fixed rates.

13.4.   All rates to be expressed in **AEDs (Dirhams) only**.

13.5.   Additional, the Vendor need to provide the rate card for the future enhancement activity related to this project.

13.6.   Payment will be made to the vendor stage by stage in which we will set the evaluation criteria (Milestones) for each stage based on contract.

14. Glossary

14.1.   Vendor may refer to this section for clarity on any acronyms used and the perceived meaning of terms by MOCD for the purpose of this Request for Proposal

14.2.   Vendor - An organization which has received this RFP and been invited to submit proposals in response to this request.

14.3.   MOCD – Ministry Of Community Development, Dubai.

14.4.   Contract - A written agreement between the successful Vendor and MOCD to provide the services and/or materials contemplated by this RFP.

14.5.   UAE - United Arab Emirates

14.6.   IT - Information Technology

14.7.   API – SOAP or REST Application programming Interface

15. Contractual Commitment of Proposal

15.1.   MOCD reserves the right to enter into discussions and/or negotiations with more than one qualified Vendor at the same time, should such action be in the best interest of MOCD. MOCD may enter into contractual agreements with one or more Vendors, with no Vendors, or with any other party who did not bid, should it determine that such actions are in its best interests. Furthermore, MOCD reserves the right to award the contract for reasons other than the lowest price.

15.2.   MOCD reserves the right to revise, cancel or to reissue this RFP in completely or in part prior to execution of a contract.

Annexures

1. Annexure A (Evaluation Criteria)

➢ **Vendor Experience**

❒ How long has your company been in business?

❒ How long has your company been selling and supporting your API Hub product?

❒ How many customers do you have worldwide?

❒ How many customers do you have in UAE?

❒ If any components of your API Hub solution can be sold separately?

❒ Explain how API Hub fits into in-house Integration.

❒ How many customers use your API Hub solution - please breakdown by Govt/Private Entities

❒ Please describe the roadmap for your API & Integration solution

❒ Do any analysts rank your API Hub solution? If so, please enumerate analysts and rankings

❒ Please describe how your offering integrates with ESB style or other integration technologies using open standards and automation

❒ Does your organization provide complementing integration technologies that fit into the API Hub solution?

❒ Please describe your organization's experience of integrating systems providing examples in our industry if possible

❒ Please provide references for your API Hub solution

❒ Do you provide free training for architecture, development, and operations on your website?

❒ Do you provide online tutorials to help us learn your product?

❒ Please provide a link to your product's user community

➢ **Deployment, Architecture & Administration**

❒ Does your solution provide flexible deployment options across public and on-premise environments?

❒ Does the solution provide ease of deployment & management for all components?

❒ Does on-premise API hub solution support multiple languages, e.g. English, Arabic, etc.?

❒ Does your solution include a console to manage and monitor all infrastructure components, i.e. gateway servers, management servers, load balancers, etc., of your API Hub solution?

❒ Can a single installation and instantiation of your API Hub solution support multi-tenancy?

❒ Please describe the availability and resilience characteristics of the solution and any SLAs associated with it

❒ Please describe how High availability & disaster recovery can be achieved

❒ Please provide a logical overview diagram of the components required to make up your solution for on-premise deployments

❒ Please provide an architectural diagram that shows how a highly available solution could be built on-premise

❑ Please describe the ability of the solution to be monitored by external enterprise tooling, listing any enterprise tooling that works directly with your solution. Also include what metrics and information can be monitored

❑ Can multiple teams work independently with runtime isolation?

❑ How does your platform integrate into continuous development and deployment practices?

❑ Does the solution support zero downtime patching and updates?

❑ Please describe what tooling is available for administrators and operators to interact and control the deployed environments for on-premise

➢ **API Creation & Deployment**

❑ Does your solution support out-of-the-box connectors to other systems?

❑ Does your solution support the automatic creation of APIs and their implementations via out-of-the-box connectors to backend systems or data stores? Please describe how and also list backend systems or data stores

❑ Does the product support OpenAPI (formerly known as Swagger) to design APIs and generate documentation?

❑ How are existing SOAP services added?

❑ Can your platform reference existing assets such as encryption libraries, schema validation tools, data validation libraries, etc.?

❑ How does your product support threat detection by detecting fraudulent data injections at the API level?

❑ Does the platform support publishing SOAP, REST, JSON, and XML style services as APIs as well as JMS?

❑ Are standard transformations included? (XML to JSON, JSON to XML, SOAP to REST, REST to SOAP)

❑ Please describe the debugging tools built into the platform.

❑ How is versioning supported?

❑ Does the solution allow the storing and querying of arbitrary schema-less JSON data?

❑ Does the platform provide user management and social relationship functionality for building personalized applications?

❑ Can the platform support push notifications across various mobile platforms?

❑ Can the core functionality of the platform be extended by the customer?

❑ Does the platform support support extensions using common languages like C# and JavaScript?

❑ How does the product support API Lifecycle governance?

❑ Can your product publish APIs for external and internal consumers? How are these managed independently?

❑ How do you manage API visibility and restrict access to consumers? Is this configuration in the platform or built as part of the APIs enablement?

❑ Does your solution use any framework and how it can help us?

❑ Please describe the different options for developing APIs?

❑ Is role based accessed enforced on developers?

❑ Does your developer tooling provide any testing capabilities?

❑ What security policies can developers enforce on their APIs?

❐ Can we merge multiple API's in to single dataset?

➢ **API Gateway**

❐ Can your API Gateway execute customer's Java / C# code / JavaScript code? Please explain

❐ How does your product support threat detection by detecting fraudulent data injections at the API level?

❐ Please describe your ability to protect from traffic spikes.

❐ Does the platform support publishing SOAP, REST, JSON, and XML style services as APIs as well as JMS?

❐ Please describe process flows for discovering services in the runtime environment.

❐ Does your API Gateway require a database?

❐ Is your API Gateway UI browser-based or does it require a fat client to be installed on a developer desktop/laptop?

❐ What other types of workload does your API Gateway support beside SOAP and REST?

❐ Does your API Gateway have any built-in capabilities for doing self-balancing across a cluster of gateways and intelligent load balancing to backend API provider layer?

❐ What security protocols and standards does your API Gateway support?

❐ Does your API Gateway provide built-in support for schema validation?

❐ Does your API Gateway support JSON to XML, XML to JSON and Any2Any message transformation without any coding or extension?

❐ Does your API Gateway provide database connectivity?

❐ Please describe how your gateway can be monitored

❐ What operating system does your gateway sit on?

❐ Does your API Gateway support routing and orchestration?

❐ Can your API Gateway use XLST to do transformation?

❐ What level of error handling is available on the gateway?

❐ Is your gateway able to provide different activities or policies for each individual API and operation on that API, i.e. POST, GET, etc.?

❐ Does your gateway support POST, GET, DELETE, HEAD, PATCH & OPTIONS?

❐ Can your gateway control, manage and shape API traffic? Please describe the policies that can be applied

❐ How is API traffic reported from the gateway?

❐ Can multiple provider channels be exposed from the same gateway with complete segregation? I.e. internal APIs and external APIs running through the same gateway in isolation?

➢ **API Management & Analytics**

❐ What REST API Description Languages does your solution support and what REST API Description Language do you support internally in your runtime?

❐ Please describe your support for Open API, i.e. Swagger. Does your corporation belong to the "Open APIs Initiative", i.e. www.openapis.org?

❐ Do you support the creation of REST and SOAP APIs?

❐ Does your API Hub solution have any out-of-the-box (OOTB) integration points to automatically manage APIs from other products?

❐ Does your API Hub solution support built-in browser-based visual/graphical message mapping?

❐ Does your API Hub solution support an external IDE to do visual/graphical message mapping that you can then deploy to the runtime environment?

❐ Please describe the API Management lifecycle, versioning, governance, & control. Does your platform support an API lifecycle beyond API naming convention? Please explain

❐ Does your solution include logging capabilities? Please explain

❐ Does your solution include monitoring and alerting capabilities? Please explain

❐ Does your API Hub solution include API analytics? If so, please describe what API metrics are captured for analytics

❐ Please describe how an API is published from an internal endpoint to an external endpoint

❐ Please describe the process for discovering services and APIs that are to be published on your solution

❐ Can APIs be extended from their original endpoints to include new functionality or data?

❐ Please describe how different environments such as Dev, Test, Staging, Production can be deployed keep APIs in isolation from each other

❐ Please describe how your API manager communicates with the other components of your solution, such as the API Gateway, Developer Portal, etc.

❐ Please describe how developer communities are managed?

❐ Please describe the role based access for management of the APIs

❐ Please describe the API build chain and how this can be automated

❐ Please describe how templates from other API definitions can be used to create new APIs sharing common functions and operations

❐ Please describe how APIs are version controlled at development time

❐ Can your offering enforce approvals on users when moving through the API lifecycle?

❐ Can the visibility of APIs be controlled? Please give examples

❐ Can the same APIs be deployed to both internal users and external users but behave differently based on context?

❐ Can APIs be grouped in a way that allows them to be consumable by specific audiences?

❐ Can errors and failures be reported in the analytics?

❐ Can payload data be captured and used for reporting?

❐ Please describe the out-of-the-box reports provided by the tool.

❐ Does the tool provide a wizard for creating custom reports?

❐ Can reports be created on-demand?

❐ What are the exception management reporting capabilities?

❐ What level of reporting is available to the developer? (call latency, SLA compliance, other metrics)

> **API Developer Portal**

- ❒ How are assets manifested in the developer portal for developer use? Sub/Department Page
- ❒ Please describe how the tool facilitates on boarding. Is this portal available as a completely on-premises solution?
- ❒ Does the solution provide interactive documentation to allow API consumers to easily try out published APIs?
- ❒ Is the registration form customizable?
- ❒ Can we integrate with Active Directory
- ❒ Are the pricing models configurable without coding?
- ❒ Is inbuilt workflow available (simple 2 or 3 step workflow)
- ❒ Does your Developer Portal leverage any Content Management System?
- ❒ Does your Developer Portal provide sample code to invoke an API from different platforms, e.g. Swift, Java, Node, Python, Ruby, PHP, cURL, Go,C#,Javascript etc. that can be easily copy-and-pasted?
- ❒ Does your Developer Portal include capabilities to create Support tickets and access FAQs?
- ❒ Is the user registration form customizable?
- ❒ Please describe what information is available to subscribing developers when they visit the Developer Portal
- ❒ Does each developer or developer organization get usage information for the APIs they have subscribed to?
- ❒ Can the visibility of specific APIs be controlled by who has signed up to the Developer Portal?
- ❒ Does your Developer Portal have OAuth testing tools, which enable the complete testing of APIs that are secured with all of the OAuth flows?
- ❒ Please describe how your Developer Portal can be extended using open technologies

> **API Security**

- ❒ Does your API Hub solution include security capabilities to manage Users, Roles, TLS Profiles, and User Registries? Please explain The upgraded software should cover the all default features
- ❒ Can your Developer Portal use an externally controlled user registry such as LDAP?
- ❒ Does your Developer Portal have new user creation self-service capabiliites?
- ❒ Does your Developer Portal support CAPTCHA for self-service new user creation as well as API Comments?
- ❒ Is your API Gateway DMZ-ready out-of-the-box?
- ❒ Does your API Gateway support FIPS 140-2 Level 3 and Common Criteria EAL4?
- ❒ Please describe how your solution would address the OWASP Top 10 threats
- ❒ How does your solution secure payloads and channels?
- ❒ Please provide a list of supported security standards
- ❒ Please describe how policies are created

- ☐ Please describe how policies are enforced
- ☐ Please describe how the interactions between developers and the published APIs are secured
- ☐ Can a developer create an OAuth provider endpoint?
- ☐ Does your solution supply any OAuth testing tools?
- ☐ How is single-sign on supported across all the roles involved in the lifecycle in your product?
- ☐ Does the proxy provide support for CORS?
- ☐ Can APIs be secured at the operation level? (Ex: can do GET, but not POST or PUT)

➢ **API Training & Support**
- ☐ Please describe the support model your organization provides
- ☐ Please provide a link to user communities for your solution
- ☐ Please provide a link to the public documentation for your solution
- ☐ Please provide public links to reference architecture that is relevant to your solution
- ☐ Please provide links to any freely available tutorials for your solution
- ☐ Please provide details of the free training that your organization provides for your solution
- ☐ Does the solution provide interactive documentation to allow API consumers to easily try out published APIs?
- ☐ Please provide details on the professional services your solution in order to implement an API Hub solution

➢ **Industry Experience**
- ☐ Please describe your company's vision for API usage in our ministry
- ☐ Please describe your company's experience in supporting different government outside the API management domain

2. Annexure B (Deliverables)

- ❒ Implementation standards document that will be adopted in delivering the solution
- ❒ User Training Kit
- ❒ Requirements Analysis document
- ❒ Functional parameterization and configuration document
- ❒ System Performance Benchmarks (Response time, etc.)
- ❒ Solution Installation and Deployment Document
- ❒ System Administration Document
- ❒ System Configuration and Parameter Document
- ❒ System Maintenance Document
- ❒ Test Cases – Unit testing / System and Integration Testing/Functional Testing
- ❒ Project Plan Document
- ❒ Project Status Update Documents
- ❒ Project Closer Document