The Internet Society

on behalf of

The IETF Administrative Oversight Committee

REQUEST FOR PROPOSALS

for

Python Development IDIQ Contract

Date of Issuance: November 2, 2009
Proposal Submission Deadline: December 11, 5:00 P.M. EST

IETF Request for Proposals

Python Development IDIQ Contract

The Internet Society (“ISOC”) on behalf of the IETF Administrative Oversight Committee (IAOC) is soliciting this request (“Request”) for Proposals ("Proposals") to provide Python development services using the Django framework. Proposals from any commercial or non-commercial vendor are welcome. Those submitting a Proposal (“Vendor”) shall do so in accordance to this Request

I. Introduction

The Internet Engineering Task Force (IETF) standards development work is supported by an IT infrastructure using MySQL database and tools developed in Python. Some earlier tools developed using Perl are being phased out. The IETF is undertaking the Life Cycle Datatracker Project and desires to enhance the current tool infrastructure with Python using the Django framework and to extend the current architecture to support authors, working group chairs, the RFC Editor, the IANA administrators, and others.

The Internet Society desires to enter into an Indefinite Delivery/Indefinite Quantity (IDIQ) Master Services Agreement (MSA) with one or more software development companies with which to accomplish its objectives over the next twenty-four (24) months. Through the MSA, ISOC, through the IAOC, will thereafter issue Work Orders for the delivery of specified software.

Awarding a contract or contracts will be a two-step process:

1. Responses to this RFP will be used to identify qualified vendors as defined in Section IV. D to proceed to step two;
2. Invited vendors will be asked to provide pricing information for the development of a specific application, the assumptions and analysis used to reach that price.

Attachment 1 contains information for an application in which an existing Django application is to be enhanced with the functionality of an existing Perl application. This RFP requests the proposer to evaluate the information and describe the approach that the vendor would take to accomplish the work.

II. Current Architecture

The current Datatracker infrastructure provides support for the work of the Internet Engineering Steering Group (IESG), the IETF Secretariat, and through the ietf.org website provides information to the community at large. The current tools are written in Perl and Python and interface with the MySQL database.

III. Life Cycle Datatracker Project

The Datatracker would provide enhanced support for the IESG, extend the Datatracker to include support for a authors, working group chairs, the RFC Editor, the IANA administrators, and others. Eventually providing management tools and a dashboard to better monitor and manage the work of the IETF.

IV. Instructions and Procedures

A. Submissions

Proposals must be received via email at rpelletier@isoc.org no later than December 11, 2009, 5:00 P.M. EST.

Vendor assumes all risk and responsibility for submission of its Proposal by the above deadline. ISOC shall have no responsibility for non-receipt of Proposals due to network or system failures, outages, delays or other events beyond its reasonable control.

All Proposals shall become the property of the Internet Society.

B. Questions and Inquiries

Any inquiries regarding this Request must be submitted in writing to the email address listed in IV.A above. Other than such inquiries, Vendors are prohibited from contacting any person or institution involved in the selection process concerning this Request.

All questions/inquiries must be submitted in writing and must be received no later than midnight, ET, November 16, 2009.

Responses to questions and inquiries shall be posted on the IAOC website, iaoc.ietf.org/rfpsrfis.html by midnight, EST, November 20, 2009.

C. Addenda and Updates

Any addenda and updates to this Request shall be posted on the IAOC website, iaoc.ietf.org/rfpsrfis.html. Each Vendor is responsible for checking the IAOC website prior to submission of any Proposal to ensure that it has complied with all addenda and updates to this Request.

D. Selection Criteria

Each Proposal must describe the approach that the vendor would take to enhance an existing Django application with the functionality of an existing Perl application. Attachment 1 provides the background information and context for the application.

Further, each Proposal must specifically address each of the selection criteria listed in Section V below in a format corresponding to this Request. Each Proposal should also be accompanied by any technical or product literature that the Vendor wishes the ISOC to consider.

The IAOC, on behalf of ISOC, shall select from among those submitting proposals those Vendors which in its discretion are the most qualified to perform the work. Those vendors making the short list shall be invited to provide pricing information for the development of the application, as well as the assumptions and analysis used to develop the pricing model.

The IAOC may select one or more Vendors to accomplish the tasks reflected in this Request.

E. Cancellation; Rejection

ISOC reserves the right to cancel this Request, in whole or in part, at any time. The IAOC may reject any or all Proposals received in response to this Request in its sole discretion. ISOC makes no guarantee or commitment to purchase, license or procure any goods or services resulting from this Request.

F. Master Services Agreement and Work Orders

Any Final Proposal that is selected by the Internet Society shall be subject to negotiation and execution of a binding Master Services Agreement (MSA) between the Internet Society and the Vendor.

The MSA shall be for a three-year period with an option for two, one-year extensions. The MSA is an Indefinite Delivery/Indefinite Quantity (IDIQ) contract as it cannot be determined at this time the nature and number of applications that will be necessary to complete the project.

Any MSA that is entered into by ISOC and Vendor does not imply a guarantee of work for that Vendor.

Work orders for individual applications will be placed against the MSA. Attachment 1 identifies the first Work Order under the MSA.

G. Costs and Expenses

Each Vendor is responsible for its own costs and expenses involved in preparing and submitting its Proposal and any supplemental information requested by the IAOC. ISOC shall not reimburse any such costs or expenses.

H. Notification

The IAOC will notify Vendors of their selection following receipt and consideration of all Proposals. The IAOC will attempt to make its selection(s) within ten days of receipt of final proposals, but shall have full discretion to make a decision earlier or later.

I. Public Information

The IETF is a community committed to transparency in the manner in which it conducts its operations. Accordingly, the following principles will apply to the Proposal, negotiations, MSA and Work Order(s):

The names of all Vendors submitting Proposals may be announced publicly, but the Proposals and individual negotiations with Vendors will not be publicly announced.

Any Master Service Agreement negotiated with a Vendor, excluding cost, will be made public after execution.

J. Intellectual Property Rights

All work performed, all software and other materials developed by the Vendor under the MSA, shall be "works for hire" and shall be owned exclusively by the IETF Trust, and the Vendor shall obtain or retain any rights or licenses from any work produced for the "Work Order".

The IETF Trust intends to release the applications to the public under the Simplified BSD Software License, and Vendor will be required to represent and warrant that no impediment to such method of release exists. The Simplified BSD Software License can be found at http://www.opensource.org/licenses/bsd-license.php.

V. Selection Criteria

The selection of Vendor(s) for the next steps in the development of the Datatracker will be based on a number of important criteria that are enumerated below. These criteria include performance features, availability and licensing, cost, and potential for future improvements.

A. Application Requirements

A read-only view of a subset of the information of the current IETF workflow application ("Existing Django Application") can be inspected at https://datatracker.ietf.org/idtracker/. The Existing Django Application source code will be available to all bidders at http://tools.ietf.org/tools/ietfdb/browser. Read-only access to the SVN repository can be provided upon request.

A read-write view of the information of the current IETF workflow application ("Existing Perl Application") is not available to Vendors as login is required. The Existing Perl Application source code will be provided to those who are selected for the short list by the IAOC.

The Replacement Application must conform to the following requirements. Each Proposal must describe the technical features of the Replacement Application that will be used to implement the following requirements:

1. The Replacement Application should retain the same functionality and database structure as the Existing Django Application and the Existing Perl Application to the greatest extent possible. The "look and feel" of the Replacement Application should be reasonably close to the Existing Perl Application. Any proposed reduction in functionality must be described in the Final Proposal.

2. The Existing Perl Application maintains metadata about a document, including a state machine and ballot positions from evaluators. There is also an administrative interface, which allows the administrator to record ballot positions that are provided offline and maintain additional data.

3. All actions on a document are logged in a comment log and sent by email to a list of interested parties. In addition, certain workflow actions cause a template email message to be sent to a wider audience (e.g., IETF Last Call, or document approval messages).

4. The Existing Perl Application is currently implemented in thousands of lines of perl, which will be provided for reference to those making the short list. The Replacement Application must be implemented in Python using the Django framework, marinating all of the functionality of the Existing Django Application and adding the functionality of the Existing Perl Application. Read-only access will not require login, but read-write access will require a login. It is expected that Django models for many of the relevant database tables already exist, but may have to be augmented for this work.

5. The code must be readable and have adequate comments. Design documentation that enables later developers to understand and continue working with the delivered code must be provided. All software will be delivered in source code, and executable form if applicable.

B Development Practices

1. Development should use best current practice for software development, which we expect would mean that some variation on iterative agile software development (http://en.wikipedia.org/wiki/Agile_software_development) such as for instance scrum (http://en.wikipedia.org/wiki/Scrum_%28development%29) is used.

2. During both design and coding work, it is expected that a representative of the IETF will be actively involved as the customer representative in the development process.

3. During both design and coding work, it is expected that an easily accessible version repository will be used to commit consistent increments of design documents and working code. Examples of such repository/access methods are svn/trac, svn/code.google.com, git/github. The Existing Django Application is being maintained using svn/trac, at http://svn.tools.ietf.org/svn/tools/ietfdb/ and

http://tools.ietf.org/tools/ietfdb/ . Continuing to use this for the development of the Replacement Django Application would be an advantage.

4. During both design and coding work, it is expected that an easily accessible issue tracking system that integrates with the source repository is available. The examples given for code repositories above also provide this capability.

C. Intellectual Property

Vendor shall describe any intellectual property rights owned or licensed by you which may cover all or part of the Replacement Application, including a list and description of all U.S. and foreign patents and patent applications.

Vendor shall describe any intellectual property owned or licensed by third parties which is required to utilize all or part of the Replacement Application in the manner contemplated by this Request.

Vendor shall describe in detail any claims or disputes relating to the intellectual property embodied, or claimed to be embodied, in all or part of the Replacement Application.

D. Personnel

Vendor shall describe the personnel who would form the team that will be directly involved in the performance of services under the Service Agreement, including supervisory, managerial, liaison, development and support personnel. Provide detailed CVs for each team member to the greatest extent possible.

Vendor shall describe each team member's experience with projects of similar technical requirements and scope, and the percentage of such team member's full-time effort that will be devoted to this project.

E. Support and Maintenance

Vendor shall describe the technical support that will be available for the Replacement Application, including qualifications of support staff, availability, response times, manner of response, escalation and any other pertinent information. It is expected that support and maintenance will be available throughout the duration of the contract.

The Replacement Application must be warranted to operate in accordance with its specifications and otherwise in a reliable and secure manner for at least one year from acceptance. There shall be no charge for work required by Vendor to repair or fix serious errors to bring the Replacement Application into compliance during the warranted time.

F. Pricing

Pricing will be a component of the Final Proposal submitted by those on the short list. The development and implementation portion of this project will be on a fixed-cost

basis. Each Proposal must provide a fixed-cost bid, without escalation, for the development and implementation of the Replacement Application (through final acceptance of all features and functionality). It is expected that payment will be made based on Vendor's timely achievement of enumerated delivery and acceptance milestones.

No ongoing royalties, license fees, transaction fees, revenue sharing or similar payment proposals will be accepted.

Each Proposal must also provide pricing for support, maintenance and future development work.

All pricing shall be denominated in U.S. dollars.

G. Timing

Time is of the essence in the development and deployment of the Replacement Application. The Service Agreement will contain binding timeframes for delivery of the Replacement Application, including penalties for late or incomplete delivery.

Each Final Proposal must include a timeline for the development and implementation of the Replacement Application, including major milestones and proposed penalties for late or incomplete delivery.

H. Relationships

Describe any relationship between your company, or any parent, subsidiary or related company, or any director or officer of any of them, with the ISOC, IAOC, IETF or the IETF Trust, or any employee, director, officer or consultant of any of them.

VI. Proposal Format

A. Proposal Submissions

Proposals shall be submitted using the following format:

1. Transmittal letter with signature of authorized representative
2. Executive Summary
3. Table of Contents
4. Experience, Qualifications and Accomplishments
5. Key Personnel
8. References (Three references attesting to performance)
9. Describe the approach to create the application in Attachment 1
10. Resumes of Key Personnel
11. Subcontractor Information (if any)
12. Assumptions
13. IPR
14. Relationships
15. Miscellaneous Information

Attachment 1 – Authentication in the first Work Order

The first Work Order will merge the Existing Django Application and the Existing Perl Application to create the Replacement Application. In the resulting application, no login will be required to view much of the data, and login will be required to update the database. Presently, there are two authentication levels: IESG and Secretariat. Additional authentication levels will be introduced in future enhancements.

Access-control functionality for the Django application will be added to the datatracker code. It makes no sense to have separate "public tracker" and "non-public tracker" code. The first access-controlled functionality will be common tasks done by IESG, such as balloting.

For authentication, the existing Apache htpasswd files will be used. These files are maintained by the IETF Secretariat. Initially, there won't be any automatic functionality for creating accounts or resetting lost passwords.

The Django code will not access the htpasswd files in any way; the actual authentication is done by Apache. Apache configuration will be modified so that "/login/" URL (or similar) requires a password. Then, the Django authentication framework is used to get the user name from the REMOTE_USER environment variable set by Apache. (Note: this requires Django version 1.1).

Apache will not request authentication for any other URLs; instead, access control is done by Django code, based on a cookie set by the login page. Pages that absolutely require authentication would redirect the client to /login/; other pages might show different views to unauthenticated users (e.g., anyone can view the ballot page, but filling in a ballot is only available to IESG members after login.

Authorization information will be used to determine which users are allowed to perform various tasks. The Django framework will be used to access existing database tables to determine authorization, for example, which users are IESG members. These database tables are maintained by the IETF Secretariat. It is also be possible to read the Apache .perms file, but it's not clear if this will be needed.

Volunteers will be available for consulting on the authentication and authorization architecture if needed.