



IETF ADMINISTRATION LLC

Request for Proposals

YangCatalog Conversion

Date of Issuance: January 23, 2019
Proposal Submission Deadline: February 8, 2019, 5:00 P.M. ET

IETF LLC Request for Proposals

YangCatalog

The IETF Administration LLC (IETF LLC) is soliciting proposals ("Proposals") to:

1. Support transitioning the operation of the YangCatalog to the IETF Secretariat;
2. Support operating the YangCatalog web site; and
3. Adding features of the yangvalidator project to the YangCatalog.

Proposals from any commercial or non-commercial vendor are welcome.

Timeline

23 Jan: RFP Issued

30 Jan: Questions and Inquiries deadline

01 Feb: Answers to questions issued, RFP Addenda and Update issued

08 Feb: Proposals due

15 Feb: Selection made, negotiations begin

22 Feb: Contract execution

26 Feb: Work begins

This is the process for the Request for Bids:

1. The Statement of Work (SOW) is in attached.
2. Any questions about the Work must be submitted by 30 January 2019. A response to all parties shall be provided by 01 February 2019. The response will include the questions asked and the answers, but will not identify the company asking the question.
3. Bids are due by 8 February. The bid must provide a not-to-exceed price, the expected start date, the expected completion date, any assumptions, and a description of any dependencies that might cause delays in the schedule.
4. The IETF LLC will discuss the Bids and may ask questions by email and/or conference call.
5. Once the answers are received a decision will be made to select the bidder to perform the work and a Work Order will be prepared for execution. We anticipate an award on or before 15 February.
6. This is the Bid format:

- a. **Executive Summary**
- b. **Project Approach & Plan**
- c. **Schedule - When the work will begin and end, as well as dependencies and other milestones.**
- d. **Test Plan**
- e. **Cost & Payment Schedule**
- f. **Warranty & Late Delivery Consequence**
- g. **Technical Support & Maintenance**
- h. **Miscellaneous**

7. Note: Instructions for IETF Software Development Contractors will apply. See <https://trac.tools.ietf.org/tools/ietfdb/wiki/ContractorInstructions>

Please reply with questions, if any, and a bid if you are interested in pursuing this opportunity to ietf-rfps@ietf.org.

Thanks in advance.

Portia Wenze-Danley

IETF LLC Executive Director, Interim

Statement of Work: YangCatalog

Three Independent Tasks

This SOW contains three sections that describe three independent tasks:

1. Support for transitioning the operation of the YangCatalog to the IETF Secretariat;
2. Support for operating the YangCatalog web site; and
3. Adding the features of the yangvalidator project to the YangCatalog.

This SOW describes three independent tasks, and a bidder can choose to bid on one, two, or all three tasks. Bids for each section are expected to stand by themselves. Each section will be awarded independently.

The contractors selected for any of the tasks are expected to have the following qualifications:

- Deep knowledge of YANG models and the NETCONF protocol
- Practical experience of the ConfD and various YANG-related tools (pyang, yanglint, etc.)
- Software engineering in Python 3, SQL database, Elastic Search, Django framework, UWSGI + NGINX (or Apache 2 and mod_wsgi), use of GitHub
- Knowledge of the yangcatalog API (see the last section of <https://yangcatalog.org>) and how to contribute to the yangcatalog project (see <https://yangcatalog.org/contribute.html>).

Support for Transitioning the Operation of the YangCatalog to the IETF

This task requires a bid for hourly work as requested by the IETF Tools Team, as well as hours and actual travel expenses to attend the IETF-104 Hackathon. Hours and travel expenses to attend the IETF-104 Hackathon are guaranteed to the winner. Additional hours depend on the work that is needed over the period of the contract.

This task includes:

- Fix transition related bugs as identified in the YangCatalog issue tracker;
- Assist with changes needed to the YangCatalog to better work with the IETF provided infrastructure as they are identified; and
- Participate in the IETF-104 Hackathon sessions focusing on the YangCatalog at IETF 104. (See <https://www.ietf.org/how/runningcode/hackathons/104-hackathon/>).

Support for operating the YangCatalog

This task requires a bid for hourly work as requested by the IETF Tools Team.

The contractor will provide between 0 and 8 hours per week of support, as requested by the IETF Tools Team, for operating the YangCatalog, for up to 6 months after the date of award, at which time the contract may be renewed.

This task includes:

- Answer all emails sent to info@yangcatalog.org;
- Ensure that the databases and the metadata are consistent, available and with their integrity preserved;
- Act as a technical point of contact for all metadata for YANG modules (for all contributions, including those from the IETF, other SDOs, and industry consortia);
- Apply upgrades to all the tools used by the YangCatalog (such as pyang, confd, yanglint, and yangdump-pro), if not done automatically; and
- Fix yangcatalog github open issues, as populated by the community, following priorities set in coordination with the IETF Tools Team.

Adding the features of the yangvalidator project to the YangCatalog

The yangvalidator project (see <http://www.yangvalidator.com/> and <https://github.com/cmoberg/bottle-yang-extractor-validator>) is an open-source BottlePy- and CherryPy-based yang validation tool. This task adds the features from the yangvalidator project to the YangCatalog. This will require reimplementing to change the framework from BottlePy and CherryPy to Django. The yangvalidator code is currently written for Python 2.7. The YangCatalog codebase is written for Python 3.6. The task will also integrate the yang validation code with the local YangCatalog repository of YANG models.