CONTRACTED SERVICES AGREEMENT

THIS CONTRACTED SERVICES AGREEMENT (this “Agreement”) is made effective as of the 06th day of March 2019, (the “Effective Date”) by and between IETF Administration LLC (“IETF”) and PANTHEON.tech s.r.o. (the “Developer”).

1. Services. Developer shall provide to the Company the software development and other services described in any Statement of Work(s) (“SOW(s)”) executed by the parties or as otherwise mutually agreed by the parties (collectively, the “Services”). Developer will perform the Services in a professional and workmanlike manner and in accordance with the prevailing industry standard for the performance of comparable work, will use best current practice for software development and Developer will adhere to the instructions and practices described in “Instructions for IETF Software Development Contractors” located at https://trac.tools.ietf.org/tools/ietfdb/wiki/ContractorInstructions?version=26

2. Independent Developer. Developer’s relationship with IETF will be that of an independent contractor and nothing in this Agreement is intended to, or should be construed to, create a partnership, agency, joint venture, or employment relationship. Consistent with broad direction set by IETF, Developer will determine what actions are required to perform the Services and to achieve the relevant objectives. Developer will provide its own equipment (e.g., laptop and phone, and related services) and set its own hours. Developer may engage on other projects during the term of this Agreement, provided such work does not present a conflict of interest, result in disclosure of Confidential Information or otherwise interfere with Developer’s ability to complete the Services under this Agreement in a satisfactory manner. Developer shall not be provided any training by IETF and is expected to have all the expertise necessary to carry out the Services. Developer shall not engage the services of third party contractors, subcontractors or consultants (“Subcontractors”) in the performance of its obligations under this Agreement without the prior written consent of the IETF, specifying both the specific Subcontractor and the scope of work which it is permitted to undertake. To the extent IETF consents, Developer shall be fully responsible for each such Subcontractor’s compliance with the terms of this Agreement, and Developer shall be liable, without limitation, for all actions and omissions of such Subcontractors in their performance or failure to perform as required hereunder. Prices or fees as specified in SOWs are exclusive of taxes. Each party assumes responsibility for all taxes, levies, or charges by any governmental entity that are applicable to it under local laws or binding international agreements associated with its status under this Agreement.

3. Term & Termination. The initial term of this Agreement will begin on 06 March 2019 and end on 06 November 2019, provided that any SOWs in effect at termination will remain in full force and effect until the SOW term expires, unless expressly terminated pursuant to this Agreement. The parties may mutually agree in writing to renew the engagement for successive renewal periods after expiration of the term of this Agreement, and the terms of this Agreement will continue to apply. Either party may terminate this Agreement and SOW at any time and for any reason with 30 days’ prior written notice to the other party. Either party may terminate this Agreement immediately upon written notice if the other party materially breaches an obligation of this Agreement and does not cure such breach within
30 days of receiving notice of such breach. Upon termination for any reason, Developer agrees to cooperate in good faith with IETF to wind down and transition any work in progress.

4. Compensation and expenses.

IETF will compensate Developer for the Services at the rates set forth in the applicable SOW and in accordance with the schedule set forth therein. Developer will invoice IETF on a monthly basis by sending a timelog and invoice to exec-director@ietf.org. IETF will pay undisputed amounts of such invoice within 30 days of receipt via wire transfer.

IETF will reimburse Developer for direct expenses described in the SOW or incurred specifically in connection with the Services, subject to IETF’s prior written approval for any such expenses. Other than pre-approved direct expenses, Developer will be solely responsible for all other costs and expenses incurred in performance of this Agreement. IETF will reimburse Developer for appropriate approved expenses within 30 days after receiving an invoice from Developer, together with written documentation and receipts itemizing all such expenses. Developer must invoice IETF for expenses no more than one month from when they are incurred.

5. Confidentiality. In the course of Developer’s engagement with IETF, parties may be exposed or have access to information, materials or documents that are confidential to the other party, or its member or community (“CI”). Parties agree to maintain CI as confidential, and to not disclose or cause to be disclosed any CI, nor use CI for any purpose except as necessary to perform the Services under this Agreement. Parties will return or destroy any CI of the other party in its possession upon termination of this Agreement.


A. Assignment. The IETF Trust is a Virginia common law non-profit Trust whose beneficiary is the IETF. The IETF Trust shall own all right, title and interest in and to all information, materials and other proceeds that Developer creates in the course of, or that otherwise result from, the Services or Developer’s engagement with IETF (“Work Product”). All Work Product shall be deemed “works made for hire” to the extent permissible under the copyright law, and to the extent any Work Product may not be so deemed, Developer hereby assigns all right, title and interest in and to all intellectual property and other proprietary rights in such Work Product to the IETF Trust. Developer retains ownership in all other works Developer created prior to this Agreement or creates in the future outside of the scope of the Services and Developer’s engagement with IETF. Upon termination of this Agreement, Developer will provide to IETF any working drafts or other interim phases of deliverables Work Product as they exist upon termination.

B. Open Source Software. The IETF Trust intends to release some or all of the Work Product to the public under the Simplified BSD Software License or another open source software license, and Developer hereby represents and warrants that Developer will not use, integrate, or develop software as part of the Work Product performed by it hereunder that is incompatible with the Simplified BSD
Software License or another open source software license identified to it by IETF (via electronic mail or in writing).

C. **Required Rights.** Prior to commencing any work, or as promptly as possible once identified if so identified after work has commenced, Developer shall describe in writing:

- Any intellectual property rights owned or licensed by Developer which may cover all or part of the work, including a list and description of all U.S. and foreign patents and patent applications;
- To the extent known by Developer, any intellectual property owned or licensed by third parties which is required to utilize all or part of the work in the manner contemplated by the Agreement; and
- To the extent known by Developer, any claims or disputes relating to the intellectual property embodied, or claimed to be embodied, in all or part of the work.

Intellectual property and claims described in the bullets above are termed “**Required Rights**”. In addition to the descriptions required above, Developer shall provide to IETF a description of the cost and other terms of any license required to use and operate under any Required Rights in the manner contemplated by this Agreement.

Developer shall not be authorized to commence any work as to which any Required Rights exist unless and until IETF has affirmed in writing that it understands the nature of such Required Rights and the Parties have mutually agreed upon a license arrangement (including allocation of its costs) that will enable the full use of any Required Rights in the manner contemplated hereby.

If Developer fails to notify IETF of any Required Rights owned or licensed by Developer in the manner required by this section, then Developer shall be deemed to have granted the IETF Trust a perpetual, irrevocable, royalty-free, paid-up, worldwide, non-exclusive, freely sub-licensable right and license to exploit such owned Required Rights (and to the extent permitted under any such license of any such Required Rights, such licensed Required Rights) in any manner in connection with the Work and any modifications or derivatives thereof.

D. **Data.** All data used or collected by the Work Product shall be the property of the IETF Trust.

7. **Warranties; indemnification.** Developer warrants that (i) it will perform all Services in a professional and workmanlike manner, in accordance with highest ethical standards, (ii) it has the right and authority to enter into this Agreement, (iii) it has the knowledge and skills to provide the Services, (iv) it will comply with all applicable laws, statutes, or regulations in the performance of the Services, and (v) to the best of Developer’s knowledge, the Services and Work Product will not violate or in any way infringe upon the rights of third parties. Developer agrees to indemnify and hold IETF and its member, directors and officers harmless from any claim, loss or expense arising in connection with Developer’s (or any Subcontractor’s) breach of this Agreement, or in connection with its negligence or willful misconduct. Developer warrants that the work will perform in accordance with any applicable
documentation, specifications and written descriptions provided by IETF to Developer, and in a reliable
and secure manner.

Developer agrees promptly to fix any errors, bugs or deficiencies in the work that are identified within
thirty (30) days from the date of delivery of the work to IETF for no additional charge and to deliver to
IETF, install in the work and demonstrate to IETF’s reasonable satisfaction such fixes. The development
and delivery of such fixes shall be performed by Developer in accordance with the provisions of this
Agreement and all software developed and/or delivered shall conform to the requirements hereof.

IETF shall test each deliverable within thirty (30) days of its receipt from Developer and shall report to
Developer, in writing, whether or not the deliverable complies with agreed specification. If IETF fails to
report to Developer, whether or not deliverable complies with agreed specification, within thirty (30)
days of its receipt from Developer, such deliverable shall be considered finally accepted by IETF. If any
deliverable does not comply with agreed specification and IETF has reported it to Pantheon within thirty
(30) working days period, IETF shall provide Pantheon with details of the failure and Pantheon shall use
commercially reasonable efforts to modify the deliverable so that it complies with agreed specification.
The parties shall repeat the above process until the deliverable complies with agreed specification.

8. Insurance. Developer shall maintain any required and customary insurance in amounts and types
reasonable for the type of business conducted by Developer and at IETF’s request, shall make IETF an
additional insured under any such applicable policy. Developer shall provide evidence of insurance and
endorsements at IETF’s request, and shall cooperate with IETF in good faith to adjust such insurance
coverage as appropriate for the Services.

9. Miscellaneous. This Agreement will be governed by Delaware law. Developer may not assign or
delegate any of its rights or obligations set forth in this Agreement without IETF’s prior written
consent. This Agreement is binding and shall inure solely to the benefit of the parties hereto (and to
the benefit of the IETF Trust with respect to intellectual property), and their respective successors and
permitted assigns. The IETF Trust is the only intended third party beneficiary to this Agreement. Other
than the IETF Trust, nothing in this Agreement shall be enforceable by a third party (being any person
or entity other than the Parties hereto). This Agreement, together with any SOWs, constitutes the sole
and entire agreement of the parties with respect to the subject matter contained herein, and
supersedes all prior and contemporaneous understandings, agreements, representations and
warranties, both written and oral, with respect to such subject matter. This Agreement may be
executed in counterparts, each of which shall be deemed an original, but all of which together shall be
deemed to be one and the same agreement. All notices, requests, directions, approvals or other
communications to be provided hereunder will be in writing and will be deemed to have been
sufficiently given (a) upon receipt if delivered in person; or (b) on the date transmitted if by email or
facsimile. All notices will be sent to the applicable party at the address(es) set forth below (or as
otherwise instructed in writing by such party):
10. **Publicity.** Developer must seek preapproval of name and logo of IETF as well as short project description on all its marketing collaterals (online, offline, website, papers, brochures, press releases) and disclose the existence of relationship with IETF for reference and marketing purposes.

11. **Non-Solicitation of Employees.** Both parties agree that during the term of this Agreement, any extension thereof and one year after its termination, neither party will offer employment or hire any employee, agent or subcontractor of the other party performing work under this Agreement.

Read and agreed to by:

**IETF ADMINISTRATION LLC**

By: Portia Wenze-Danley
Title: Executive Director (Interim)
Email: exec-director@ietf.org

**PANTHEON.tech s.r.o.**

By: Ing. Janka Jančová
Title: Executive
Email: execs@pantheon.tech

Sales Manager
Statement of Work #1

This Statement of Work #1 ("SOW") is entered into effective as of its signature by both parties (the "Effective Date") by and between PANTHEON.tech s.r.o. ("Developer") and IETF Administration LLC ("IETF"). This SOW is incorporated into, and forms a part of, the Contracted Services Agreement, dated 1 March, 2019 by and between the parties (the "Agreement"). Any term not defined herein shall have the meaning ascribed to it in the Agreement. This SOW must be signed by both parties to be effective.

1. Description of Services: Developer agrees to provide software development services (collectively, the "Services") on an hourly basis to IETF. Such Services may include but are not limited to the following (described in further detail below):
   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.

Developer may, as part of the Services, be expected to participate in various meetings, and will perform other activities as mutually agreed by Developer and IETF. IETF expects that successful performance of the Services will require approximately 352 hours of dedicated time, but no set number of hours is required.

<table>
<thead>
<tr>
<th>Section</th>
<th>Item</th>
<th>Hours Anticipated</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Support for Transitioning</td>
<td>80</td>
</tr>
<tr>
<td>2</td>
<td>Support for Operating Site</td>
<td>192</td>
</tr>
<tr>
<td>3</td>
<td>Adding Features of Yangvalidator</td>
<td>80</td>
</tr>
</tbody>
</table>

A. Support for Transitioning the Operation of the YangCatalog to the IETF

This task requires 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 Developer. Additional hours associated with this task will depend on the work that is needed and requested by the IETF Tools Team over the period of this SOW.

It is expected that the YangCatalog.org application is served from the IETF’s web-server(s), and that it is in IETF’s responsibility to make sure the service is available.

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/>).

B. Support for operating the YangCatalog
This task requires hourly work as requested by the IETF Tools Team. The Developer 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 this SOW may be renewed. Developer will not exceed 8 hours of such support services in a calendar week during the term of this SOW without first obtaining the explicit approval of the IETF Tools Team.

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.

C. 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 involves adding the features from the yangvalidator project to the YangCatalog as directed by the IETF Tools Team. This will require reimplementation to change the framework from BottlePy and CherryPy to Django. The yangvalidator code is currently written for Python2.7. 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. Developer shall notify the IETF Tools team when all the features from the yangvalidator have been added to the YangCatalog, such that the IETF Tools team can review for acceptance (as further described below).

Acceptance
Developer will promptly provide IETF with the most recent version of a deliverable upon completion.

IETF will test and evaluate the deliverable to determine whether it conforms to the agreed upon specifications and requirements and will provide within 30 (thirty) days a written notice to Developer of its acceptance or of the deliverable’s nonconformity specifying why and how the deliverable is not acceptable to IETF. If Developer receives a notice of a nonconformity from IETF, it will promptly and at no expense IETF remedy the error or deficiency to ensure that the deliverable does conform to the applicable description and criteria and submit a revised deliverable to IETF. IETF will conduct such further tests and evaluations on the deliverable as it deems necessary and either accept or reject deliverable. If the deliverable is not accepted, Developer will at its own expense take whatever steps are required to ensure that the deliverable is acceptable to IETF. If IETF fails to provide any notice regarding acceptance/non-conformity to the Developer within 30 (thirty) days from receipt of deliverables, such deliverables will be deemed accepted by IETF.

2. Fees: The Agreement shall dictate the terms of payment and reimbursement for expenses.

The hourly rate payable to Developer for all the Services described herein shall be as follows, unless otherwise agreed in writing by the parties:
Developer currently anticipates the following hours (and associated fees) for the Services described in this SOW. Developer will provide notice to IETF before incurring any fees in addition to (or devoting any time beyond) the estimates set forth below for each of the categories of Services described.

<table>
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<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total Project Hours &amp; Fees</strong></td>
<td><strong>352</strong></td>
<td></td>
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</tbody>
</table>

**EXPENSES**

- IETF 104 Hackathon: 1 person attending
- VM Server Expenses (not to exceed $100/month): 12 months

|         | **Total Project Fees & Expenses**        |

**3. Term:** This SOW shall be effective as of 06 March 2019 and shall remain in effect until 06 November 2019, after which the Company and Developer may agree in writing (email to suffice) to extend the term of this SOW for an additional period. In the event the term of this SOW extends beyond the term of the Agreement, the terms and conditions of the Agreement will remain in effect for the benefit of this SOW only.

**Schedule of Services:**

<table>
<thead>
<tr>
<th>Activities and Deliverables</th>
<th>Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support for transitioning</td>
<td>SOW Effective Date + 10 business days (10MDs)</td>
</tr>
<tr>
<td>Support for operating site</td>
<td>Ongoing throughout SOW Term</td>
</tr>
<tr>
<td>Yangvalidator</td>
<td>SOW Effective Date + 20 business days (20MDs)</td>
</tr>
</tbody>
</table>

For avoidance of doubt, **1 MD means 8 hours** long working day.

During the term of this SOW, Developer shall keep IETF and any specific designee of the IETF informed of the status of the development process. Notwithstanding the foregoing, Developer is solely responsible for fulfilling its obligations under this SOW, and the IETF designee will not be responsible for completing any work hereunder or for checking, debugging or validating Developer’s work.
All of the terms, covenants and conditions set forth in the Agreement are incorporated herein by reference as if the same had been set forth herein in full.

IETF ADMINISTRATION LLC

By: Portia Wenze-Danley
Title: Executive Director (Interim)
Email: exec-director@ietf.org

PANTHEON tech s.r.o.:

By: Ing. Janka Jančová
Title: Executive
Email: execs@pantheon.tech
3/6/2019

Sales Manager