Trac and Subversion migration to GitHub

A Request for Proposals issued on 2021-05-17

IETF Executive Director
exec-director@ietf.org
Overview

The IETF maintains a number of Trac and Subversion instances used for IETF tools development that are actively used for issue tracking, wiki pages, release management and source code control. These tools include:

- Datatracker - main document and workflow management tool
- xml2rfc - main tool used by IETF document authors.
- Mailarchive - custom mail archiving tool with a web interface that replaces the default Mailman archive.
- Mailreplay - re-send captured emails using SMTP.
- Postconfirm - mail processing tool used to control access to IETF mailing lists.
- Postfind - find postfix log-entries related to a given Message-ID.
- xml2rfc web service - a wrapper to xml2rfc providing a web API and interactive web page
- BibXML generators - generates XML citations in BibXML formats.

In addition, there are three Trac instances that are actively used by IETF working groups for issue tracking.

The IETF seeks a contractor to migrate these Trac and Subversion installations to GitHub.

Timeline

17 May 2021 RFP Issued
31 May 2021 Questions and Inquiries deadline
7 June 2021 Answers to questions issued and RFP updated if required
14 June 2021 Bids due
28 June 2021 Preferred bidder selected and negotiations begin
12 July 2021 Contract execution and work begins

RFP Process

The process for the RFP is as follows:
1. The RFP is publicly issued, posted to our website¹ and announced to the RFP Announcement mailing list², which anyone can subscribe to.

2. Potential bidders have until 31 May 2021 to submit any questions by email to ietf-rfps@ietf.org. Questions will be treated as anonymous but not private, as explained below. If you do not receive confirmation that your questions have been received within 24 hours then resend until you do.

3. A written response to all questions is provided on or before 7 June 2021, direct to those parties that sent questions, by email to the RFP Announcement Mailing List and posted on our website³. The response will include the questions asked and the answers, but will not identify the company asking the question. If required, the RFP may be updated to correct or clarify any issues identified.

4. Bids are due by 14 June 2021 by email to ietf-rfps@ietf.org. If you do not receive confirmation that your bid has been received within 24 hours then please resend until you do. The bid should include the following information:
   a. Executive summary
   b. Project approach including any assumptions.
   c. Project plan and schedule including when the work will begin and end, and any other milestones, as well as any dependencies that may delay delivery.
   d. Fee and payment schedule. Fixed priced bids are preferred but if that is not possible then a maximum fee must be specified.
   e. Warranty including a proposal for fee reduction/refund due to late- or non-delivery

5. The IETF Administration LLC and designated contractors and volunteers will select a preferred bid and notify the bidder by 28 June 2021. The selection process may include questions by email and/or conference call.

6. The IETF Administration LLC then enters into contract negotiation with the preferred bidder, based on its standard contract and using the relevant sections of the Statement of Work below. If contract negotiation fails then a different preferred bidder may be chosen.

¹ https://www.ietf.org/about/administration/rfps-and-contracts/
² https://www.ietf.org/mailman/listinfo/rfp-announce
³ https://www.ietf.org/about/administration/rfps-and-contracts/
7. Contract negotiation is anticipated to complete by 12 July 2021 and result in the award of the contract. All RFP contract awards are posted on our website and announced to the RFP Announcement mailing list. The terms of the contract are later posted publicly on our website, with the fee information and signatures (where possible) redacted. In addition any Conflict of Interest declarations required of the preferred bidder are also posted publicly on our website. This transparency is non-negotiable.

8. Work generally begins immediately after award of the contract, unless specified otherwise in the Statement of Work or negotiated contract.

Jay Daley
IETF Executive Director
IETF Administration LLC
Statement of Work: Trac and Subversion migration to GitHub

Overview

The IETF maintains a number of Trac and Subversion instances used for IETF tools development that are actively used for issue tracking, wiki pages, release management and source code control. These tools include:

- Datatracker - main document and workflow management tool
- xml2rfc - main tool used by IETF document authors.
- Mailarchive - custom mail archiving tool with a web interface that replaces the default Mailman archive.
- Mailreplay - re-send captured emails using SMTP.
- Postconfirm - mail processing tool used to control access to IETF mailing lists.
- Postfind - find postfix log-entries related to a given Message-ID.
- xml2rfc web service - a wrapper to xml2rfc providing a web API and interactive web page
- BibXML generators - generates XML citations in BibXML formats.

In addition, there are three Trac instances that are actively used by IETF working groups for issue tracking.

The IETF seeks a contractor to migrate these Trac and Subversion installations to GitHub.

Deliverables

1. A new GitHub repository for the Datatracker correctly populated with migrated data from Trac and Subversion.
2. A new GitHub repository for Mailarchive correctly populated with migrated data from Trac and Subversion.
3. A new GitHub repository for Mailreplay correctly populated with migrated data from Trac and Subversion.
4. A new GitHub repository for Postconfirm correctly populated with migrated data from Trac and Subversion.
5. A new GitHub repository for Postfind correctly populated with migrated data from Trac and Subversion.

6. A new GitHub repository for xml2rfc correctly populated with migrated data from Trac and Subversion.

7. A new GitHub repository for the xml2rfc web service correctly populated with migrated data from Trac and Subversion.

8. A new GitHub repository for the BibXML generators correctly populated with migrated data from Trac and Subversion.

9. A new GitHub organisation and repository for the DMARC Working Group correctly populated with migrated data from Trac.

10. A new GitHub organisation and repository for the EMAILCORE Working Group correctly populated with migrated data from Trac.

11. A new GitHub organisation and repository for the TSVWG Working Group correctly populated with migrated data from Trac.

12. Full documentation, including:
   a. List of all page redirects that are required to ensure that external references to the existing Trac wikis are still functional.
   b. List of every page migrated and its new target
   c. List of every page not migrated and why it was not moved.
   d. Mappings from Subversion revision numbers to git commit ids
   e. Mappings from Trac ticket numbers to github issue numbers.

Requirements

1. For Datatracker, Mailreplay, Mailarchive, Postconfirm, Postfind, xml2rfc, xml2rfc web service and BibXML generators the following information needs to be migrated and mapped:
   a. Trac tickets -> GitHub issues
   b. Trac wiki pages -> GitHub pages
   c. Subversion source code -> GitHub Git repositories
   d. Subversion source code commits -> GitHub pull requests and commits
   e. Trac releases -> GitHub releases
   f. Trac/Subversion users -> GitHub users
2. For the dmarc, emailcore and tsvwg installations, the following information needs to be migrated and mapped:
   a. Trac tickets -> GitHub issues
   b. Trac users -> GitHub users

3. To aid with the migration of users, a list of Trac/Subversion user IDs must be provided and the IETF will endeavour to map those to GitHub IDs. This may take a number of weeks. Where a mapping is not possible then anonymous user details are to be used.

4. The migration should exclude the template pages that are automatically generated when a new Trac instance is created.

5. Wherever possible, the history of commits, issues, users, releases etc, and the linkages between them should be preserved by the migration. In particular, enough information must be preserved to allow the links in pages like https://datatracker.ietf.org/release/ to resolve to the correct git commit and github issue.

6. All page links that exist in Trac, including between Trac instances, must be migrated to GitHub pages and must point to the correct new pages in GitHub.

7. Any links to existing Trac instances that appear in the RFC series, the Internet Draft database or the IETF website, must be identified and documented. The documentation must include where the target of each link has moved to. The documentation must be provided, in a format that can easily be used to generate a list of server redirections.

8. Any links to existing Subversion instances that appear in the RFC series, the Internet Draft database or the IETF website, must be identified and documented. The documentation must include where the target of each link has moved to. The documentation must be provided, in a format that can easily be used to generate a list of server redirections.

9. The new repositories created for Datatracker, Mailreplay, Mailarchive, Postconfirm, Postfind, xml2rfc, xml2rfc web service and BibXML must be public GitHub repositories under the IETF Tools Organisation⁴.

10. The new repositories created for dmarc, emailcore and tsvwg must be public GitHub repositories each under a new GitHub organisation named after the relevant working group and with the GitHub user ietf-secretariat set as an owner.

⁴ https://github.com/ietf-tools/
Additional Details

Access to the Trac and Subversion instances

Some Trac instances are used for more than one tool and similarly some Subversion instances, as detailed below. Please note that account creation\(^5\) is required for access to the Trac repositories.

<table>
<thead>
<tr>
<th>Tool</th>
<th>Trac instance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Datatracker (primary)</td>
<td><a href="https://trac.ietf.org/trac/ietfdb/">https://trac.ietf.org/trac/ietfdb/</a></td>
</tr>
<tr>
<td>Mailarchive</td>
<td></td>
</tr>
<tr>
<td>Mailreplay</td>
<td></td>
</tr>
<tr>
<td>Postconfirm</td>
<td></td>
</tr>
<tr>
<td>Postfind</td>
<td></td>
</tr>
<tr>
<td>xml2rfc (primary)</td>
<td><a href="https://trac.ietf.org/trac/xml2rfc/">https://trac.ietf.org/trac/xml2rfc/</a></td>
</tr>
<tr>
<td>xml2rfc web service</td>
<td></td>
</tr>
<tr>
<td>BibXML generators</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tool</th>
<th>Subversion repository</th>
</tr>
</thead>
<tbody>
<tr>
<td>Datatracker</td>
<td><a href="http://svn.ietf.org/svn/tools/ietfdb/">http://svn.ietf.org/svn/tools/ietfdb/</a></td>
</tr>
<tr>
<td>Mailarchive</td>
<td><a href="http://svn.ietf.org/svn/tools/mailarch/">http://svn.ietf.org/svn/tools/mailarch/</a></td>
</tr>
<tr>
<td>Mailreplay</td>
<td><a href="http://svn.ietf.org/svn/tools/mailreplay/">http://svn.ietf.org/svn/tools/mailreplay/</a></td>
</tr>
<tr>
<td>Postconfirm</td>
<td><a href="http://svn.ietf.org/svn/tools/postconfirm/">http://svn.ietf.org/svn/tools/postconfirm/</a></td>
</tr>
<tr>
<td>Postfind</td>
<td><a href="http://svn.ietf.org/svn/tools/postfind/">http://svn.ietf.org/svn/tools/postfind/</a></td>
</tr>
<tr>
<td>xml2rfc (primary)</td>
<td><a href="http://svn.ietf.org/svn/tools/xml2rfc/">http://svn.ietf.org/svn/tools/xml2rfc/</a></td>
</tr>
<tr>
<td>xml2rfc web service</td>
<td><a href="http://svn.ietf.org/svn/tools/xml2rfc/website/">http://svn.ietf.org/svn/tools/xml2rfc/website/</a></td>
</tr>
<tr>
<td>BibXML generators</td>
<td><a href="http://svn.ietf.org/svn/tools/xml2rfc/website/rfcbs/bibxml/">http://svn.ietf.org/svn/tools/xml2rfc/website/rfcbs/bibxml/</a></td>
</tr>
</tbody>
</table>

Excluded Subversion repositories

The repositories above have recently migrated from trac.tools.ietf.org and any copies found on tools.ietf.org should be ignored.

\(^5\)https://datatracker.ietf.org/accounts/create/
Additionally, the following Subversion instances are not part of this RFP:

<table>
<thead>
<tr>
<th>Subversion Repository</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="http://svn.ietf.orgsvn/tools/ietf-cli/">http://svn.ietf.orgsvn/tools/ietf-cli/</a></td>
<td>Moved</td>
</tr>
<tr>
<td><a href="http://svn.ietf.orgsvn/tools/ebook/">http://svn.ietf.orgsvn/tools/ebook/</a></td>
<td>Abandoned</td>
</tr>
<tr>
<td><a href="http://svn.ietf.orgsvn/tools/ietfwww/">http://svn.ietf.orgsvn/tools/ietfwww/</a></td>
<td>Abandoned</td>
</tr>
<tr>
<td><a href="http://svn.ietf.orgsvn/tools/pdfsigner/">http://svn.ietf.orgsvn/tools/pdfsigner/</a></td>
<td>Abandoned</td>
</tr>
<tr>
<td><a href="http://svn.ietf.orgsvn/tools/utils/">http://svn.ietf.orgsvn/tools/utils/</a></td>
<td>Abandoned</td>
</tr>
<tr>
<td><a href="http://svn.ietf.orgsvn/tools/logmatch/">http://svn.ietf.orgsvn/tools/logmatch/</a></td>
<td>Abandoned</td>
</tr>
<tr>
<td><a href="http://svn.ietf.orgsvn/tools/art/">http://svn.ietf.orgsvn/tools/art/</a></td>
<td>Abandoned</td>
</tr>
<tr>
<td><a href="http://svn.ietf.orgsvn/tools/bibliography/">http://svn.ietf.orgsvn/tools/bibliography/</a></td>
<td>Unused</td>
</tr>
<tr>
<td><a href="http://svn.ietf.orgsvn/tools/codestand/">http://svn.ietf.orgsvn/tools/codestand/</a></td>
<td>Unused</td>
</tr>
<tr>
<td><a href="http://svn.ietf.orgsvn/tools/issues/">http://svn.ietf.orgsvn/tools/issues/</a></td>
<td>Unused</td>
</tr>
<tr>
<td><a href="http://svn.ietf.orgsvn/tools/mentoring/">http://svn.ietf.orgsvn/tools/mentoring/</a></td>
<td>Unused</td>
</tr>
<tr>
<td><a href="http://svn.ietf.orgsvn/tools/misc/">http://svn.ietf.orgsvn/tools/misc/</a></td>
<td>Unused</td>
</tr>
<tr>
<td><a href="http://svn.ietf.orgsvn/tools/rfcformat/">http://svn.ietf.orgsvn/tools/rfcformat/</a></td>
<td>Unused</td>
</tr>
<tr>
<td><a href="http://svn.ietf.orgsvn/tools/rps/">http://svn.ietf.orgsvn/tools/rps/</a></td>
<td>Unused</td>
</tr>
</tbody>
</table>

**Templated pages to exclude**

The following standard wiki pages are added when a new Trac instance is created and can be excluded from the transfer:

- CamelCase
- IetfSpecificFeatures
- InterMapTxt
- InterTrac
- InterWiki
- PageTemplates
- RecentChanges
- SandBox
- SvnTracHooks
- ThisTracInstallation
- TicketQuery
- TitleIndex
- TracAccessibility
- TracAdmin
- TracBackup
- TracBatchModify
- TracBrowser
- TracCgi
- TracChangeLog
- TracChangeset
- TracEnvironment
- TracFastCgi
- TracFineGrainedPermissions
- TracGuide
- TracImport
- TracIni
- TracInstall
- TracInterfaceCustomization
- TracLinks
- TracLogging
- TracModPython
- TracModWSGI
- TracNavigation
- TracNotification
- TracPermissions
- TracPlugins
- TracQuery
- TracReports
- TracRepositoryAdmin
- TracRevisionLog
- TracRoadmap
- TracRss
- TracSearch
- TracStandalone
- TracSupport
- TracSyntaxColoring
- TracTickets
- TracTicketsCustomFields
- TracTimeline
- TracUnicode
- TracUpgrade
- TracWiki
- TracWorkflow
- WikiDeletePage
- WikiFormatting
- WikiHtml
- WikiMacros
- WikiNewPage
- WikiPageNames
- WikiProcessors
- WikiRestructuredText
- WikiRestructuredTextLinks

The following standard wiki pages are also added and can be excluded from the transfer if they have not been modified since creation:

- TrainingMaterials
- WikiStart (home page)

ENDS