2016-12 Fedora Newsletter

This is the December 2016 edition of the Fedora Newsletter. This newsletter summarizes the most significant activities within the Fedora community over the last month.

Call for Action

Fedora is designed, built, used, and supported by the community. An easy and important way that you can contribute to the effort is by helping resolve outstanding bugs. If you have an interest in gaining a better understanding of the Fedora code base, or a specific interest in any of these bugs [1], please add a comment to a ticket and we can work together to move your interest forward.

Membership

Fedora is funded entirely through the contributions of DuraSpace members that allocate their annual funding to Fedora. The 2016 membership campaign has so far raised $564,750 from 74 members. The annual goal this year is $580,000, so we are over 97% of the way there. We will continue to coordinate with members of the Fedora Leadership Group to expand the pool of DuraSpace members supporting the Fedora project and build a sustainable funding base for the future. If your institution is not yet a member of DuraSpace in support of Fedora, please join us [2]!

Software development

4.7.0 Release

The Fedora 4.7.0 release is now available [3]. This release furthers several major objectives:

- Upgrade to Modeshape 5.0.0 Final
- Tighten the definition of the RESTful application programming interface (API)
- Replace legacy transform service with more powerful LDPath service
- Fix bugs

Fedora 4.7.0 upgrades versions of the underlying persistence application, which will require a straightforward backend data migration. If you have an existing Fedora 4 repository, you are requested to test backing up your existing repository, followed by restoring it into an installation of the 4.7.0 release candidate repository. See RESTful HTTP API - Backup and Restore [4] for more details.

4.6.1 Release


1. Concurrent creation of repository resources may introduce an invalid state
2. Upgrade to Modeshape 4.6.2.Final which includes
   a. ModeShape: Backup and Restore contains duplicate IDs [6]
   b. ModeShape: Backup and Restore is memory constrained [7]

Standards

Fedora API Specification

The Fedora community is working to establish a clearly defined specification for the core Fedora services [8]. This specification will detail the exact services and interactions required for a server implementation to be verified as "doing Fedora".

You are invited to comment on and contribute to the draft specification [9].

Community-driven Activity

Import/Export Tooling

One of the design goals of Fedora is to simplify the process of both getting your resources into and out of Fedora in a standardized way. This enables the reuse of Fedora resources in other contexts, such as exporting to a separate preservation system, as well as provides a pathway for migrating across Fedora installations, such as migrating from a LevelDB backend to PostgreSQL. Half of the problem is solved with the existing GET/POST interactions for RDF and non-RDF resources provided by the Linked Data Platform API. The other half should be addressed by tooling external to Fedora. In addition to the basic import/export of simple RDF and non-RDF resources, there is also significant community interest in supporting import/export of BagIt bags. The work has been broken into phases - phase 1 priorities [10] have been addressed in the first two sprints, and initial stakeholder testing and validation is now complete. The third sprint is now in progress, with plans to address phase 2 requirements [11]. Please join in to contribute use cases, development effort, and testing.

API Extension Architecture
The first API-X milestone is now complete: a concrete implementation of API-X, accompanied by a set of evaluation tasks comprising a demo that showcases its current capabilities and serves as a basis for soliciting feedback from the community. The demo includes services provided by Amherst College, and will demonstrate the capability of API-X to incorporate these services into the repository layer. You are invited to deploy the demo, run through the evaluation tasks, and provide feedback.

The API-X team holds regular bi-weekly meetings. The next meeting will take place on Thursday, December 8 at 1pm Eastern time.

Performance and Scalability

The Performance and Scalability group met on November 21 to discuss updating the graphs and summaries of completed tests. The group also plans to refine JMeter tests to be short running rather than running until Fedora fails. This will allow the tests to be run in quick succession while varying characteristics along the way (I/O, memory, etc.) in order to establish characteristics between hardware and application performance.

If you are interested in Performance and Scalability, please join the discussion on the fedora-community mailing list and attend the next meeting on December 19.

Conferences and events

In an attempt to simplify the task of keeping up with Fedora-related meetings and events, a Fedora calendar is available to the community as HTML and iCal.

Upcoming Events

CNI

The 2016 CNI Fall Membership Meeting will take place December 12-13 in Washington, DC. Representatives from CNI member organizations gather twice annually to explore new technologies, content, and applications; to further collaboration; to analyze technology policy issues; and to catalyze the development and deployment of new projects. The meeting will feature several presentations from Fedora community members, including panel discussions on digital preservation and integration with OSF.

South Central States Fedora Users Group Meeting

The South Central States Fedora Users Group will meet January 11-12 in Houston, TX. The meeting will include presentations on current implementations, discussion for users considering Fedora, workshops led by Fedora experts and developers, and conversations intended to foster collaboration among users and in support of the Fedora project. Space is limited so please register in advance for the meeting.

IDCC

The 12th International Digital Curation Conference (IDCC) will be held in Edinburgh from February 20-23, 2017 bringing together digital curation professionals and educators with data producers and consumers to consider digital curation in a multi-disciplinary context. David Wilcox, Fedora product manager for DuraSpace, will offer a full-day Fedora workshop, “Curating Digital Content with Fedora,” on Thursday, February 23. The main conference runs from February 21-22. Workshop registration details may be found on the conference website. There is a £90 charge for the workshop paid to conference organizers.

Previous Events

DLF

The 2016 DLF Forum was held in Milwaukee, Wisconsin, November 7-9, 2016. Digital Preservation 2016 was be held in conjunction with the Forum, from November 9-10. An Introduction to Fedora 4 workshop was offered on November 8, along with a project update on November 7.

LITA Forum

The 2016 LITA Forum took place November 17-20 in Fort Worth, Texas. It is the conference where technology meets the practicality of daily information operations in archives, libraries, and other information services. David Wilcox, Fedora Product Manager, presented an update on the Fedora project.

Fedora Camp

Fedora Camp NYC was held at Columbia University November 28-30. The camp was attended by 22 participants from institutions across North America and abroad. We would like to thank Columbia University for hosting the event, and our team of instructors for volunteering their time and expertise:

- Benjamin Armintor, Columbia University
- Diego Pino Navarro, Metropolitan New York Library Council
- Nick Ruest, York University
- Adam Wead, Penn State University

Presentations and other course materials are available on the wiki.
References

[1] https://jira.duraspace.org/issue/?filter=13122
[12] https://gitlab.amherst.edu/acdc/repository-extension-services
[15] https://calendar.google.com/calendar/embed?src=fedora-commons.org_8mrecvr3g6s2sm2fduetfor69s%40group.calendar.google.com&ctz=America/New_York
[16] https://calendar.google.com/calendar/ical/fedora-commons.org_8mrecvr3g6s2sm2fduetfor69s%40group.calendar.google.com/public/basic.ics
[17] https://www.cni.org/events/membership-meetings/upcoming-meeting/fall-2016
[18] https://osf.io/
[19] https://wiki.duraspace.org/display/Events/South+Central+States+Fedora+Users+Group+Meeting%3A+11-12+January+2017
[20] https://goo.gl/forms/7zHMCUZMW3jiJQyw2
[22] http://www.dcc.ac.uk/events/idcc17/workshops
[23] https://www.diglib.org/forums/2016forum/
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