

Fedora 4.5.1 Release Notes

Release date: 29 April, 2016

We are proud to announce the release of Fedora 4.5.1.

- [Resources](#)
- [Team](#)
 - [Release Managers](#)
 - [Developers](#)
 - [A. Soroka, University of Virginia](#)
 - [Issue Reporters](#)
- [Summary](#)
- [References](#)

Resources

- This release has been built against Java 8
- [Downloads](#) [1]
- [Javadocs](#) [2]

Team

Release Managers

- [Benjamin Armintor](#), Columbia University
- [Jared Whiklo](#), University of Manitoba

Developers

- [A. Soroka](#), University of Virginia
- [Unknown User \(acoburn\)](#), Amherst College
- [Aaron Elkiss](#), University of Michigan
- [Andrew Woods](#), DuraSpace
- [Bethany Seeger](#), Amherst College
- [Esme Cowles](#), Princeton University
- [Jared Whiklo](#), University of Manitoba
- [Michael Durbin](#), University of Virginia
- [Nick Ruest](#), York University
- [Osman Din](#), Yale University
- [Scott Prater](#), University of Wisconsin-Madison
- [Yinlin Chen](#), Virginia Tech

Issue Reporters

- [A. Soroka](#), University of Virginia
- [Unknown User \(acoburn\)](#), Amherst College
- [Andrew Woods](#), DuraSpace
- [Unknown User \(daniel-dgi\)](#), discoverygarden inc.
- [David Chandek-Stark](#), Duke University
- [Elliot Metsger](#), Johns Hopkins University
- [Esme Cowles](#), Princeton University
- [Harsh Ummerpillai](#), University of Michigan
- [Hélder Silva](#), University of Minho
- [Jared Whiklo](#), University of Manitoba
- [Jason Sherman](#), University of Oklahoma
- [Jim Coble](#), Duke University
- [Justin Coyne](#), Stanford University
- [Nick Ruest](#), York University
- [Osman Din](#), Yale University
- [Peter Eichman](#), University of Maryland
- [Scott Prater](#), University of Wisconsin-Madison
- [Steve DiDomenico](#), Northwestern University
- [Stuart Chalk](#), University of North Florida
- [Trey Pendragon](#), Princeton University
- [Yinlin Chen](#), Virginia Tech

Summary

The Fedora 4.5.1 release furthers several major objectives:

- Tighten the definition of the RESTful application programming interface (API)
- Improving the Versioning capability
- Re-establish performance test fixtures
- Improve durability with MySQL and PostgreSQL backends
- Fix bugs

Application Programming Interface

One of the [technical priorities](#) [3] of Fedora is to define a well-specified application programming interface (API) against which client applications can be written and future server-side implementations can be created. This Fedora API should be clear and detailed enough such that a corresponding [technology compatibility kit](#) [4] (TCK) would be able to indicate if any Fedora implementation fulfills or diverges from the specification. With this in mind, several issues were addressed in this release that clean up Fedora's RESTful interaction [5].

Deprecations: The following endpoints have been marked for future deprecation:

- /fcr:import
- /fcr:export
- /fcr:nodetypes

key	summary	type	created	updated	due	assignee	reporter	priority	status	resolution
Unable to locate Jira server for this macro. It may be due to Application Link configuration.										

Versioning

This release includes several bug fixes related to versioning [6]:

- Resolves error encountered when GETting a version of a container that itself has versioned child resources
- Resolves error encountered when GETting a version of a container that has a deleted child resource
- Resolves inability to see description of binary resource versions

key	summary	type	created	updated	due	assignee	reporter	priority	status	resolution
Unable to locate Jira server for this macro. It may be due to Application Link configuration.										

Web Access Control

This release furthers the [Web Access Control](#) [7] authorization module with several fixes [8], including:

- Resolve error when creating versions in the context of WebAC
- Provide WebAC "accessControl" Link header from effective ancestor

Additional documentation of Fedora's implementation of Web Access Controls is available on the [wiki](#) [9].

key	summary	type	created	updated	due	assignee	reporter	priority	status	resolution
Unable to locate Jira server for this macro. It may be due to Application Link configuration.										

Performance

One of Fedora's perennial goals is "improved performance". With this as a focus, a [Performance and Scalability working group](#) [10] has progressed in the creation of repeatable, scripted tests that exercise and meter basic read/write operations. The objective of these tests is to reveal application bottlenecks and to track changes in performance as the reference Fedora implementation evolves.

key	summary	type	created	updated	due	assignee	reporter	priority	status	resolution
Unable to locate Jira server for this macro. It may be due to Application Link configuration.										

Preservation

From a preservation perspective, this release includes support for alternative backend object stores to the default LevelDB. New configurations now exist for MySQL and PostgreSQL [11].

key	summary	type	created	updated	due	assignee	reporter	priority	status	resolution
Unable to locate Jira server for this macro. It may be due to Application Link configuration.										

Housekeeping and Bugfixes

Numerous refactorings, bugfixes, and clean-up tasks were addressed in this release [12]:

key	summary	type	created	updated	due	assignee	reporter	priority	status	resolution
Unable to locate Jira server for this macro. It may be due to Application Link configuration.										

References

[1] <https://wiki.duraspace.org/display/FF/Downloads>

[2] <http://docs.fcrepo.org/>

[3] <https://wiki.duraspace.org/display/FF/2015+-+2016+Technical+Priorities>

[4] https://en.wikipedia.org/wiki/Technology_Compatibility_Kit

[5] <https://jira.duraspace.org/browse/FCREPO-1977?jql=filter%3D13608%20>

[6] <https://jira.duraspace.org/browse/FCREPO-1981?jql=filter%3D13612%20>

[7] <http://www.w3.org/wiki/WebAccessControl>

[8] <https://jira.duraspace.org/browse/FCREPO-1885?jql=filter%3D13609%20>

[9] <https://wiki.duraspace.org/display/FEDORA451/WebAC+Authorization+Delegate>

[10] <https://wiki.duraspace.org/display/FF/Performance+and+Scalability>

[11] <https://wiki.duraspace.org/display/FEDORA451/Configuring+JDBC+Object+Store>

[12] <https://jira.duraspace.org/browse/FCREPO-2007?jql=filter%3D13613%20>