Fedora Forward: Current Developments and Future Plans

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About DuraSpace

DuraSpace is a not-for-profit organization that provides leadership and innovation for open technologies.

We work to ensure that current and future generations have durable and persistent access to our collective digital heritage.

Our community is part of an interconnected, worldwide, scholarly ecosystem.

DuraSpace open source projects

DSpace

Fedora™

VIVO

connect • share • discover
A Brief (Recent) History of **Fedora**
Fedora Futures

- 3 year initiative
- Re-architecting the software
- Building sustainable membership

Fedora Futures began in 2012 as a grassroots effort to revitalize the Fedora project and community.
Production and Adoption

- Fedora 4.0 released in 2015
- 16 incremental releases since
- 50+ institutional deployments

Since the 4.0 release, Fedora has been continuously updated in response to testing and feedback.
Strategy and Vision Planning

- Focused on five key areas:
  - Product technology
  - Product position
  - Communication, Outreach, Marketing
  - Community
  - Governance and Business Model

A Fedora Leaders sub-group is working to develop the vision and strategic plan.
Technology Roadmap
An Eye Toward The **Future**

- Fedora is linked data infrastructure
- Built on modern web standards
- Focused on modularity and extensibility
- Core component of a digital preservation strategy

Fedora stays true to its roots while planning for a future of linked data and interoperability.
Guiding Principles

- Durability
- Data portability
- Standardization
- Interoperability
Understanding The Ecosystem

- Fedora works with other applications and services
- Institutions want interoperability
- Data should move freely between applications

Institutions use many different technologies that need to work together
Component of Ecosystem

Sources: https://www.w3.org/RDF/icons/
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Fedora

Triple store

Web Site

IIIF Server

Workflow Tools

Import/Export

Research Data

Profiles

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Fedora

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The Year Ahead
Fedora API Specification

http://fedora.info/spec/

- Resource Management (Linked Data Platform)
- Resource Versioning (Memento)
- Resource Authorization (Web Access Control)
- Notifications (Activity Streams)
- Binary Resource Fixity (HTTP headers)
API Specification Timeline

2016
Drafting

2017
Review

2018
Implementation

Fedora 5.0
Specification Release Requirements

- At least two implementations
  - Ideally, three or more
- At least two client frameworks
- Test compatibility suite
- No critical, unresolved discussions
Let a thousand flowers bloom

Source: Andrew Woods, Summit County, Colorado
Fedora Spec Implementations

Cavendish (backed by a triplestore)

Trellis (scalable linked data platform)

DRAS-TIC (scalable repository for computation)

Derby (based on Ruby on Rails)

Esmero (based on PHP7/Silex)

Trilpy (based on Python)

Community Implementation (current)
Community Initiatives

- API Extension Framework (API-X)
- Import / Export Utility
  - Moving data through time
  - Transparent formats
  - Easy in -- Easy out
- Oxford Common Filesystem Layout
Oxford **Common Filesystem Layout**

- A common approach to file-and-folder hierarchies within file storage systems
- A community of practice around which to discuss issues of filesystem storage
- An ecosystem of software tools that encapsulate shared practices

The OCFL emerged from the Fedora community but it is much broader in scope
Fedora 5.0.0

- Next major release based on Semantic Versioning
- Equivalent in scope to 4.8
- Not like the jump from 3 to 4

Fedora 5.0.0 will represent the alignment of the ModeShape implementation with the API spec
The Value of **Community**

- Prevents accumulation of domain-specific knowledge
- One of the key strengths of Fedora
- A natural fit for institutions dedicated to sharing knowledge

Fedora is supported by a distributed, global community of stakeholders and contributors
How to Get Involved

Fedora website
http://fedorarepository.org/

Mailing lists
https://wiki.duraspace.org/display/FF/Mailing+Lists+etc
THANKS!

Any questions?

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Credits

Presentation template by SlidesCarnival