

# Open Repositories 2013 Fedora User Group Presentation Proposal

## Building Fedora Futures

Over the past six months, we have been developing durability is a key objective. An extensive network of committed institutions and individuals have invested in the project, and remain committed to its enduring success.

### Abstract

For the past six months, beginning in January 2013, the Fedora Futures team began development on the next major release of Fedora, Fedora 4. Development of Fedora 4 focuses on three principal objectives:

1. to preserve the strengths of the current Fedora architecture and community
2. to address the needs for robust and full-featured repository services (that are now mature and well-understood, compared to six or twelve years ago)
3. to provide a successful platform for our common use for the next 5-10 years

Specific technical goals are driven by new demands to support research data management and for increased scalability and performance. Just as significantly, the development is also driven by the demand to build healthy ecosystem of developers and users that will sustain Fedora's growth in the years to come.

Here we report on the current development status of Fedora 4, its architecture, APIs and services as well as our process and methodology for ongoing development and engagement with the Fedora community.

### Architecture, APIs and Services

We will provide an overview of the Fedora 4 architecture, including core storage and event modules as well as Fedora 4's approach to scaling out across multiple nodes.

We will also introduce Fedora 4's APIs, including its core REST API as well as additional APIs to support repository interoperability, including the legacy Fedora 3 API and CMIS. We will also demonstrate support for extending Fedora using language-independent modules (with Python, Ruby and Scala) in addition to providing messaging-based

services.

## **Building Methodology**

Fedora 4 development is conducted in a lean fashion, steered by a designated product manager, with biweekly releases. Developers include both current Fedora committers and a greatly expanded pool of contributors, drawing from a much wider set of contributing institutions. Ongoing integration and smoke testing from the wider Fedora community (and particularly institutions with their own front-ends) help ensure a relevant and responsive development effort, aligned and in pace with the community's needs.

We will report on our process to build Fedora in a lean spirit, engaging with early adopters to measure and learn quickly what works and what doesn't in order to build a healthy, productive rapport with our users.