

Introduction to Fedora 4

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ABSTRACT

Fedora is a flexible, extensible, open source repository platform for managing, preserving, and providing access to digital content. Fedora is used in a wide variety of institutions including libraries, museums, archives, and government organizations. Fedora 4 introduces native linked data capabilities and a modular architecture based on well-documented APIs and ease of integration with existing applications. Both new and existing Fedora users will be interested in learning about and experiencing Fedora 4 features and functionality first-hand.

Attendees will be given pre-configured virtual machines that include Fedora 4 bundled with the Solr search application and a triplestore that they can install on their laptops and continue using after the workshop. These virtual machines will be used to participate in hands-on exercises that will give attendees a chance to experience Fedora 4 by following step-by-step instructions. Participants will learn how to create and manage content in Fedora 4 in accordance with linked data best practices. Finally, participants will learn how to search and run SPARQL queries against content in Fedora using the included Solr index and triplestore.

Keywords

Fedora, repository, linked data, open source.

1. OUTLINE

The tutorial will include three modules, each of which can be delivered in 1 hour.

1.1 Introduction and Feature Tour

This module will feature an introduction to Fedora generally, and Fedora 4 in particular, followed by an overview of the core and non-core Fedora 4 features. It will also include a primer on data modeling in Fedora 4, which will set the audience up for the next section.

1.2 Linked Data and LDP

The Fedora community is deeply invested in linked data best practices; this is exemplified by our alignment with the W3C Linked Data Platform recommendation in Fedora 4. This section will feature an introduction to linked data and LDP, with a particular focus on the way Fedora implements linked data. Attendees will have an opportunity to create and manage content according to linked data best practices using the Fedora 4 virtual machine.

1.3 Fedora 4 Integrations

Fedora 4 is fundamentally a middleware application – it is meant to be used in conjunction with other applications. This section will provide an overview of the most common integrations, such as Solr and triplestores. Attendees will learn how to use these tools to index and query content in Fedora.

2. DURATION

Half-day (3 hours)

3. AUDIENCE

This tutorial is intended to be an introduction to Fedora 4 - no prior experience with the platform is required. Repository managers and librarians will get the most out of this tutorial, though developers new to Fedora would likely also be interested.

4. OUTCOMES

Tutorial attendees will:

- Learn about the latest and greatest Fedora 4 features and functionality
- Discover new opportunities enabled by LDP and linked data
- Learn how to create and manage content in Fedora
- Understand how to index and query content in Fedora

5. PRESENTERS

David is the Product Manager for the Fedora project at DuraSpace. He sets the vision for Fedora and serves as strategic liaison to the steering committee, leadership group, members, service providers, and other stakeholders. David works together with the Fedora Technical Lead to oversee key project processes, and performs international outreach to institutions, government organizations, funding agencies, and others.

Andrew is a software engineer specializing in the coordination of open source, distributed development initiatives that focus on the preservation and access of digital cultural heritage. He has over a decade of experience advising, managing, and implementing projects across government and academics sectors. For the last six years, he has worked as a member of the DuraSpace team providing software development and community coordination of the DuraCloud and Fedora applications. Prior to joining the not-for-profit organization, DuraSpace, he worked as a software contractor on a number of Federal projects.