Curating Digital Content with Fedora

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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. Recent community initiatives have added more robust functionality for exporting resources from Fedora in standard formats to support complete digital preservation workflows. Both new and existing Fedora users will be interested in learning about and experiencing Fedora features and functionality first-hand.

Attendees will be given pre-configured virtual machines that include Fedora 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 by following step-by-step instructions. Participants will learn how to create and manage content in Fedora in accordance with linked data best practices and the Portland Common Data Model Attendees will also learn how to import resources into Fedora and export resources from Fedora to external systems and services as part of a digital curation workflow.

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

1.3 Data Curation Workflows
Fedora 4 is fundamentally a middleware application – it is meant to be used in conjunction with other applications as part of a data curation workflow. This section will provide an overview of the recently developed import/export utility and demonstrate how content can be packaged for both ingest into Fedora and export from Fedora to external preservation systems and services.

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

- Learn how to create and manage content in Fedora in accordance with the Portland Common Data Model

- Understand how to import content into Fedora and export content to external systems

5. PRESENTER
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.