

# MANAGING AND PRESERVING 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. For the past several years the Fedora community has prioritized alignment with linked data best practices and modern web standards. We are now shifting our attention back to Fedora's digital preservation roots with a focus on durability and the Oxford Common File Layout (OCFL). This tutorial will provide an introduction to the latest version of Fedora with a focus on digital preservation functionality and workflows.

**Keywords** – fedora, repository, ocfl, preservation, standards

**Conference Topics** – The Cutting Edge: Technical Infrastructure and Implementation.

## I. INTRODUCTION

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. For the past several years the Fedora community has prioritized alignment with linked data best practices and modern web standards. We are now shifting our attention back to Fedora's digital preservation roots with a focus on durability and the Oxford Common File Layout (OCFL). This tutorial will provide an introduction to the latest version of Fedora with a focus on digital preservation functionality and workflows. Both new and existing Fedora users will be interested in learning about and experiencing Fedora features first-hand.

## II. CURRICULUM

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

### A. *Introduction And Feature Tour*

This module will feature an introduction to Fedora generally, with a focus on the latest version, followed by an overview of the core and extended Fedora features. It will also include a primer on data modeling in Fedora.

### B. *Digital Preservation Workflows*

Fedora has a number of features that support digital preservation, including fixity checking, versioning, and backup/restore. Fedora also provides a robust REST-API that can be used to integrate with other applications and services in a broader digital preservation workflow. This module will demonstrate both Fedora's internal digital preservation features and API-driven integrations.

### C. *Oxford Common File Layout*

The OCFL is an application-independent approach to the storage of digital objects in a structured, transparent, and predictable manner. It is designed to promote long-term access and management of digital objects within digital repositories. This module will provide an overview of

the OCFL and present the design and prototyping work that will lead to OCFL support in the next major version of Fedora.

### III. LEARNING OUTCOMES

Tutorial attendees will:

1. Become familiar with core and extended Fedora features and functionality.
2. Learn how to exercise Fedora's digital preservation features.
3. Understand the OCFL and its potential impact on digital preservation using Fedora.

### IV. TARGET AUDIENCE

This tutorial is intended to be an introduction to Fedora - 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.

### V. CONCLUSION

This tutorial will provide an introduction to the core and extended features of Fedora, along with an overview of Fedora's digital preservation features. Participants will have an opportunity to experience this functionality through hands-on exercises. Finally, participants will learn about the Oxford Common File Layout and how it will be implemented in Fedora to enhance support for digital preservation.