

Proposed Workshop Training Modules and Structure

This is the draft outline for an intensive 3-day Fedora workshop for developers and repository administrators. The workshop days will be broken up into smaller modules that build on each other. Module materials will be developed to serve in both instructor-led and self-paced learning environments.

Common Topics

presentation slides

Name	Learning Goals	Activity	Prerequisites	Number of Sessions	Presenter	Author
Introducing Fedora Repositories	role of Fedora repository software feature tour review some case studies connect with classmates on projects	presentation slides discussion	none	1	David Wilcox	David Wilcox
Fedora Front-ends	tour of Islandora, Hydra, and custom front-ends interoperability between front-ends ingest methods	presentation slides discussion	none	1		Unknown User (acoburn)
Content Migration	migrating content from Fedora 3 to 4 - data migration planning - functionality migration planning - data migration with "migration-utils"	presentation slides guided steps	VirtualBox workshop Vbox image migration-utils test content	1		Michael Durbin
SPARQL-Update	introduction to SPARQL-Update SPARQL cheat-sheet updating resources in Fedora 4	presentation slides guided steps	VirtualBox workshop Vbox image	1		Andrew Woods
Linked Data Platform	what is linked data and how is it used - basic primer - distributed schema-less database - open and expressive - uses in Fedora linked data formats supported advantages of the LDP standardization - CRUD for RDF and beyond (binaries) - one container and resource model for interoperability	presentation slides discussion	none	2		Greg Jansen
Indexing Fedora	demonstrate admin search and limitations explain message queue (fcrepo-message-consumer) set up Solr indexing set up Fuseki indexing add objects with properties query indexes	presentation slides guided steps	VirtualBox workshop Vbox image	1		Greg Jansen
Authentication and Roles	authN: concepts and components built-in authentication (fedora as back-end) Apache authN (E.G. mod Shibboleth) Tomcat authN (E.G. LDAP Realm) basic roles authorization	presentation slides	none	0.5 or 1		Greg Jansen

Extensible Authorization	XACML: request flow and components configuration of XACML authorization module policy language available request attributes and how to add more adding more object (aka resource) attributes arbitrariness of XACML roles ACL model and how to link to policies	presentation slides		1		Greg Jansen
Content Modelling Practice	implication of Fedora/LDP containers: - administration and portability (file folder) distinguishing other uses of containment: - composition & logical order (book) - for derivative data - amongst groups of manifestations linking for reuse (E.G. XACML policies) hands-on practice: Using containment and other relationships between objects and datastreams, coming up with two ways to model your group's example data. Review models (after break)	presentation slides group work	none	1		Greg Jansen

Dev/Ops Topics

Name	Learning Goals	Activity	Prerequisites	Number of Sessions	Presenter	Author
Sealing Fedora Up and Out	clustering for high availability metrics achieved in Fedora testing storage options projection over arbitrary storage	presentation	none	0.5 or 1		Andrew Woods
Configuring Fedora with Ansible	explore key configuration files how to run playbooks: - as a vagrant provisioner - against a single host - against a cluster basic Fedora host variables: - storage locations - configure authN additional Fedora playbooks: - configure XACML	guided steps	VirtualBox workshop Vbox image			Greg Jansen nice to have, but lower priority postponed if we do it.
Extending Fedora	extension points and how best to use them Apache Camel framework API extension architecture	presentation slides	none	0.5 or 1		Unknown User (acoburn)
Developer Resources	why project participation is the best intro building, maven project structure IDE setups for module development Fedora sprints and how to participate	presentation	none	0.5 or 1		Andrew Woods