Fedora Integration

Introduction

A few months ago, the DuraSpace organization made the recommendation that the DSpace and Fedora user communities work together to integrate the DSpace and Fedora technologies, allowing the DSpace software to run "on top of" the Fedora platform. Essentially, this would mean that the DSpace application would have an option to install it with "Fedora Inside". DSpace with "Fedora Inside" would be a version of the DSpace application which would store its contents (files and/or metadata) in Fedora. The goal of this effort would be for DSpace to retain the out-of-the-box experience, while also enabling the features that Fedora provides (e.g. versioning, relationships between objects, flexible architecture). You can read more about this recommendation in the FAQ that accompanied the proposal: DSpace-Fedora Integration FAQ

Roadmap

As DuraSpace moves forward with our roadmap plans for 2011, we are looking for participants to collaborate on determining requirements, developing code and/or testing prototypes for a variety of use cases starting in the following areas:

1. Propose a Fedora data model for DSpace data
   a. Related Project(s): There is prior art (which would need to be updated) for this from Google Summer of Code 2008 Fedora Integration and Google Summer of Code 2009 Fedora Integration. There was also a GSoC 2010 project to backport DSpace 2.x Storage Services to 1.x. GSOC10 - Backport of DSpace 2 Storage Services API for DSpace 1.x. The GSoC 2010 project may enable the ability to use prior Fedora integrations in the DSpace 1.x platform.
2. A conversion, crosswalking, or import utility to get DSpace data into the selected Fedora data model.
   a. Related Project(s): DuraSpace has developed a general AIP Backup and Restore capability for DSpace 1.7. This feature provides a way to extract the items from DSpace's current internal store, along with all of their relationships (communities, collections, and people).
   b. Need determine if the current 1.7 AIP Backup & restore feature would need reworking in order to more easily crosswalk/map the data into the eventual Fedora data model.
3. Designing an integration of the DSpace business logic, user authentication and authorization with Fedora.
4. Porting the DSpace user, administrative, and web services interface applications to run against the resulting environment.

Invitation

We look forward to the community collaboration on the DSpace/Fedora integration effort in these and other areas. Please contact Brad McLean (bmclean@duraspace.org) or Valorie Hollister (vhollister@duraspace.org) if you and/or your institution are interested in being a part of the work groups on any or all of the above areas, or if you have related work.

Thank-you!

Bradley McLean, CTO, DuraSpace