

DSpace Fedora jointprojects

In August 2008 DSpace Foundation and Fedora-Commons had a two day strategy session to determine what are the best projects both communities could work on together and achieve success. Projects were based on many community discussions, focus groups and individual conversations held with members of both communities over the prior 4 months.

In order to best facilitate communication and interaction between both communities a shared collaborative workspace has been set up at: <https://fedora-commons.org/confluence/display/DSPACE/DSpace+++Fedora+Commons+Collaboration>. We invite members of both communities to use this space to comment, participate and update collaborative projects of interest to both communities. Currently, you will need to register to edit this wiki space, however both Foundations are working on open ID systems to make this process seamless. The DSpace Foundation will continue to update this page, however for the most current information please go to the joint wiki space.

Payette(Executive Director Fedora Commons) and Kimpton(Executive Director DSpace Foundation) agreed that the best strategy for both organizations is to find paths to new innovation and development while not compromising the integrity of their existing open source software nor destroy the de facto open source communities already built around the existing products. It is well known that without community open source software does not thrive. We must not destroy the progress already made by both organizations. However, we must still be able to offer compelling, innovative and competitive solutions not only today, but five years from now to sustain our organizations and continue to add value to the community.

Payette and Kimpton believe that it will be in both organizations' long-term interest to better align our existing technologies and to devote time and resources to developing new software and services that advance open access and permanence to research output. An essential ingredient to the success of such a collaborative endeavor is the commitment of the organizational leaders (i.e., Payette/Kimpton) to work together and a willingness of the open source communities to collaborate. We believe have both ingredients in the DSpace/Fedora proposition.

Action Plan:

From a tactical standpoint, Payette and Kimpton have identified a set of short-term projects and longer-term efforts.

- **Short Term Projects:** These are a selected group of high impact and technically feasible projects that can enable convergence of both organizations' existing technologies. These projects were deemed high-impact in terms of moving the existing Fedora and DSpace repository products from a "system-centric" positioning to a broader Web-oriented infrastructure positioning.
- **Longer-Term Efforts:** These efforts build on existing knowledge and technologies from both communities, but are focused more on ensuring that our non-profit organizations are "future-proof" and can endure to serve our non-profit missions with a sustainable business plan. The Executive Directors took a fresh view of the competitive terrain and known revenue-generating strategies for socially driven non-profits and open source organizations. They considered the unique capabilities of their existing organizations (e.g., expertise, reputation with the communities we serve, and the health and size of our open source communities). Also, they considered emerging technology trends and current/potential competitors.

I. Short-Term Projects

• **Shared Storage Abstraction Layer**

- Evaluate Akubra Project as a possible starting point. Akubra is currently a collaborative project of Fedora and Topaz developers. The goals are to validate Akubra or re-design in light of emerging standards
- Move beyond plug-ins of file systems and local storage to accommodate cloud storage and other external providers.
- Joint design; also include other open source projects that are interested in moving this forward
- Develop stand-alone software component that can run under Fedora, DSpace, other systems, and future systems. As part of Alpha software, develop first set of plug-ins, including at least one cloud storage plug-in (e.g., Amazon S3).

• **Common Repository Exposure for Web**

- Demonstrate moving objects back and forth among DSpace and Fedora repositories
- Technical Approach: Atom Publishing Protocol (read/update/delete); SWORD (deposit), and ORE for serialization of objects aggregations

• **Integration of Repositories with Common Authoring Tools**

- Meet with Zotero team to design plug-in strategy for repositories
- Meet with Microsoft to design plug-in strategy (done already by FC)
- Technical approach:
- Web protocols: SWORD, Atom Publishing Protocol, other
- Serialization: OAI-ORE, Atom, other?
- Consider challenges of fitting a generic approach with particular authorizing tools both in terms of what standards that these tools do or do not want to support; also issues of "lossiness" between systems.

• **DSpace Running on Fedora** (continue on from work done in DSpace google summer of code)

- Run DSpace application and workflow on top of Fedora repository
- High priority for Universities and Libraries interested in both systems.
- Model on Google+Summer+of+Code prototype that is underway
- Fedora Commons will participation in new DSpace 2 data model work