Customizing DSpace: Developing Private Communities & Collections for Future Repository Integrations

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Abstract
In this presentation, practitioners from the Georgia Tech Library will describe our collaboration with DSpace vendor Atmire to deploy code customization allowing greater granularity over access permissions to our unique digital content, and to merge two locally hosted DSpace instances. This collaboration arose from efforts at Georgia Tech to bridge the traditionally separate worlds of the institutional repository and archival digital collections by employing a loosely integrated ecosystem of DSpace, ArchivesSpace, Archivematica, and Vireo. A first step in this effort was to merge two locally hosted DSpace instances used for quite different purposes: our open access institutional repository and a dark archive of both unprocessed born-digital materials and preservation copies of digitized files. Because DSpace is inherently designed for providing open access to an institution’s intellectual output, we required code customization that would allow greater control over access to the restricted content migrated from our dark archive. We collaborated with Atmire to develop a phased deployment process that would allow Georgia Tech to maintain our local technical institutional knowledge and administrative control while employing Atmire’s specialized skill set in DSpace code customization and support. We will share lessons learned about the costs and benefits of this more complex deployment strategy.

Keywords
Repository integration, Archives, DSpace code customization

Audience
Librarians, archivists and developers may all be interested in this collaboration across the three professional boundaries of librarianship, archives and information technology.

Proposal (no longer than a page)
In this presentation, practitioners from the Georgia Tech Library will describe our collaboration with DSpace vendor Atmire to deploy code customization to allow greater granularity over access permissions to our unique digital content. This collaboration arose from efforts at Georgia Tech to bridge the traditionally separate worlds of the institutional repository and archival digital collections. Our long-term ambition is to
employ a loosely integrated information management ecosystem using DSpace, ArchivesSpace, Archivematica, and Vireo to curate and provide access to the unique digital content stewarded by the Library.

A first step in this effort was to merge two locally hosted DSpace instances used for quite different purposes: our open access institutional repository (SMARTech) and a dark archive of both unprocessed born-digital materials and preservation copies of digitized files. Because DSpace is inherently designed for providing open access to an institution’s intellectual output, we required code customization that would allow greater control over access to the unprocessed or otherwise restricted items that we planned to migrate from the dark archive to our central OA DSpace repository. The code customization enables us to create collections that are hidden from general users in the DSpace discovery interface and in OAI and API requests. It also supports the cascading of collection-level permissions changes down through all the items in a collection.

We employed Atmire to create the required code customization and merge our two disparate repositories. Georgia Tech has a long history of hosting and customizing DSpace locally and wanted to maintain this level of local administrative control and institutional knowledge. To address this dual purpose of accomplishing the tasks at hand while maintaining our own local knowledge base, we collaborated with Atmire to develop a phased deployment process using three mirror DSpace 6.3 instances: an Atmire development instance, a Georgia Tech test instance and our production version of SMARTech, all on locally managed servers. We will share lessons learned about the costs and benefits of this more complex deployment strategy.

This work brought together practitioners from the professional domains of archives, librarianship, and information technology, allowing us to solidify organizational trust and share domain expertise. It will be of interest to:

- Practitioners looking to extend DSpace for the stewardship of private content
- Librarians and archivists hoping to bridge the institutional repository & archival digital collections domains
- DSpace practitioners interested in building an information management ecosystem with ArchivesSpace and other digital asset management tools
- Technologists seeking to maintain local control and build institutional knowledge while working with a vendor to complete code customization and other specialized work

References, if applicable

Use any clear unambiguous reference style you like.