Apr 9th, 12:00 PM

Preserving Scientific Research Data at Middlebury College

Wendy Shook
Middlebury College

Follow this and additional works at: http://escholarship.umassmed.edu/escience_symposium

Part of the Scholarly Communication Commons

This work is licensed under a Creative Commons Attribution-Noncommercial-Share Alike 3.0 License.

http://escholarship.umassmed.edu/escience_symposium/2015/posters/16

This material is brought to you by eScholarship@UMMS. It has been accepted for inclusion in University of Massachusetts and New England Area Librarian e-Science Symposium by an authorized administrator of eScholarship@UMMS. For more information, please contact Lisa.Palmer@umassmed.edu.
Preserving Scientific Research Data at Middlebury College

Problem

Middlebury College is a small liberal arts college with an active and growing scientific research community. Recognizing that data are a valuable resource, research funding agencies require preservation and accessibility of data and its metadata. Open data is also becoming a strong motivation for preservation and access. For these to happen, data should be curated through the whole data lifecycle.

There are large discipline specific repositories, but not all data, including a percentage of that created by Middlebury researchers, fit the ingestion criteria. For these data sets, however large or small, Middlebury College Library is working towards implementation of a local science data repository to preserve and make accessible research products for the long term.

Planning

Planning for such a repository was divided into five main stages.

- Survey and assess faculty needs for on-campus data storage.
- Map the elements of a sustainable data repository.
- Research potential platforms.
- Draft policies and procedures, adopting standards and best practices when possible.
- Test and assess prototype(s) of most suitable platform(s).

Next Steps

Data@Middlebury, or D@M, has been commissioned locally as a functional proof-of-concept prototype, and we are assessing and optimizing functionality and integration.

Pilots

First Pilot: CONTENTdm

CONTENTdm is a proprietary institutional repository platform that is optimized for library collections, developed at the University of Washington then acquired and maintained by OCLC. It was chosen as the platform for our first pilot because it was available and well supported at Middlebury. While well suited to library needs and offering vendor support, it lacks flexibility needed to support a robust data repository.

Second Pilot: Islandora

Islandora is an open source digital asset management system developed by the University of Prince Edward Island that uses Fedora Commons and Drupal. Islandora itself is a Drupal module that provides a link between the Fedora CMS user interface and the Fedora repository structure. Additionally, Islandora optionally uses the Java-based Solr search and discovery platform.

Islandora currently enjoys several advantages over CONTENTdm. It allows nested collections and also has the ability to set independent metadata and security requirements for individual collections and sub-collections, including access and embargo controls. Islandora is extensible, flexible, and platform-independent. Lastly, Islandora has a large and active development and support community.

Flexibility comes with a cost. Implementation of Islandora may require in-house skills for installation and maintenance, which can overwhelm a small support staff (although support can be outsourced to third parties).

With greater flexibility also comes the burden of creating sound, sustainable policies for discipline specific metadata, naming conventions, intellectual property concerns, access, and security. Islandora has tools to simplify these processes, but policy is developed at the institutional level.

Resources

CONTENTdm: http://www.contentdm.org/
Drupal: https://www.drupal.org
Fedora Commons: http://fedora-repository.org
Islandora: http://islandora.ca/
Omeka: http://omeka.org/

April 9, 2015