Preservation Policy of DiscoverArchive

Introduction

Vanderbilt University, Jean and Alexander Heard Library launched DiscoverArchive in 2005 with the mission of collecting, preserving, and disseminating digital scholarly output of Vanderbilt University. DiscoverArchive, based on the open sourceware called Dspace, is comprised of three main stakeholders: Vanderbilt communities, Vanderbilt Library, and Vanderbilt Administration. DiscoverArchive was established with the goal “to make the repository a campus-wide product and a world-class resource” (Interim Report of the Institutional Repository Policy Committee).

Scope

DiscoverArchive is responsible for providing access to, preservation of, and management of digital scholarly content at Vanderbilt University. The focus is on finished scholarly products related to Vanderbilt research and teaching such as publications, reprints, supporting research materials, and teaching materials and also includes cultural, historical and administrative documents.

Purpose of Preservation Policy

The purpose of the Preservation Policy is to outline the responsibilities of the stakeholders to ensure continued support and planning.

Information for the preservation policy is taken from the Interim Report of the Institutional Repository Committee and updated with additional standards and best practices.

Roles and Responsibilities of stakeholders

Three stakeholders have responsibility in ensuring the preservation of digital scholarly materials at Vanderbilt University: the Library, Vanderbilt Administration, and Vanderbilt Communities. Vanderbilt Library assumes responsibility for the daily management of content, ensuring support and access. Please see the Interim Report for more information.

Role of the Library

The Library (under the auspices of Vanderbilt Administration)

- The Library will take the initiative to create communities, involving appropriate leaders or campus units.
- Search for archive-worthy materials generated by groups on campus.
- Establish initiatives to address special needs in communities i.e. mapping features, streaming media, photo archives, harvesting metadata, digitization, batch ingest of records.
- Run and maintain the hardware and software of the Repository and pursue upgrades as needed.
- Encourage content to be openly accessible.
- Educate communities to DiscoverArchive benefits including worldwide access.
- Responsible for growth, development, management, and preservation of DiscoverArchive and its contents.
Role of the Vanderbilt Administration

The major roles of the administration with respect to DSpace are as follows:

- Encourage establishment of new DiscoverArchive communities.
- Participate in Open Access & self-archiving of Vanderbilt University resources.

Role of the Vanderbilt Communities

- Self-constitute and establish its own policies as appropriate.
- Submit research, administrative records, and historical documents and allow it to be accessed and archived.

Preservation strategy

Preservation Strategy outlines methodologies employed to ensure the preservation of digital content as well as the cultivation and access to content in the repository. “Preservation, as it applies to library and archive material, can be defined as: ‘all managerial and financial considerations including storage and accommodation provision, staffing levels, policies, techniques and methods involved in preserving library and archive materials and the information contained therein’”. – Building Blocks for a Preservation Policy.

This policy is subject to change as technology ushers in new and better ways of preserving digital items. Additional strategy components will continue to be developed.

1. DiscoverArchive provides two types of basic preservation:
   a. Bit preservation. Digital content will be processed and ingested into DiscoverArchive and maintained in the original format, unchanged over time.
   b. Functional preservation. Because the physical media will change over time, functional preservation ensures the content will be accessible over time by changing the file as with migration. Migration of file formats will occur as the library identifies the need.

2. DiscoverArchive provides three levels of preservation:
   a. Supported formats will be functionally preserved using either format migration or emulation techniques. The Library in conjunction with the international institutional repository community will determine formats requiring preservation activities. Examples include TIFF, SGML, XML, AIFF, and PDF.
   b. Known formats are those that we can’t promise to functionally preserve, such as proprietary or binary formats, but which are so popular that third party migration tools will likely emerge to help with format migration. Examples include Microsoft Word and Powerpoint, Lotus 1-2-3, and WordPerfect.
   Unsupported formats are those that we don’t know enough about to do any sort of functional preservation. This would include some proprietary formats or a one-of-a-kind software program.

   A list of supported formats can be found at the DiscoverArchive website at http://DiscoverArchive.Vanderbilt.edu.

3. DiscoverArchive assigns Dublin Core metadata:
   a. Preservation metadata is automatically assigned upon ingestion as well as added to each item by Library specialists. Preservation metadata addresses provenance, authenticity, preservation activity, and the technical environment needed for access.
   b. Metadata is also assigned by specialists in the library for optimal retrieval across institutional repositories, search services and collocating with similar content within larger systems.

   For more information on DiscoverArchive metadata see the Application Profile.
4. **DiscoverArchive provides access.** Digital preservation cannot be achieved without access.

   a. **Long term access.** DiscoverArchive is committed to providing long term access for digital content whether items are made publicly accessible or not.
      - Deposited items will be assigned a persistent URL.
      - Deposited items cannot be changed.
      - Withdrawn Items
        Withdrawing items from public viewing is possible but not advisable.
        Metadata will not be searchable for withdrawn items
        In the case of a withdrawn item, the URL will be preserved and a tombstone will be displayed in its place.

   b. **Current use access.** Today’s users expect organized and easily accessible digital content. DiscoverArchive provides immediate access to items without restrictions.

5. **DiscoverArchive has backup copies.** Backup describes the copy of repository data (administrative and content) to a storage system other than that which supports the repository itself. To help assure the maintenance of viable and authentic digital content, a documented back up program is in place.

   a. The Library maintains four back up copies. Two full copies of all content, associated metadata and systems specifications are stored at a secure, geographically distant location in keeping with Crisis Management, Disaster Recovery with an additional monthly and yearly backup. The library will continue to look for cooperative agreements with other organizations (academic or commercial) which may provide a suitable means to achieving remote back-up storage.

6. **Future preservation**

   **Trusted Digital Repository.** A goal is continued development and implementation of a "Trusted Digital Repository" based on the ideas of the "Reference Model for an Open Archival Information System (OAIS)" and the RLG report on "Trusted Repositories". DiscoverArchive architecture is based on Dspace and will continue to update the architecture, tools, and platforms.

   "A reliable digital repository is one whose mission is to provide long-term access to managed digital resources; that accepts responsibility for the long-term maintenance of digital resources on behalf of its depositors and for the benefit of current and future users; that designs its system(s) in accordance with commonly accepted conventions and standards to ensure the ongoing management, access, and security of materials deposited within it; that establishes methodologies for system evaluation that meet community expectations of trustworthiness; that can be depended upon to carry out its long-term responsibilities to depositors and users openly and explicitly; and whose policies, practices, and performance can be audited and measured." (Trusted Digital Repositories) ([http://www.oclc.org/programs/ourwork/past/trustedrep/repositories.pdf](http://www.oclc.org/programs/ourwork/past/trustedrep/repositories.pdf))


**Resources:**