University of Oregon Libraries

Preservation Policy for digital resources

(revised February 20, 2005)

Preamble

This policy is designed to guide decision-making in preserving the digital resources of the University of Oregon Libraries. It may also guide collaborative decisions made with partner institutions and with vendors, specifically for preservation of digital resources considered to be of value to UO Libraries' users.

The goal of library preservation is to maximize the utility and life expectancy of collections. The transient nature of digital technology and digital objects requires an unprecedented commitment—to sustained investment in effective technology, trained and dedicated personnel, and active and informed administrators—to enable successful preservation. Failure to act rapidly and appropriately is failure to preserve digital resources. Both the development and the preservation of digital resources can be expensive, and responsible stewardship of resources and collections is an underlying principle of this and all other Digital Library policies.

As the state of the art of digital preservation is a rapidly moving target, no policy document can effectively prescribe tools and techniques, nor strictly define formats. Risk is implicit, but we shall actively seek to minimize unnecessary risk through informed decision-making.

For this policy, "digital resources" are defined as items and collections in any digital format that are the property of the Libraries or the University, or have been selected as resources of value to the Libraries' users. Valued resources may include those licensed from vendors, or owned by partner entities.

Policy

1. Preservation Selection

The Libraries do not have the resources to preserve everything, and it is irresponsible to pretend that we can. Digital resources cannot survive without active preservation, which requires an active and realistic selection process. The Libraries shall select digital resources for preservation. Selection shall be performed by Digital Content Coordinators or their delegates. Selection status shall be recorded in an inventory instrument, reviewed at least annually. An environmental scan shall be conducted at least annually to seek additional resources to review for preservation selection.

The level of preservation shall be specified in the inventory as bit-level or as full. Bit-level preservation retains the content through includes integrity checking, the creation of multiple masters, and secure storage. Full preservation includes bit-level treatment plus format normalization and format migration, retaining the content of the resource and seeking to replicate the interface, so the experience of the user does not alter through time.

The Libraries shall not expend resources to preserve digital resources that have been rejected for preservation.

2. Preservation Classes

Standardization is a critical component of an effective preservation plan. The Libraries shall define classes of digital resources, aggregating similar types of resources of similar value (for example, electronic UO theses in PDF format), to facilitate use of standardized preservation plans. Class definitions shall include properties determined to be significant aspects of the class, such as priority for preservation, format, access mechanisms, evidence of authenticity, property rights, et cetera. Classes shall be defined by Digital Content Coordinators.

The definition of classes is a tool designed to facilitate decision-making and treatment, and serve as a framework for the development of new resources. No system is perfect: some resources will not fit existing classes and will require alternative plans. Generally open standard or publicly declared file formats shall be preferred to proprietary, as simple systems are preferable to complex, and the Library shall seek to steer newly acquired resources into preferred formats.

3. Preservation Plans

Preservation plans establish a prescriptive framework for effective action. The Libraries shall use standards and best practices (from peer institutions and national or international standard-setting organizations) to develop plans for each class of digital resources. Generally, plans shall utilize framework of the Open Archival Information System (OAIS) Reference Model. Plans shall be documented and reviewed at least annually to ensure that they are effective and efficient and produce a robust product. The plans shall cover quality control monitoring, reformatting, refreshing and other critical action tasks required for each class, and shall enable cost-accounting for each class. Plans shall be approved by Digital Content Coordinators.

4. Documentation and Reporting

Documentation of decisions and actions provide accountability and facilitate monitoring, and is a critical component of a successful preservation program. Documentation (including metadata) shall be compiled and maintained for all identified digital resources. Level of documentation may vary, depending upon the class of the digital resource. Items rejected for preservation selection shall also be documented through a watch-list, to retain the decision and the underlying reasons. Documentation for selected resources shall include but not be limited to:

- Owner
- · Nature of resource
- · Location
- · Selection status and preservation level
- · Class
- · Technological requirements

Successful preservation requires pervasive ownership, which is established through demonstrated success, accountability, and accurate projection of required actions and costs. The Libraries shall maintain documentation of digital preservation activities, including costs, and shall report at least annually on preservation activities and strategies, projecting costs and identifying threats and opportunities. Documentation shall be maintained at appropriate places and by appropriate personnel throughout the digital library workflow. The Digital Content Coordinators shall produce an annual report that including digital preservation activities, to inform all Library personnel and

Administration.

5. Infrastructure

Successful digital preservation requires an effective infrastructure that can respond to the rapid pace of technological development. The Libraries shall designate personnel to perform digital preservation tasks, and shall ensure that personnel receive continuing education—workshops, research time, participation at conferences and on committees—in support of their preservation work. The Libraries shall maintain robust, redundant servers and create routine backups. Digital resources and the technological infrastructure that supports them shall be included in the Libraries' disaster preparedness plan. Digital Content Coordinators shall monitor the existing infrastructure and include analysis of its effectiveness and recommendations for improvement in the annual report.

Successful digital preservation requires proactive behavior and community participation. The Libraries shall seek to be recognized as a Reliable Digital Repository, to contribute to the community of digital libraries and to ensure that we continue to create and sustain digital resources responsibly. To ensure that we can handle what we undertake to preserve, the Libraries shall seek to constrain the acquisition of digital resources and technologies that exceed our ability to manage and preserve.

We shall contribute to advancing the state of the art and the development of support by:

- · Sharing our policies and procedures broadly and consulting freely;
- Communicating freely to maintain and improve mechanisms for comparing approaches and strategies, and review developments;
- · Serving on standards development committees and similar best-practices bodies
- · Presenting on our successes and failures;
- · Supporting the development of better standards and tools; and
- · Leveraging our status to positively influence the actions of government and vendors, within appropriate boundaries.