

# **Definitions of Digital Preservation**

Prepared by the Preservation and Reformatting Section, Working Group on Defining Digital Preservation ALA Annual Conference, Washington, D.C., June 24, 2007

### **Preamble**

These definitions have been developed to promote an understanding of digital preservation within the library community, as well as our allied professions and the user communities we exist to serve. This draft is presented to mark our current understanding of digital preservation and encourage further development of these ideas.

During the American Library Association's (ALA) 2007 Midwinter Meeting, a working group within the Preservation and Reformatting Section (PARS) was charged to draft a definition for digital preservation to support the work of PARS, the Association for Library Collections and Technical Services (ALCTS) and the ALA, for use on the web, verbally, in written policy statements, and other documents. Our work was reviewed at the 2007 Annual Meeting and approved for further distribution by the PARS and ALCTS Executive Committees.

The working group studied a number of resources to familiarize itself with the critical elements of digital preservation identified by a broad selection of individuals and agencies. We endeavored to cast these ideas into language that would speak to a wide variety of stakeholders while also being consistent with the core preservation concepts that have developed in the library and archival communities.

We decided to package a set of core concepts into a short, medium, and long version to accommodate a variety of needs. The long version includes a number of currently accepted best practices but is not intended to be an exhaustive list. As more is learned about implementing digital preservation programs, the definitions should be reviewed and revised on a regular basis.

A few key terms and phrases have already been identified as points that require further discussion and require special attention to clarify their relationship to the professional vocabularies of archivists, librarians, computer scientists and system administrators. These are explained here and *italicized* in the definition draft that follows.

- *Policies, strategies and actions:* this phrase makes explicit the need for a declared intention to preserve, a plan for doing so, and engagement in measurable activities to realize that plan. These policies, strategies determine the precise actions required of a digital preservation effort.
- To ensure access to: the concept of access was initially used because of its fundamental place in the mission of libraries, but the working group has recognized that the phrase "to ensure usability of" may speak more effectively to the needs for computer processing and rights to access that are crucial for digital content, as well as the traditional interaction of our patrons with our resources.
- Accurate rendering of authenticated content: this phrase refers to well-established library and archival concepts for the authorship and provenance of a work as well as the integrity and functionality of a digital object. In digital preservation there may be a requirement support the ongoing machine readability and future processing potential of digital content in addition to human interaction with the content.
- Born digital and reformatted content: The term "reformatted" carries a very particular meaning in the library community and among the PARS membership. This meaning is different than its colloquial use and its meaning in information technology. Consequently, the group is considering expansion of this phrase to "content that is born digital as well as converted to digital form."

## The Working Group

Further information, including revisions and background documentation, is available at the working group's public website: http://blogs.ala.org/digipres.php.

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#### **Short Definition**

Digital preservation combines policies, strategies and actions that *ensure access to* digital content over time.

## **Medium Definition**

Digital preservation combines policies, strategies and actions *to ensure access to* reformatted and born digital content regardless of the challenges of media failure and technological change. The goal of digital preservation is the accurate rendering of authenticated content over time.

## **Long Definition**

Digital preservation combines policies, strategies and actions to ensure the accurate rendering of authenticated content over time, regardless of the challenges of media failure and technological change. Digital preservation applies to both born digital and reformatted content.

Digital preservation policies document an organization's commitment to preserve digital content for future use; specify file formats to be preserved and the level of preservation to be provided; and ensure compliance with standards and best practices for responsible stewardship of digital information.

Digital preservation strategies and actions address content creation, integrity and maintenance.

#### Content creation includes:

- Clear and complete technical specifications
- Production of reliable master files
- Sufficient descriptive, administrative and structural metadata to ensure future access
- Detailed quality control of processes

# Content integrity includes:

- Documentation of all policies, strategies and procedures
- Use of persistent identifiers
- Recorded provenance and change history for all objects
- Verification mechanisms
- Attention to security requirements
- Routine audits

# Content maintenance includes:

- A robust computing and networking infrastructure
- Storage and synchronization of files at multiple sites
- Continuous monitoring and management of files
- Programs for refreshing, migration and emulation
- Creation and testing of disaster prevention and recovery plans
- Periodic review and updating of policies and procedures

The Preservation and Reformatting Section contributes to library service and librarianship through encouragement, promotion of, and responsibility for those activities of the Association for Library Collections & Technical Services of the American Library Association relating to the preservation and reformatting of library materials in all types of institutions. The Preservation and Reformatting Section provides leadership in the application of new technologies to assure continued access to library collections.