

Developing a Unified Preservation Strategy: Moving beyond the Analog/Digital Divide

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Preservation Administrators
Interest Group



Background

- Formal preservation program less than a decade old
- Multiple activities/workflows/priorities
- Competition for resources
- Collections accepted without factoring in cost of preservation
- Little advance warning for preservation emergencies

Goals of Preservation Task Force

- Articulate an overall comprehensive preservation philosophy
- Document current policies and practices across units and formats
- Identify gaps in policies, procedures, staffing, tools
- Identify challenges and opportunities for collaboration and growth
- Provide recommendations for implementation.

Library-Wide Initiative

- Preservation Services
- Digital Curation Services
- Metadata Management Services
- Information Technology
- APTrust
- Special Collections
- Data Management Services
- Scholar's Lab
- Humanities and Social Sciences
- Libra (institutional repository)

Preservation Philosophy

Preservation Strategy at the University of Virginia Library

The University of Virginia Library plays a unique role in preservation within the University. Preservation is a set of activities and an overall approach to everything we do in the Library—every activity is informed by a set of preservation principles. The ultimate aim of preservation activities at the University of Virginia Library is to ensure access to materials that enable research, teaching, and learning.

We strive to maximize the life expectancy and utility of collections, regardless of format, for current and future scholars. We collaborate with stakeholders to determine and define essential characteristics of materials. We advocate for the preservation of the scholarly and cultural record writ large. We embrace the challenges and possibilities of the digital world by acknowledging the integrity of both analog and digital objects and take a balanced approach that best captures the unique evidence or function of the original form.

Preservation Philosophy

In order to accomplish our preservation mandate, we

- Adhere to the ethical standards of professional organizations and follow established best practices
- Are proactive whenever possible and reactive as necessary
- Sustain and maximize usability
- Preserve integrity and authenticity
- Are transparent about processes and decisions
- Participate in collaborative initiatives that provide shared solutions to community-wide problems
- Ensure sustainable preservation activities

NDSA Levels of Digital Preservation

Table 1: Version 1 of the Levels of Digital Preservation

	Level 1 (Protect your data)	Level 2 (Know your data)	Level 3 (Monitor your data)	Level 4 (Repair your data)
Storage and Geographic Location	<ul style="list-style-type: none"> - Two complete copies that are not collocated - For data on heterogeneous media (optical discs, hard drives, etc.) get the content off the medium and into your storage system 	<ul style="list-style-type: none"> - At least three complete copies - At least one copy in a different geographic location - Document your storage system(s) and storage media and what you need to use them 	<ul style="list-style-type: none"> - At least one copy in a geographic location with a different disaster threat - Obsolescence monitoring process for your storage system(s) and media 	<ul style="list-style-type: none"> - At least three copies in geographic locations with different disaster threats - Have a comprehensive plan in place that will keep files and metadata on currently accessible media or systems
File Fixity and Data Integrity	<ul style="list-style-type: none"> - Check file fixity on ingest if it has been provided with the content - Create fixity info if it wasn't provided with the content 	<ul style="list-style-type: none"> - Check fixity on all ingests - Use write-blockers when working with original media - Virus-check high risk content 	<ul style="list-style-type: none"> - Check fixity of content at fixed intervals - Maintain logs of fixity info; supply audit on demand - Ability to detect corrupt data - Virus-check all content 	<ul style="list-style-type: none"> - Check fixity of all content in response to specific events or activities - Ability to replace/repair corrupted data - Ensure no one person has write access to all copies
Information Security	<ul style="list-style-type: none"> - Identify who has read, write, move and delete authorization to individual files - Restrict who has those authorizations to individual files 	<ul style="list-style-type: none"> - Document access restrictions for content 	<ul style="list-style-type: none"> - Maintain logs of who performed what actions on files, including deletions and preservation actions 	<ul style="list-style-type: none"> - Perform audit of logs
Metadata	<ul style="list-style-type: none"> - Inventory of content and its storage location - Ensure backup and non-collocation of inventory 	<ul style="list-style-type: none"> - Store administrative metadata - Store transformative metadata and log events 	<ul style="list-style-type: none"> - Store standard technical and descriptive metadata 	<ul style="list-style-type: none"> - Store standard preservation metadata
File Formats	<ul style="list-style-type: none"> - When you can give input into the creation of digital files encourage use of a limited set of known open formats and codecs 	<ul style="list-style-type: none"> - Inventory of file formats in use 	<ul style="list-style-type: none"> - Monitor file format obsolescence issues 	<ul style="list-style-type: none"> - Perform format migrations, emulation and similar activities as needed

<http://www.digitalpreservation.gov/ndsas/activities/levels.html>

Levels of Preservation Action

- 0: Retain record of its existence
- 1: Stable environment, minimal metadata
- 2: Minimal intervention—maintain current state
- 3: Intervention to maintain usability, some loss
- 4: Significant intervention to maintain usability and much of original characteristics
- 5: Preservation of context, robust metadata

Preservation Assessment Template

Purpose

- To address immediate preservation needs
- To plan for future preservation needs
- To have people consider preservation implications of accepting a collection
- To prioritize collection level preservation needs
- Identify responsibilities and trigger workflow

Preservation Assessment form beta



This form is meant to help the Library address immediate preservation needs, prioritize and plan for future preservation needs

* Required

... FOR COLLECTION STEWARD

Collection or item id if applicable *

(e.g. ISBN, ISSN, DOI, Accession Number, local)

Collection name *

<http://tinyurl.com/o7nuon9>

New to the Library? *

Is this an addition to an existing collection? If so, which?

Donor or source

Collection Steward

- Donor agreement/MOU/License?
Location?
- Use restrictions
- Copyright/intellectual property issues?
- Institutional commitment to preserve?
- Preserved elsewhere?
- Preservation level desired (0 to 5 scale)

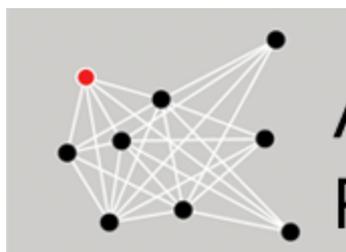
Preservation or Technical Specialist



- Actions needed to stabilize
- Actions needed to provide access
- Actions needed to preserve long-term

Current Activities

- What goes into



ACADEMIC
PRESERVATION TRUST



- Who determines level of preservation action?
- Implementation of policies, assessment and preservation levels

Feedback or Questions?



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