



Managing Digital Content over Time: An Introduction

ELUNA 2014

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Digital Preservation Outreach & Education Network

DPOE People

The DPOE Network is made up of the [DPOE National Trainer Network](#), the [DPOE Steering Committee](#), and a community of [Digital Preservation Education Advocates](#).

DPOE National Trainer Network



The DPOE National Trainer Network is made up of individuals who have attended a DPOE Train-the-Trainer workshop. The network covers six regions: [Midwest](#), [Northeast](#), [Northwest](#), [Southcentral](#), [Southeast](#), and [Southwest](#).

Six Steps

Identify - what digital content do you have?

Select - what portion of that content will be preserved?

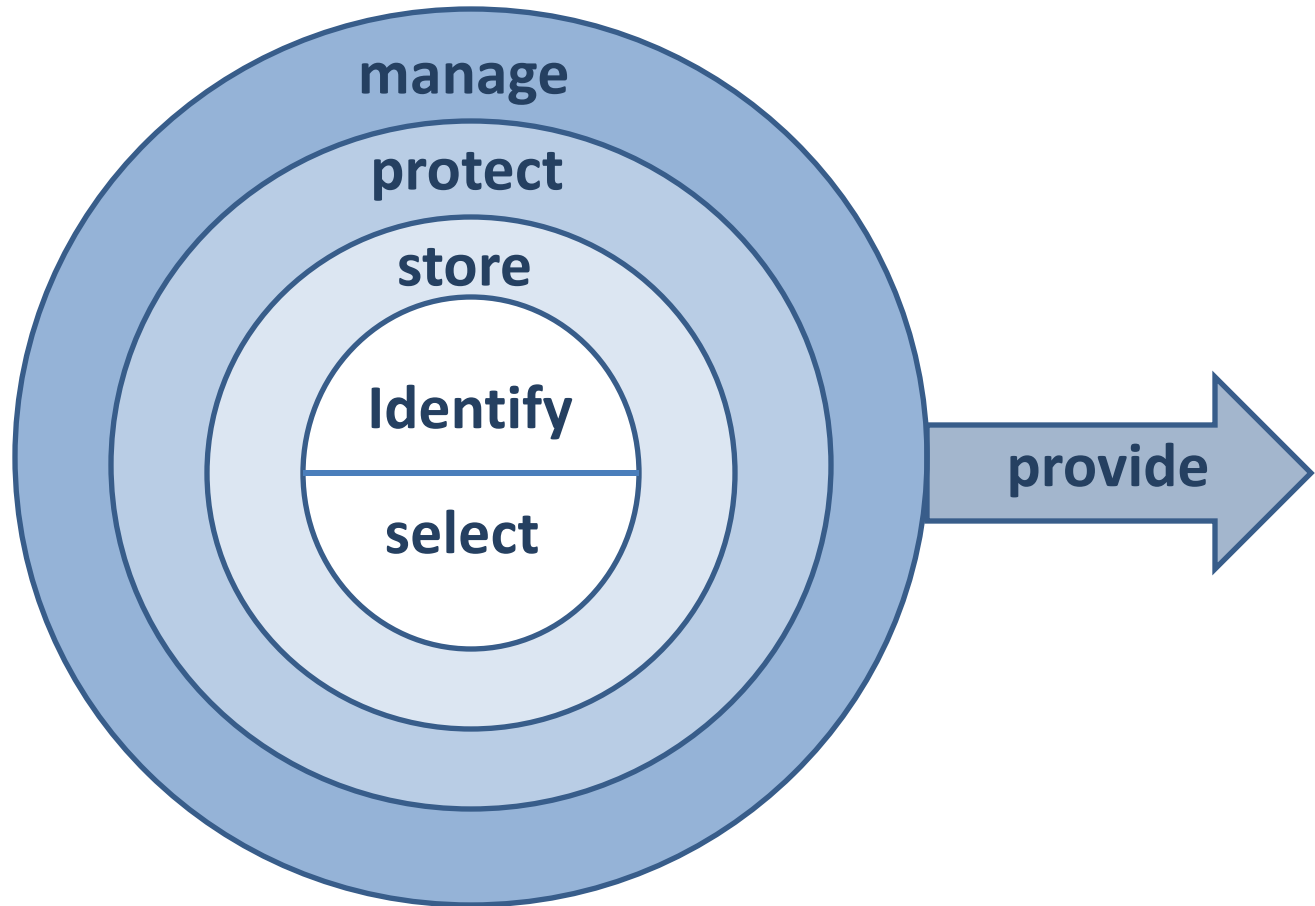
Store - what issues are there for long term storage?

Protect - what steps are needed to protect your digital content?

Manage - what provisions are needed for long-term management?

Provide - what considerations are there for long-term access?

Managing Content Over Time



Modules

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Why do we *identify* content?

- Not all of our digital content is to be preserved
- Preservation requires a **commitment** of resources
- First step to making **informed** decisions
- Effective planning is based on knowing what **needs** to be preserved now and in the future

A detailed inventory is the best way to identify content

How will an inventory help?

Good preservation decisions are based on an *understanding* of the possible content to be preserved

The Identify stage asks:
“what content do we have?”



Your Inventory Scope

Answers the questions:

- What content are we already preserving?
- Who has digital content?
- Who is creating digital content?
- What content **MUST** we keep?



Content Categories

Inventories should include all relevant items:

- Institutional records
- Special collections
- Scholarly content – licensed and open
- Research data
- Web content



Format Types

An inventory should identify existing format types of content - examples:

- Images
- Video
- Audio
- Text
- Maps/geospatial
- Drawings
- Web content
- Structured data

Each category may include multiple types

Location Issues

Locations of content are important – consider:

- Where is the content?
 - Online/offline?
 - With us, with creator?
- Can we track location as content moves?
- How do we indicate the location?

Be clear enough without going to extremes...

Your Inventory

- Make it work for your situation

1	Title/Description	Creator	Contact Information	Creation Date(s)	Location	Size / Extent	Format(s)	Category	Born Digital?	Preserve?	Notes
2	1										Preserve: Y - If this is to be preserved in the library archive. N - Maintain locally
3	2										
4	3										
5											
6											
7											
8	1	Folder	No. of Files	Level	Type of collection	Type of Files	Size	Access restrictions if any	Description		
9	2	Phase 1 files	AC - 2005	9	Collection	Ongoing	Word 97 documents.	300 KB	These are confidential files.	Records management; A	
10	3		Sperry Photos	7	Collection	Closed	Four tif images; Three .xls spreadsheets.	11.2 MB	Access to these materials is restricted until 2013.	Archive collections	
11	4	Collection level metadata for the files will come from Gordon and Cory.									
12	5										
13	6	Folder	No. of Files	Level	Type of collection	Type of Files	Size	Access restrictions if any	Description		
14	7	Phase 2 files	OJS - BYU Studies	5	Collection	Ongoing	4 PDF journal articles 1 TXT OJS article level metadata file	8.84 MB	Accessible through BYU OJS website	files that were loaded i software	
15	8		HBLI Cataloging Website	511	Collection	Closed	Various web files	30.1 MB	Access through Curator only	Cataloging Policies and	
16	9		OSCard IGMS	79	Collection	Ongoing	Files include html, jpg, pdf, .msg outlook email, .exe, .mp3.	39 MB	Access through Curator only	One issue of Intergalact	
17	10		OSCard e books	1	Collection	Ongoing	mobi	712 KB	Access through Curator only	Electronic version of abc	
18	11		Video - Library	2	Collection	Closed	1 .mhtml web page; 1 .mp4 video	9.72 MB	No access.	Download of web files	
19	12		Herculaneum/inventories	22	Collection	Closed	TXT, .xls, .doc	5.2 MB	No access.	Verification, inventory, c	
20	13		Herculaneum/CD 001	2	Collection	Closed	Tif images	12 MB	No access.	MSI scans of papyri	

Identify Outcomes

- Identify potential digital content you may need to preserve
- Treat the inventory as a management tool that grows as your program grows
- Use it as a planning tool to prepare
 - e.g., staff, training, annual growth
- Provides a basis for acquiring content, defining submission agreements, plans

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Why select content to preserve?

- Storage may be cheap, management is not
... especially over time
- Quality of content
- Discovery and dissemination
... who has it, who needs it?
- Matching mission to content



Why select content to preserve?



Determine Selection Criteria

- Acquisition or collection development policy
- Departmental criteria (*priorities, precedents*)
- Core record/content types (*need no review*)
- Research criteria (*interests, significance*)
- Uniqueness (*only source*)
- Value (*historical, evidential, can't reproduce*)
- Preserved elsewhere (*avoid duplication*)

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What drives storage decisions?

- Immediate Costs
 - Quantity (size and number of files)
 - Number of copies
 - Media (life span, availability)
- Available resources
 - Expertise (skills required to manage)
 - Services (local vs. hosted)
 - Partners (achieving geographic distribution)
- Institutional constraints (e.g., legal restrictions)



What are we storing?

Digital content: files + metadata = entity

- Files
 - e.g., images, text, sound, video, maps
- Metadata
 - Information about the objects



Archival Storage

Computer Backups are not Preservation

- Backups:
 - Restoring files in case of a failure
 - Temporary
- Preservation:
 - Care for individual files over time
 - Stored with information about the objects
 - Software and hardware independent
 - Spans generations of technology



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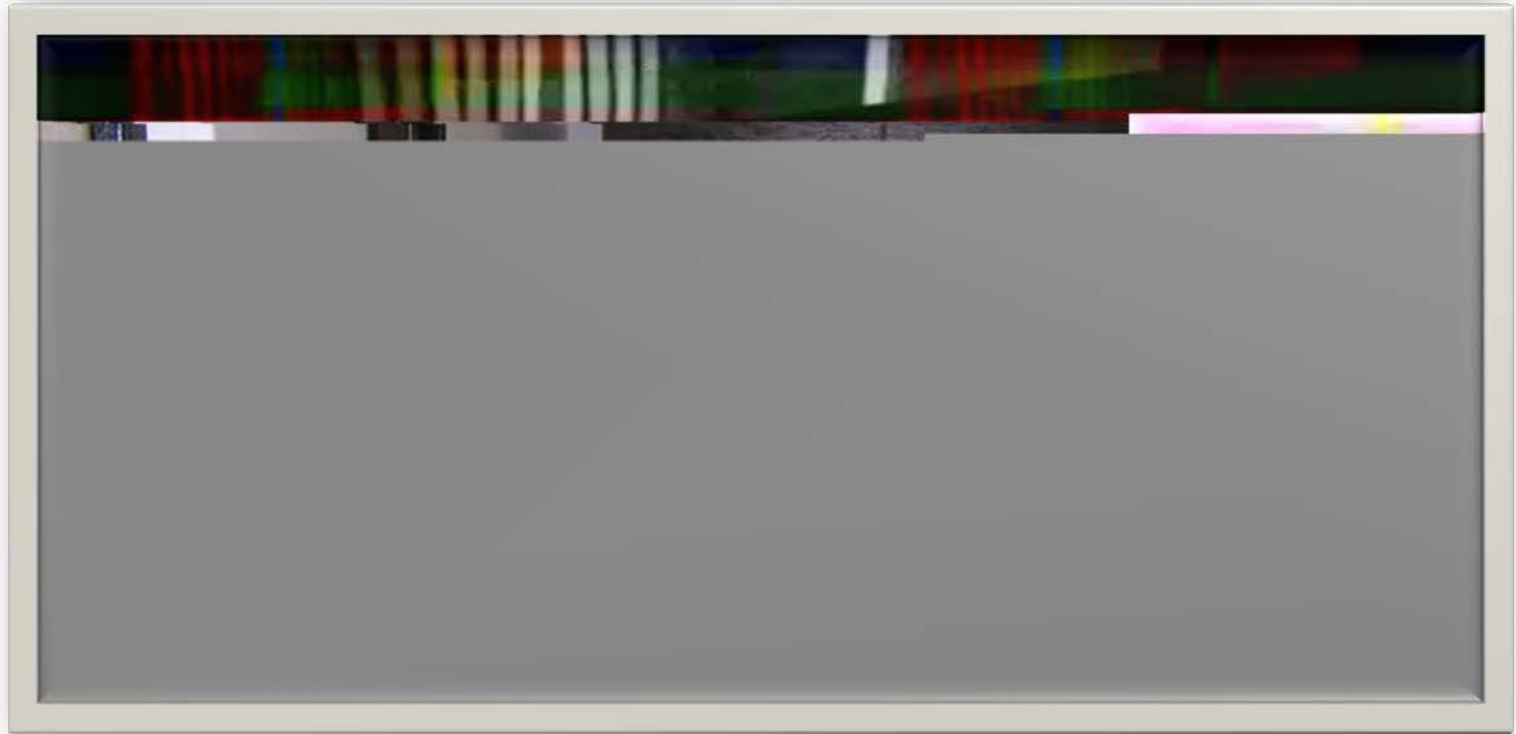
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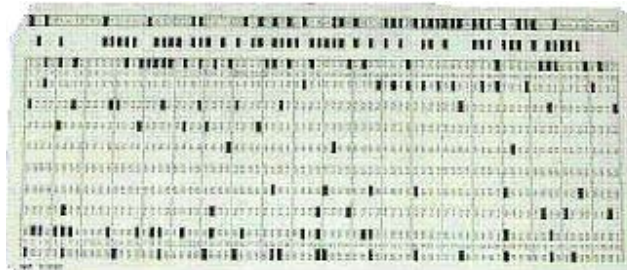
What are we protecting content from?

- Change and loss – accidental and intentional
- Obsolescence – as technology evolves
- Inappropriate access – e.g., confidential data
- Non-compliance – standards and requirements
- Disasters – emergencies of all kinds

Change and Loss



Obsolescence



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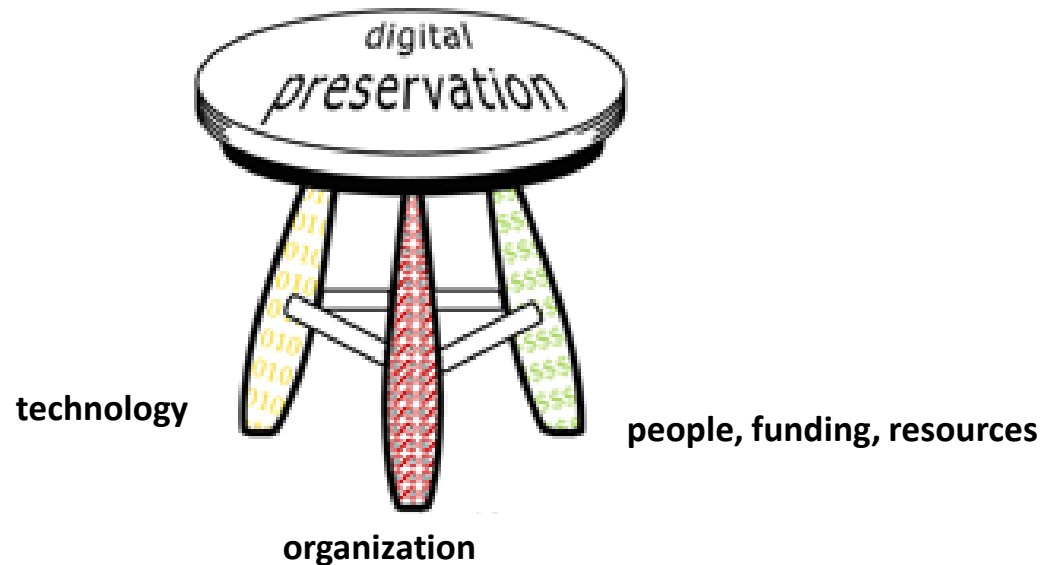
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Balanced Management

An effective approach will address:

- Organizational requirements and objectives
- Technological opportunities and change
- Resources – funding, staff, equipment, etc.



Organizational: People

Roles in managing digital preservation programs:

- Administrators
- Project managers
- Technical specialists
- Metadata specialists
- Legal staff
- Communications staff



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What is Long-term Access?



What is Long-term Access?

Preservation makes long-term access possible...

Long-Term Access

- **Purpose:** ensure future access
- **Focus:** future users

- **Proven** technologies
- Across **generations** of technology
- **Accumulates** lifecycle metadata
- **Create** new versions over time

Immediate Access

- **Purpose:** provide content today
- **Focus:** current users

- **Cutting edge** technologies to provide best and fastest access now
- Selects **metadata** needed to use and understand content
- **Deliver** objects with user-oriented services to make the objects

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Identifying Next Steps

- Think about your current situation
- Write down the top 2 or 3 things you think you most need to do – not more than 3
- For each one, think through:
 - Who you might work with
 - Challenges you might face and ways to address those
 - What the desired outcome
- Choose one item to work on and start

Questions?

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