2020 SOA Annual Conference, June 16th

## Initial Steps on a Digital Preservation Policy

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https://bit.ly/2N1hQS2

## **UC Libraries**

#### Sidney Gao

- Digital Imaging Coordinator
- Background in management and workflows for digitization

#### James Van Mil

- Digital Projects & Preservation Librarian
- Work history outside of digital collections; was acquisitions/e resources librarian and software developer.

## **UA Archives**

#### **Brittany Hayes**

- Library Cataloging
  Specialist/Electronic Resources
- Assists with audio -visual digitization in the University Archives

#### Zoe Orcutt

- Library Research Assistant at Archival Services
  - Researcher for the University of Akron's Sesquicentennial

## Our Repositories: What are we preserving?

#### **UC Libraries**

- DRC (antique DSpace installation)
  - Historical and Archival Records
- Scholar@UC (Samvera)
  - Faculty-owned
- Luna Image repository
  - Art, but also image -based archives content
- Other content in storage
- Current digitization workflow

#### **UA Archives**

- The archives and special collections of the university
- Materials related to:
  - The University of Akron
  - Akron and Summit County
  - The rubber industry
    - Goodyear Tire & Rubber Company
  - Lighter -than -air flight
  - Ohio canals
  - The book and print culture
  - $\circ$   $\hfill The B-26$  Marauder and the 9th Air Force

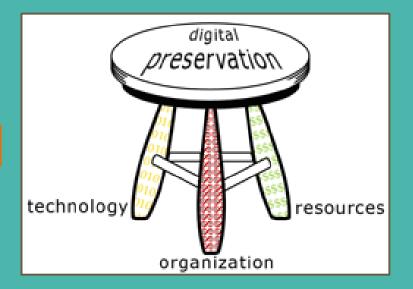


# What is digital preservation?

Maintenance of digital objects to ensure future accessibility and use.



## Three legged stool of digital preservation



Anne Kenney & Nancy McGovern. (2003). Three legged stool. Retrieved June 12, 2020 from, <u>https://libguides.bodleian.ox.ac.uk/digitalpre</u>servati <u>n/threeleggedstool</u>



## Know your challenges

## Mold your policy

#### NDSA%

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#### Levels of Digital Preservation

Functional Area	Level						
	Level 1 (Know your content)	Level 2 (Protect your content)	Level 3 (Monitor your content)	Level 4 (Sustain your content)			
Storage	Have two complete copies in separate locations Document all storage media where content is stored Put content into stable storage	Have three complete copies with at least one copy in a separate geographic location Document storage and storage media indicating the resources and dependencies they require to function	Have at least one copy in a geographic location with a different disaster threat than the other copies Have at least one copy on a different storage media type Track the obsolescence of storage and media	Have at least three copies in geographic locations, each with a different disaster threat Maximize storage diversification t avoid single points of failure Have a plan and execute actions address obsolescence of storage hardware, software, and media			
Integrity	Verify integrity information if it has been provided with the content Generate integrity information if not provided with the content Virus check all content; isolate content for quarantine as needed	Verify integrity information when moving or copying content Use write-blockers when working with original media Back up integrity information and store copy in a separate location from the content	Verify integrity information of content at fixed intervals Document integrity information verification processes and outcomes Perform audit of integrity information on demand	Verify integrity information in response to specific events or activities Replace or repair corrupted conte as necessary			
Control	Determine the human and software agents that should be authorized to read, write, move, and delete content	Document the human and software agents authorized to read, write, move, and delete content and apply these	Maintain logs and identify the human and software agents that performed actions on content	Perform periodic review of actions/access logs			
Metadata	Create inventory of content, also documenting current storage locations Backup inventory and store at least one copy separately from content	Store enough metadata to know what the content is (this might include some combination of administrative, technical, descriptive, preservation, and structural)	Determine what metadata standards to apply Find and fill gaps in your metadata to meet those standards	Record preservation actions associated with content and when those actions occur Implement metadata standards chosen			
Content	Document file formats and other essential content characteristics including how and when these were identified	Verify file formats and other essential content characteristics Build relationships with content creators to encourage sustainable file choices	Monitor for obsolescence, and changes in technologies on which content is dependent	Perform migrations, normalization emulation, and similar activities th ensure content can be accessed			

## NDSA Levels of Digital Preservation

National Digital Stewardship Alliance. (2018). Levels of Digital Preservation. Retrieved June 01, 2020, from <a href="https://ndsa.org/publications/levfed3/2020/">https://ndsa.org/publications/levfed3/2020</a>, from

Level	Electronic Records Survey Capability Metrics				
0	The organization has little or no capability or resources to collect and analyze information about the volume, location, media, format types, and lifecycle management requirements for electronic records.				
1	The organization uses existing retention schedules to identify electronic records of permanent historical, fiscal, and legal value in the custody of records producers. It may also conduct ad hoc, one-time interviews and surveys to identify other electronic records of permanent historical, fiscal, and legal value.				
2	The organization uses systematic interviews, surveys, and retrospective analysis of existing retention schedules to identify electronic records of permanent historical, fiscal, and legal value in the custody of select records producers. This effort may be enhanced by focusing on identified "at risk" electronic records.				
	ISO 14721 Conformance				
3	The organization supplements analysis of "at risk" electronic records through collection of information about the volume and location, media and format types (preservation ready and near-preservation ready) of permanent electronic records in the custody of records producers.				
4	The organization has identified and categorized all preservation ready, near-preservation ready, and legacy permanent electronic records in the custody of all records producers.				

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Digital Preservation Capability Maturity Model (a.k.a. "Dollar")

Dollar, C., Ashley, L (2015). Digital Preservation Capability Maturity Model (DPCMM). Retrieved June 01, 2020, fittps://static1.squarespace.com/static/52ebbb45e4b06f07f8bb62bd/t/559bf956e4b06cac7e905011/1436285270 565/DPCMM+Background+and+Performance+Metrics+v2.7\_July+2015.pdf

## **Common Challenges**

Limited resources & staffing

Legacy content

Deferring the Work

## Limited Resources & Staffing

#### University of Cincinnati Libraries

- Intentionally slow pace accommodates limited staffing
- Progressive approach that continuously builds on existing infrastructure
- Compensates with documentation, and by sacrificing speediness

#### University of Akron Archives

- Continuing self -education in digital preservation
  - Research and attend workshops
- Strategically work around budget restrictions
- Creating a team of staff willing/able to assist

## Legacy Content

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#### University of Cincinnati Libraries

- Developing collection assessment strategies
  - Relationships with stakeholders
  - Documenting collection goals and technical debt
- Balance investment in maintenance of established collections vs investment in new content

#### University of Akron Archives

- Identify all legacy content
  We are at this stage
- Keep a tracking sheet
- Create a plan of action for incoming, obsolete materials
- Request that incoming materials be in a standardized file format as outlined by the DPCMM

## **Deferring the Work**

#### University of Cincinnati Libraries

- Set small, achievable goals for your level of staffing and resources
- Standing meetings between core collaborators relieves the emotional labor of planning
- Remember that digital preservation work is often front -loaded
- Avoid deferring responsibility (do not run by committee)

#### University of Akron Archives

- We do have meetings every other week
  - It is slow paced because we are still doing the assessment.
- With the current pandemic we are doing a lot of research that we wouldn't have been doing otherwise.

## **Unique Challenges**

**UC** Libraries

• Accessibility

**UA** Archives

• Finding the right Digital Asset Management (DAM) system

### **UCLAccessibility \*is\* Digital Preservation**

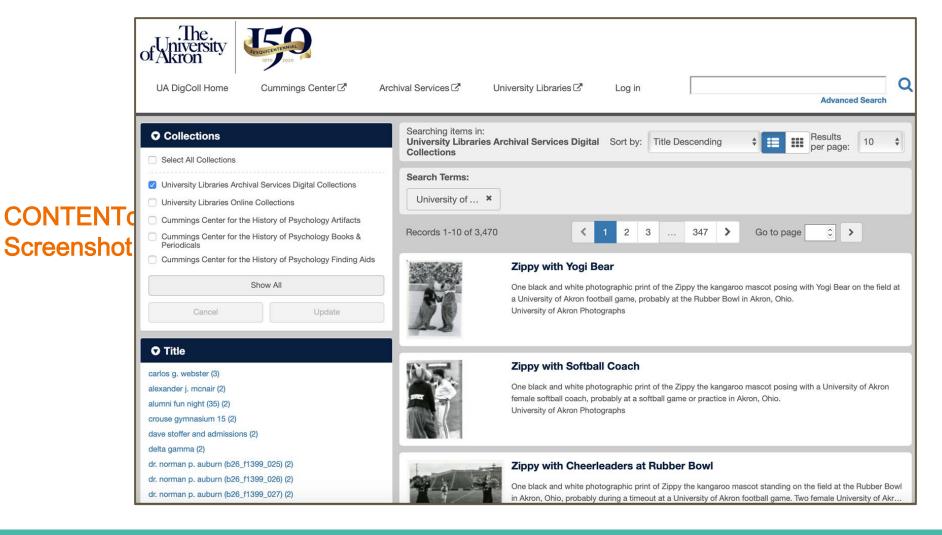
## Culture of Accessibility Compliance "PDF/A considered harmful for digital preservation" Formats and information accessibility

## UA How do we find the right DAMS for our content?

- Searching for the right Digital Asset Management/Archival Management system
  - Budgeting obstacles
  - Administrative support
- CONTENTdm

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- Institutional repository
- Remote accessibility
  - Patrons and users can access content without physically coming to facility
  - $\circ$   $\,$  We've seen an increase of usage of our DAM with the coronavirus pandemic  $\,$ 
    - Digital preservation more relevant with current pandemic



## Sharepoint

• What is it?

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- Microsoft Office web -based collaborative platform that offers document management and storage space
- Archival Services began transition from institutional servers to Sharepoint in 2019, and is still transitioning
- Does it work?
  - Advantages (remote access, cloud storage complies with NDSA and DPCMM models, access can be determined per member/guest, notify admins when files are changed/edited/deleted)
  - Challenges (does not accept all file formats, issues uploading, long loading times, viewing large files/folders, naming convention complications, metadata, checksums)
- What is its purpose?
  - Not recommended for storage of digital collections
  - Work better as collaborative platform for short term file sharing and documentation

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### Where we are now.

Know your content and your challenges to tailor your digital preservation policy to your library.

### Resources

- Frameworks for assessment
  - NDSA Levels of Digital Preservation
  - Digital Preservation Capability Maturity Model
  - o DPC Rapid Assessment Model
- Open Archival Information System
- Sustainability Health Check Tool for Digital Content Projects
- <u>TheMaintainers.org</u> if you're interested read <u>this</u> first!
- Three Legged Stool of Digital Preservation
- Klindt, M. PDF/A considered harmful for digital preservation, iPres 2017
- PDF Universal Accessibility (PDF/UA)
- UA Archives CONTENTdm Repository
- Using Sharepoint as a collaboration tool



# Thank you!

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