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Looking Forward to Look Back: Digital Preservation Planning

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Looking Forward to Look Back

Digital Preservation Planning

Jennifer Brancato, University Archivist, University of Dayton Kayla Harris, Archivist / Librarian, University of Dayton



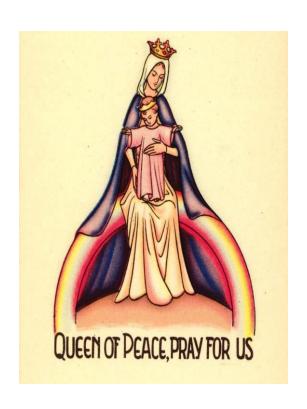
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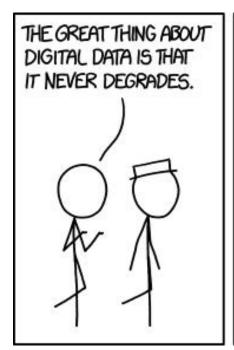
US Catholic Special Collection

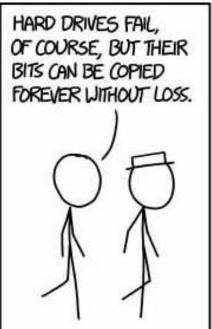


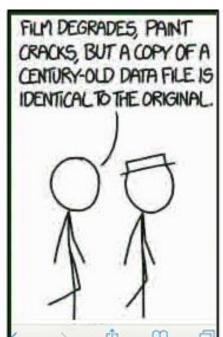
Marian Library



What is Digital Preservation?





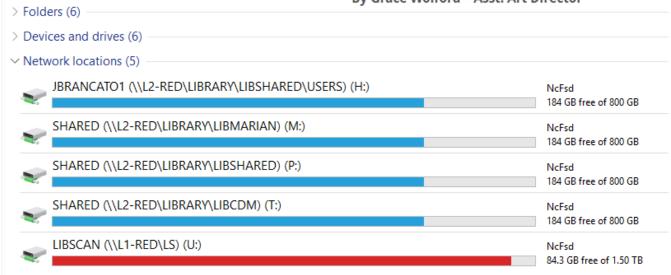




https://xkcd.com/1683/

Why Now?







What We Found

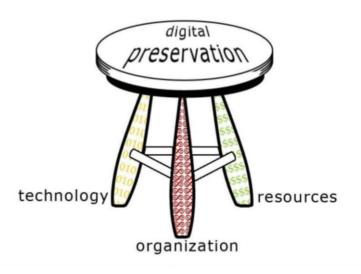
- Lack of maintenance plan
- Digital content is fragile
- Focused on files
- Focused on access copies
- Not familiar with UDit policies
- No standardization of multimedia files

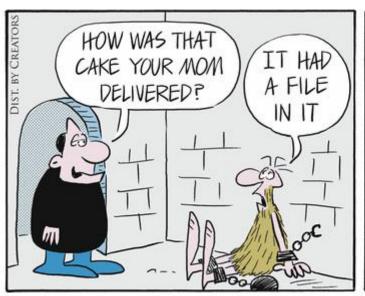




Recommendations

- Develop Digital Preservation Policy
- Work with UDit
- Streaming media server
- Annual review of standards
- Cloud Storage with IR
- Continue to educate & advocate
- Submit RFI









Wizard of ID, May 4, 3013

POWRR's Path to Digital Preservation

There are tools primarily

focused on processing like...

Archivematica
Curator's Workbench
Data Accessioner

There are services that also provide

storage and/or preservation like....

MetaArchive DuraCloud Amazon Glacier Internet Archive

Ingest

Processing

Access

Storage

Maintenance

There are even some services that will pretty much do it all like....

Preservica
Dspace Direct
Archivematica + DuraCloud



OhioLINK's Functionality Requirements

	Α	B	С
1	Mandatory/ Optional	Digital Preservation Repository Software Functionality	Comments
2		Ingest	
3		Receive submission	
4	M	Receive submissions from Producers	
5	M	Receive submissions from Administration	Within the library
6	M	Support standard data transfer protocols, specify which protocol/s are supported	Check with UDIT
7	M	Place special access controls on the content	
8	M	Producers may define access rights and conditions of use as a component of the SIP	Producers would know if they have restrictions
9	Р	The system sends a confirmation of receipt of a SIP to a Producer	Preferred - Not a dealbreaker
10	Р	A record of all SIP receipts is maintained for audit and financial control	Preferred - Not a dealbreaker
11	M	Ingest workflows are flexible; and based on building blocks that can be reused and removed as required	
12	M	Ability to create submission tools tailored by the administration	What defines user?
13	M	Large ingests are supported, identify what file size can be processed from ingest to creation of AIP using basic hardware configuration	
14	0	Ability to plug in any web crawler and view an archived website	Using it to crawl like Archive-It
15			
16			
17		Quality Assurance	
18	M	Verify automatically if transfer was successful via a checksum	

Developing an RFI



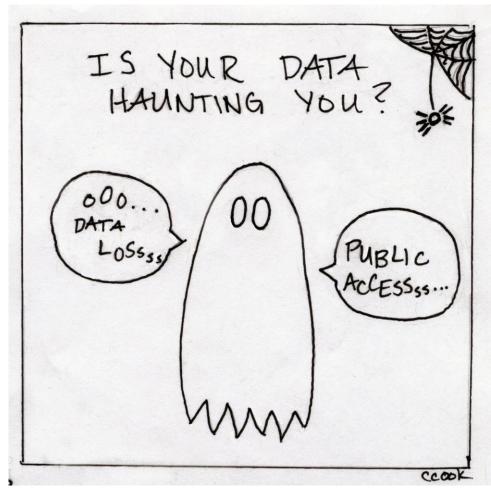






	Level 1 (Protect your data)	Level 2 (Know your data)	Level 3 (Monitor your data)	Level 4 (Repair your data)
Storage and Geographic Location	- Two complete copies that are not collocated - For data on heterogeneous media (optical discs, hard drives, etc.) get the content off the medium and into your storage system	- 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	- At least one copy in a geographic location with a different disaster threat - Obsolescence monitoring process for your storage system(s) and media	- 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	- Check file fixity on ingest if it has been provided with the content - Create fixity info if it wasn't provided with the content	- Check fixity on all ingests - Use write-blockers when working with original media - Virus-check high risk content	- Check fixity or content at fixed intervals - Maintain logs or fixity info; supply audit on demand - Ability to detect corrupt data - Virus-check all content	- 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	- Identify who has read, write, move and delete authorization to individual files - Restrict who has those authorizations to individual files	- Document access restrictions for content	- Maintain logs of who performed what actions on files, including deletions and preservation actions	- Perform audit of logs
Metadata	- Inventory of content and its storage location - Ensure backup and non-collocation or inventory	- Store administrative metadata - Store transformative metadata and log events	- Store standard technical and descriptive metadata	- Store standard preservation metadata
File Formats	- When you can give input into the creation of digital files encourage use of a limited set of known open formats and codecs	- Inventory of file formats in use	- Monitor file format obsolescence issues	- Perform format migrations, emulation, and similar activities as needed

Questions?



http://researchdata.wisc.edu/news/happy-halloween-from-rds/