CoSA & Preservica Practical Digital Preservation 2016

Digital Preservation in the Real-World & Program Round-up

June 21 2016

CoSA
Council of State Archivists

Preservica
Digital Preservation

Practical Digital Preservation 2015/16

- **Welcome!**

  PDP "Hot Topic" Webinars
  (Tuesdays 2-3pm Eastern)

  - Achieving ISO Standards for your digital archive   Oct 28 2015
  - Ingesting records from multiple sources and systems   Dec 08 2015
  - Automating email archiving and preservation   Feb 23 2016
  - New ways of providing public access to your archive   Apr 26 2016
  - **Real-world digital preservation and program round-up   Jun 21 2016**

  Camille Tyndall Watson
  Digital Archivist
  North Carolina

- **PDP Online Workshops - with focus on records and email**
  (Tuesdays 2-4pm Eastern)

  - Nov 10 2015 : Part 1
  - Nov 17 2015: Part 2

  - Mar 08 2016: Part 1
  - Mar 15 2016: Part 2

  - May 10 2016: Part 1
  - May 17 2016: Part 2

http://rc.statearchivists.org/Content/Electronic-Records/Education-Training/CoSA-Preservica-Practical-Digital-Preservation.aspx

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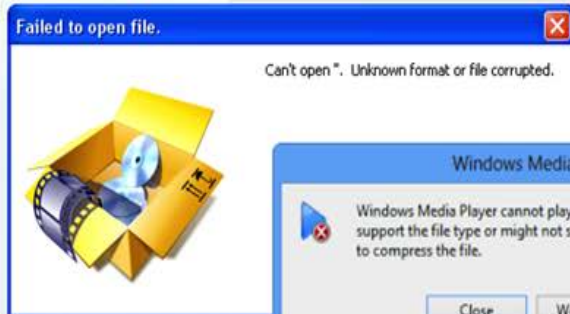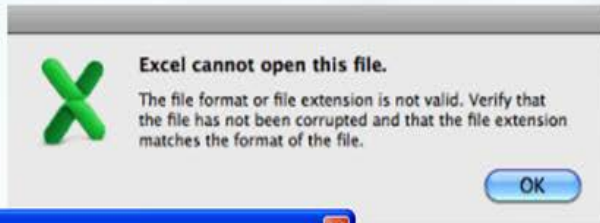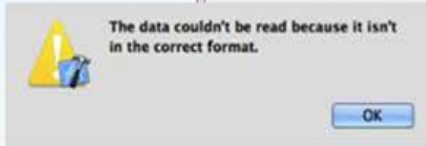Preservica
Digital Preservation

Digital Preservation in the Real-World

- Introduction

- Resources, tools, hints & tips

- How other states have approached the challenge
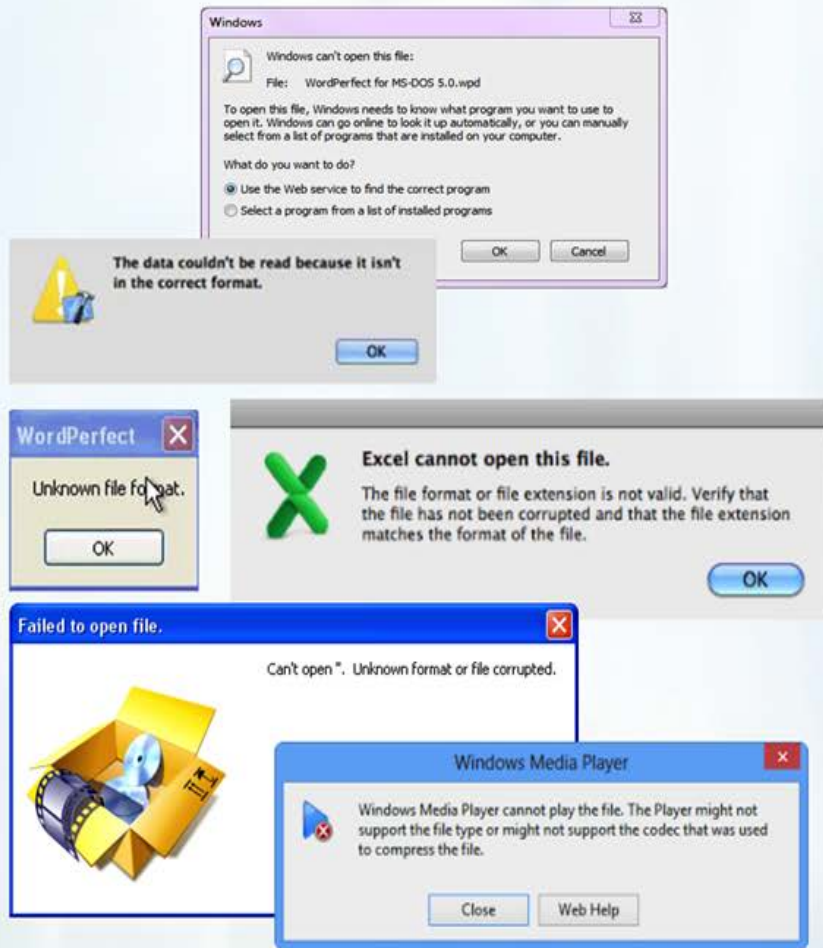
- Summary and Questions

Michael Hope
Preservica

Digital Content older than 10 years is at risk
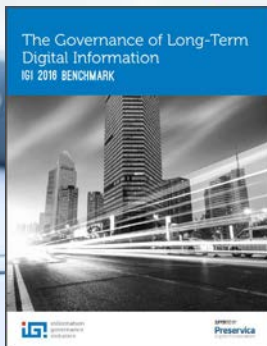
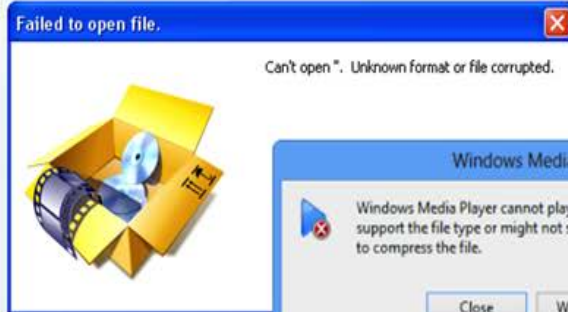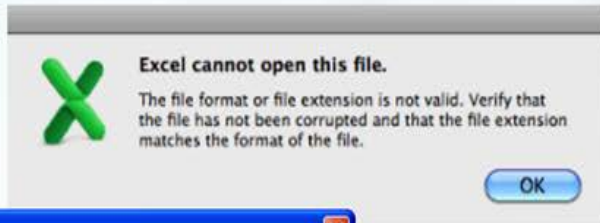# Digital Content older than 10 years is at risk

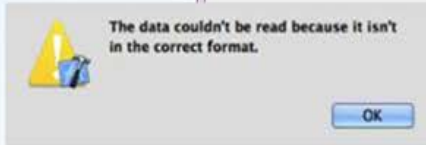**98%** Yes

Organisations that need to keep digital records and information for the long-term because of it's importance

97% Yes

Information Managers are aware that technology obsolescence puts long-term digital records at risk

information governance initiative

Digital Content older than 10 years is at risk

Windows

Windows can't open this file:

File: WordPerfect for MS-DOS 5.0.wpd

To open this file, Windows needs to know what program you want to use to open it. Windows can go online to look it up automatically, or you can manually select from a list of programs that are installed on your computer.

What do you want to do?
- Use the Web service to find the correct program
- Select a program from a list of installed programs

OK   Cancel

The data couldn't be read because it isn't in the correct format.

OK

WordPerfect

Unknown file format.

OK

Excel cannot open this file.

The file format or file extension is not valid. Verify that the file has not been corrupted and that the file extension matches the format of the file.

OK

Failed to open file.

Can't open "". Unknown format or file corrupted.

Windows Media Player

Windows Media Player cannot play the file. The Player might not support the file type or might not support the codec that was used to compress the file.

Close   Web Help

The Governance of Long-Term Digital Information
IGI 2018 BENCHMARK

98% Yes

Organisations that need to keep digital records and information for the long-term because of it's importance
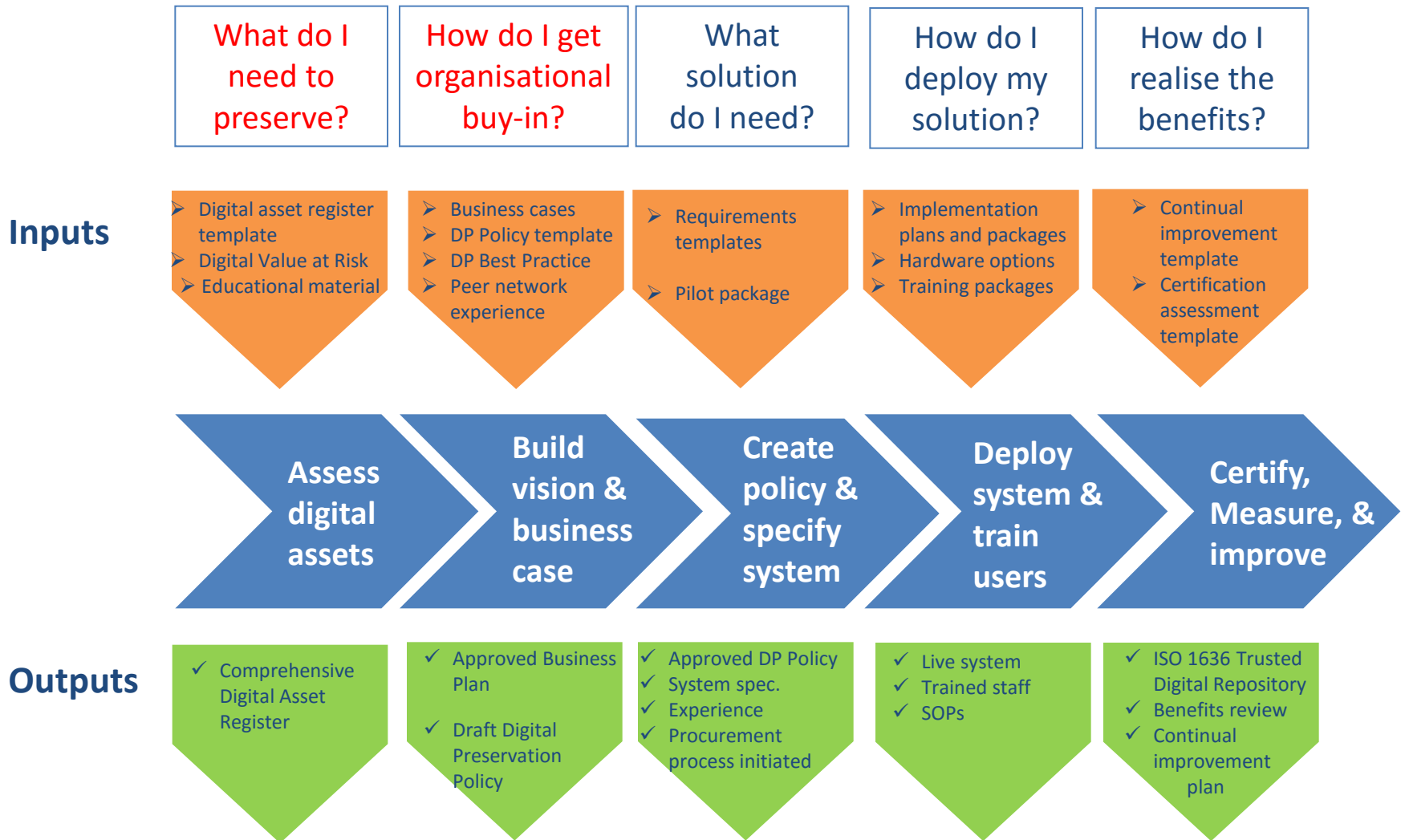
97% Yes

Information Managers are aware that technology obsolescence puts long-term digital records at risk

www.preservica.com/resource/long-term-records-preservation-2/

information governance initiative

We need it ! Now how do we get buy-in?

Digital Preservation : 5 Step Journey

What do I need to preserve?	How do I get organisational buy-in?	What solution do I need?	How do I deploy my solution?	How do I realise the benefits?

Inputs

➢ Digital asset register template ➢ Digital Value at Risk ➢ Educational material	➢ Business cases ➢ DP Policy template ➢ DP Best Practice ➢ Peer network experience	➢ Requirements templates ➢ Pilot package	➢ Implementation plans and packages ➢ Hardware options ➢ Training packages	➢ Continual improvement template ➢ Certification assessment template

Assess digital assets	Build vision & business case	Create policy & specify system	Deploy system & train users	Certify, Measure, & improve

Outputs

✓ Comprehensive Digital Asset Register	✓ Approved Business Plan ✓ Draft Digital Preservation Policy	✓ Approved DP Policy ✓ System spec. ✓ Experience ✓ Procurement process initiated	✓ Live system ✓ Trained staff ✓ SOPs	✓ ISO 1636 Trusted Digital Repository ✓ Benefits review ✓ Continual improvement plan

CoSA — Council of State Archivists

Preservica Digital Preservation

Building the Case

- What do I need to preserve?

- What are the risks, consequences and benefits to our organization?

- How does our organization shape up?

- **What are other organizations doing about it?**

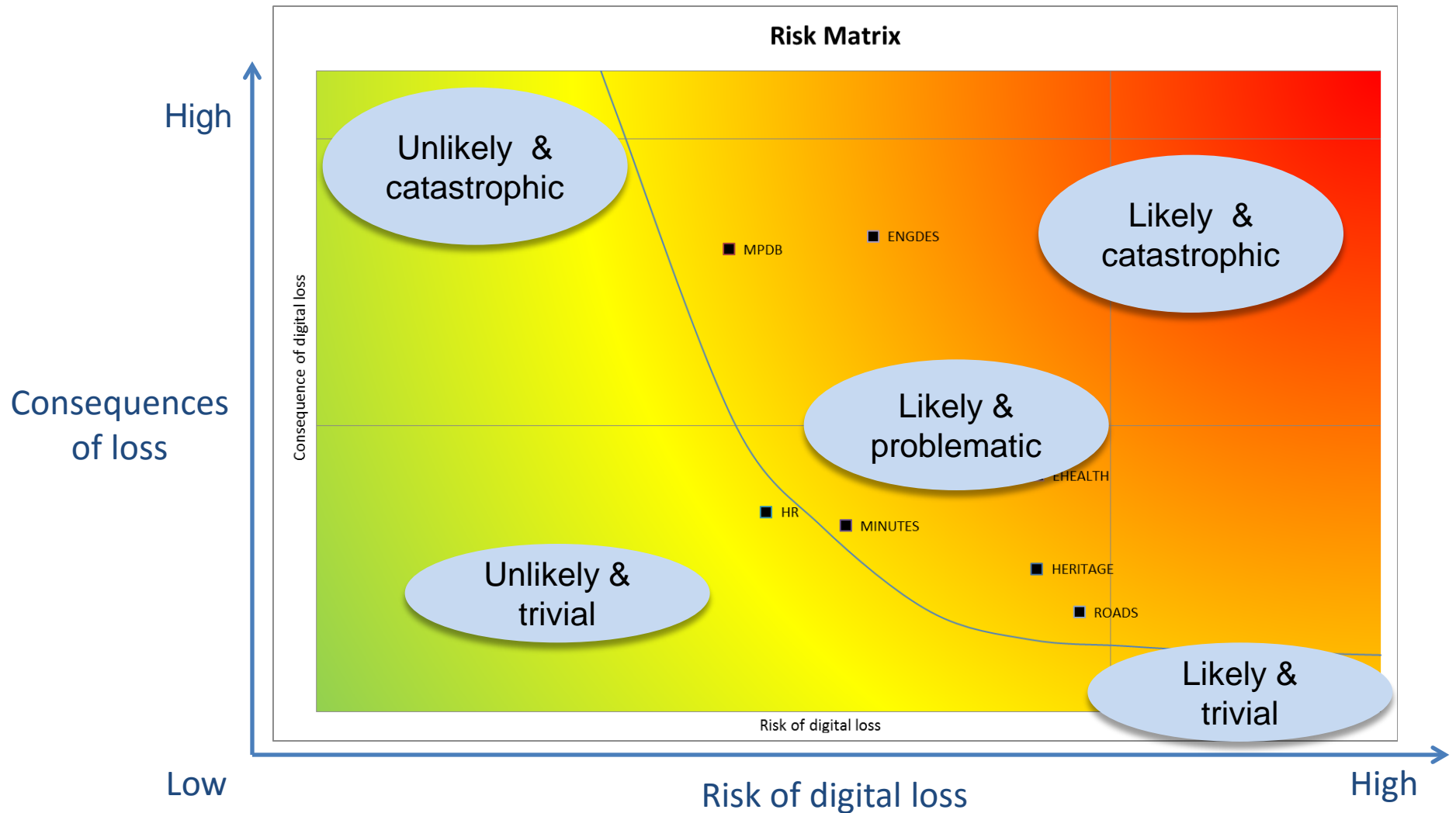- What do I need and how much will it cost?

What do I need to preserve?

- Size, scale and scope

- Digital Asset Audit/Register
  - what content, format, where is it stored?

- Engage other departments (builds stronger ROI)

- Look for high-profile "quick wins"

What are the risks and consequences?

Risk Matrix with labeled regions: "Unlikely & catastrophic", "Likely & catastrophic", "Likely & problematic", "Unlikely & trivial", "Likely & trivial". Data points: MPDB, ENGDES, EHEALTH, HR, MINUTES, HERITAGE, ROADS. Axes: Consequence of digital loss (vertical), Risk of digital loss (horizontal).

Digital Value at Risk Calculator
http://preservica.com/resource/digital-value-at-risk-dvar-calculator/

Quantify the risks and consequences

- Failure to meet mandate

- Legal & financial liability

- Regulatory fine

- Reputational damage

- Cost of re-digitisation

- Born-digital material lost forever

- Loss of knowledge

Quantify the benefits

- Make digital information more accessible (transparent)

- Enable future reuse of information

- Preserve heritage or corporate memory (brand value)

- Save time searching for information

- Respond quickly to legal and compliance challenges

- Retire existing legacy systems (saving cost)

- Support digital ways of working

How does your organisation shape up?

- Use a **Scorecard** to sell to Stakeholders

- Essential Guide: http://preservica.com/resource/essential-guide-achieving-step-change-digital-preservation-capability/

- **DPCMM** Scorecard Audit: www.digitalOK.org

Index Score Results	Nominal (0)	Minimal (1)	Intermediate (2)	Advanced (3)	Optimal (4)
DIGITAL PRESERVATION POLICY	●				
DIGITAL PRESERVATION STRATEGY		●			
GOVERNANCE		●			
COLLABORATIVE ENGAGEMENT	●				
TECHNICAL EXPERTISE					●
OPEN STANDARD TECHNOLOGY NEUTRAL FORMATS					●
DESIGNATED COMMUNITY	●				
ELECTRONIC RECORDS SURVEY	●				
INGEST					●
ARCHIVAL STORAGE					●
DEVICE/MEDIA RENEWAL					●
INTEGRITY				●	
SECURITY					●
PRESERVATION METADATA					●
ACCESS				●	

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Talk to other organizations……
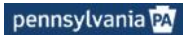
Allen Ramsey
Connecticut

Bryan Collars
South Carolina

Lisa Speer
Arkansas

Mary Dunn
Arkansas

A collaboration between the University of Connecticut Libraries, Connecticut State Library, and Connecticut Cultural Heritage Organizations

Allen Ramsey, Assistant State Archivist, Connecticut State Library

What is the CTDA?

- The CTDA is dedicated to the maintenance, delivery, and preservation of a wide-range of digital resources for educational and cultural institutions and state agencies in the State of Connecticut.

- The CTDA is a digital repository built on the Open Archival Information System (OAIS) (ISO 14721).

- Participation in the CTDA is open to all educational, cultural, and memory institutions based in the state of Connecticut that have a mission to preserve and make available historically valuable resources and records.

- Governance: Advisory Committee; and Technical Roadmap.

CTDA Infrastructure

- Built on Fedora (Flexible Extensible Digital Object Repository Architecture) version 3.71 repository software.

- Islandora version 7.15 (Drupal 7) for administrative, discovery and presentation layer built on Drupal.

- Handle System for persistent and unique identifier generation system and lives in the MODS metadata.

- Does not require any particular presentation layer.
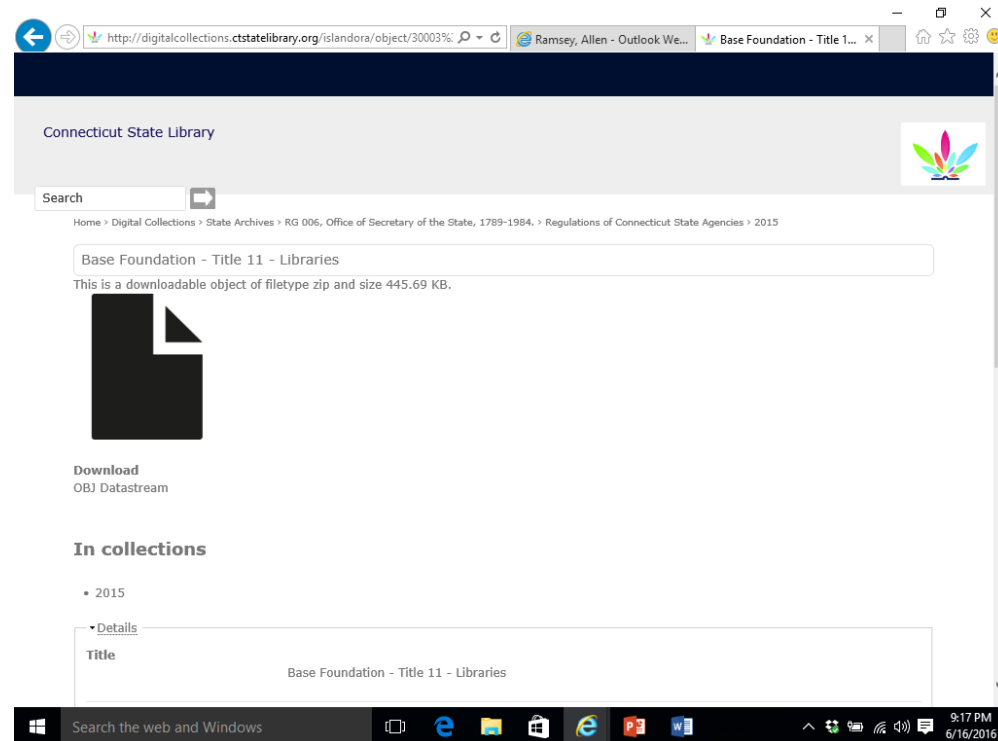
CTDA Development

2011-2013

- State Librarian Kendall Wiggin learned about Greg Colati, Associate University Librarian, University Archives and Special Collections at the University of Connecticut, digital preservation initiative.

- Discussions continued on costs, name of the repository, storage and projected storage needs of the State Library, management and presentation layers, etc.

- CTDA launches on November 13, 2013 with 20,000 digital objects from one collection – Thomas J. Dodd Nuremberg trial papers held by the University Archives.

CTDA Development (cont.)

2014-2015

- State Library begins ingesting digital objects into the CTDA and presentation channel goes live.

- Uniform Electronic Legal Material Act (UELMA) signed into law in 2014.

- *Regulations of Connecticut State Agencies* automated ingest model.

- 100,000 digital objects ingested mark reached by participants.

CTDA Future Developments

2016-2018

- State Librarian convenes an internal steering committee to advise on moving the Library's digital objects from platforms such as ContentDM to the CTDA – a roughly estimated 1 million digital objects (equal to about 9 TB+) will need to be ingested!

- 40+ CTDA participant institutions including public and academic libraries, historical societies, museums, state agencies, etc.

- First annual CTDA Participants' Day, June 10, 2016.

- Functionality: external batch upload (2017); Fedora 4 (2018); and open APIs direct to Fedora (2018).

- Architecture: storage architecture on University servers (2017); and third-location redundancy through APTrust/DPN/AWS Glacier (2017).

Advice and Lessons

- Partner with institutions that have similar missions

- Collaborate with Information Technology (IT)

- Communicating the difference between preservation and "back up"

- Credibility from the Executive Branch

- Convincing state agencies

- Proximity to CTDA staff

Further Information

- Connecticut Digital Archive (CTDA)
  - http://ctdigitalarchive.org/
    - More information can be found under the "About" and "Resources" drop down menus such as:
      - Policies: http://ctdigitalarchive.org/ctda-policies/
      - Organization and Governance: http://ctdigitalarchive.org/organization-and-governance/
  - CTDA Collections site: http://collections.ctdigitalarchive.org/
    - This is an aggregated presentation channel of any participants shared content. In the footer of the page you will also find links under "News and Information" to channels' statistics; newsletters; participants' lists; event calendar; and links to Trello, Slideshare and Github sites.
  - CTDA Development Trello Board: https://trello.com/b/ELToWEhE/ctda-development

Further Information (cont.)

- Connecticut State Library
  http://ctstatelibrary.org/
  - Digital Collections:
    http://digitalcollections.ctstatelibrary.org/islandora/object/islandora%3Aroot
  - Public Records Policy 02: Digital Imaging and Standards:
    http://ctstatelibrary.org/wp-content/uploads/2015/04/PRP02DigitalImaging.pdf
  - Recommendations of the State Librarian for Establishing Standards and Guidelines for the Preservation and Authentication of Electronic Documents issued January 5, 2012:
    http://ctstatelibrary.org/wp-content/uploads/2015/05/PA11-150StLibRec.pdf
  - Recommendations of the State Librarian Concerning the Retention Schedule for Land Use and Development Records issued January 1, 2016:
    http://ctstatelibrary.org/wp-content/uploads/2016/04/StateLibraryReport-LandUseRecords.pdf
  - Remembering World War One: Sharing History/Preserving Memories,
    http://ctinworldwar1.org/.
    This is an example of a project that through community digitization events has created collections and ingested content directly into the CTDA.

Contact

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Selecting an Electronic Records Repository Platform

How we conjured something from nothing

As Presented By

Bryan Collars
South Carolina Department of
Archives and History
2016

Background

- Theory but very little practice (Camp Pitt?)
- Starts and Stops and Re-Starts and Communes
- NDIPP
- PeDALS
- Then in 2008

6 long years later........

BOOM!

2014: A new attempt

- New Director (2009)
- New hardware funding
  - Installed August 2015
- Search for an Electronic Records Archivist
- June 2014 – New Electronic Records Archivist hired
- Process begins, 4 steps
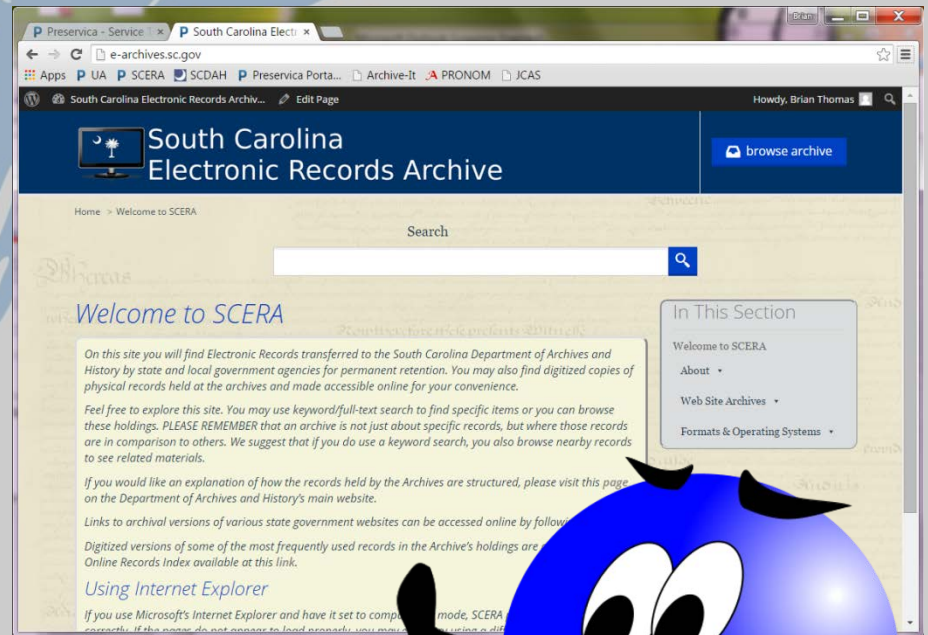
The plan

Research/literature review

Policy writing (draft)

Testing and evaluation

- Self assessment
- Testing

Final recommendation and acquisition

Final Criteria reached

Tier 1
- Integrated Repository Platform
  - Automated repository services
  - Integrated access tools

Tier 2
- Unintegrated Repository Platform
  - Some or all automated repository services
  - Manual DIP connection to access or mediated access

Tier 3
- Manual preservation tools resulting in a repository

A bit of necessary background…

➢ Officially established in 1905 as the Arkansas History Commission

➢ Act 905 (1995) established first records management and archives program

➢ Repealed in 2005 for lack of funding

➢ As of January 2016, working with only about *13% of state agencies* in preservation of records

➢ In February 2016, Governor Asa Hutchinson (R) mandated state agencies, offices and departments to work with state archives to preserve historical records having long-term value.

➢ In March 2016, began holding state records workshops with agencies to discuss issues including:
>   ➢ Transferring records having long-term value to the state archives
>   ➢ Preservation of electronic records

➢ Purchased Preservica in spring 2016

Electronic records preservation challenges

➤ State Archives played no role in developing guidelines

➤ "Current" guidelines are 11 years old

➤ Each individual agency is authorized to decide for itself how electronic records will be managed

  ➤ Agency plans run gamut from nothing to scanning everything as PDFs

➤ Electronic agency records retention schedules are based on retention schedules for paper records, *which make no mention of state archives*

  ➤ Records having long-term value are not necessarily retained

➤ Printing electronic correspondence (email) is recommended as a storage option

Stepping into the void

➤ Creating an electronic records preservation program is a problem with a multi-faceted answer.

> ➤ Installing a digital preservation software is a step towards the solution.

➤ What does a solution involve – and how did we reach one?

> ➤ Determining the goals of a successful program
>
> ➤ Outlining roles and responsibilities
>
> ➤ Securing funding
>
> ➤ Gaining the cooperation of records' creators
>
> ➤ Working with parameters of IT department
>
> ➤ Investigating digital preservation software options and deciding what works best for your organization

Moving forward

- Will need to address specific challenges:
  - Lack of legal mandate
  - Raising awareness of the State Archives among state agencies
  - Raising awareness of good ERM preservation practices among state agencies
  - Addressing variety of digital preservation needs among agencies
  - Acquisition of permanent funding for program
  - Increasing agency infrastructure to support comprehensive RM/ERM

- Tips & Recommendations
  - Don't adopt a "If you build it, they will come" approach – outreach is necessary.
  - Establish connections with records' creators and tailor goals around their needs.
  - Don't reinvent the wheel – draw on the experience and research of colleagues

Thank you for your attention! We would also be happy to answer any questions by phone or email:

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501-682-6916 (fax)

www.ark-ives.com
ahc.digital-ar.org/

What do I need and how much will it cost?

People

Content

Policy &Process
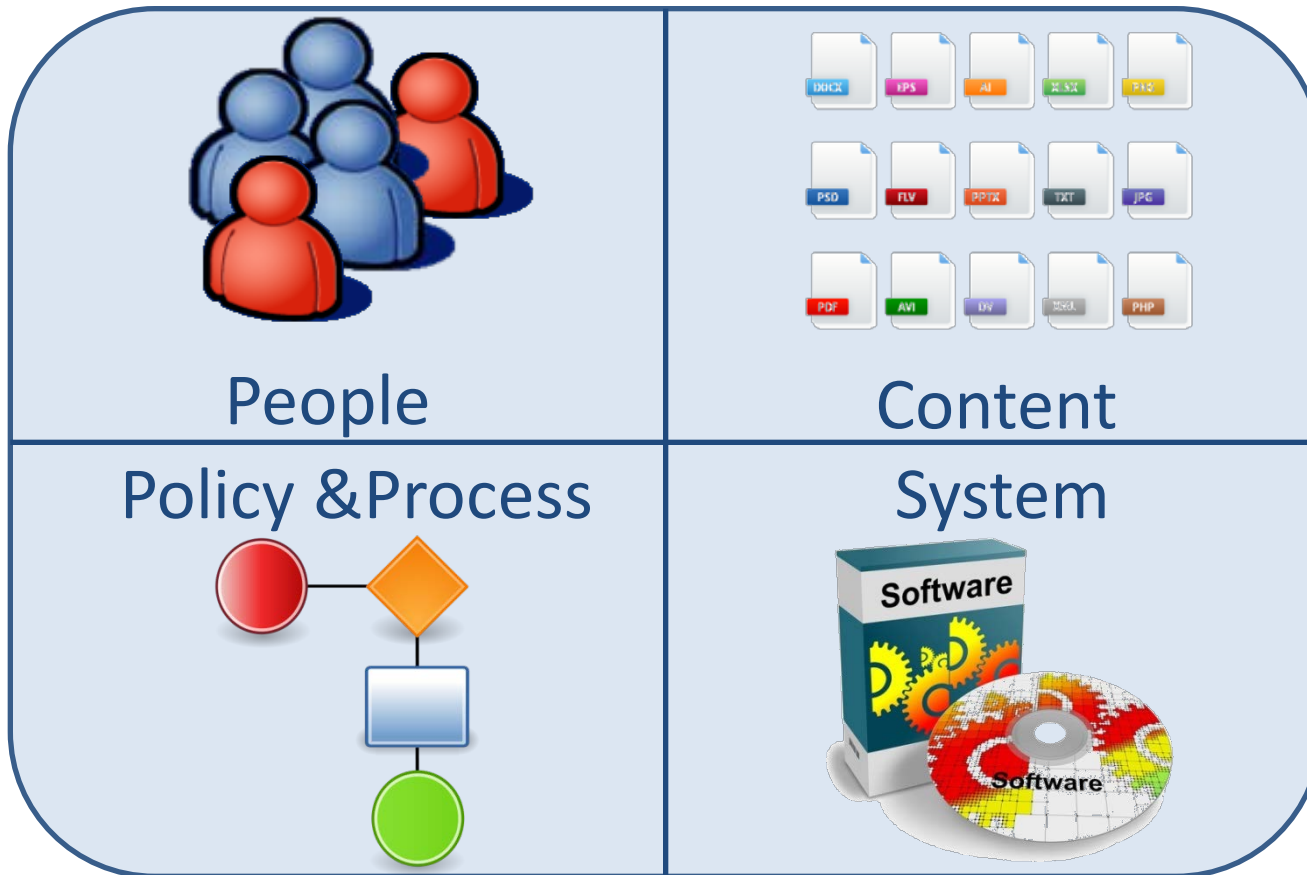
System

What else do I need to consider?

- "Out-of-the-Box" connectors to other systems

- Included support, maintenance and upgrades

- An active, collaborative User Group and Forum

- Public and internal access
  - key to sustainability and transparency

Summary & Next Steps

- Talk and learn from others organisations

- Use tools & templates to make the case

- Think about long-term sustainability (access)

- Recap the PDP Program Webinars!
  - Achieving ISO Standards for your digital archive
  - Ingesting records from multiple sources and systems
  - Automating email archiving and preservation
  - New ways of providing public access to your archive
  - Real-world digital preservation and program round-up

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Questions?

Thank you!

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