Stronger Over Time:
Digital Preservation Resources to Help You and Your Patrons

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Agenda

• Digital preservation – what is it and why should we care?
• Digital preservation education website from the State Library of NC & State Archives of NC
• Talking to the public about caring for digital materials
What is digital preservation?

Short Definition

• Digital preservation is a series of managed activities necessary to ensure continued access to digital materials for as long as they are needed.
Why bother with digital preservation?
Why is the State Library of NC concerned about digital preservation?

- Permanent repository for state government publications
- Today, many state publications only exist in a digital format
- Protect the investment we have made in digitizing print materials
- Citizens need access to government information
Show of hands

Do you...

– Have digital photos or documents to preserve that do not exist in print (“born digital”)?
– Have digitized materials to preserve?
– Have computer files you want to be able to access in five or ten years?
– Have patrons with digital pictures and files they need to access in five or ten years?
– Have a significant record of your life posted to Facebook or Twitter?
Show of hands

Who here...

– Knows someone who has lost all their photos and contacts from their phone?

– Still has a floppy disk or two (or more) somewhere in their house or library? Or, CD-ROMs?
Public Records of Public Libraries


Digital Preservation Best Practices and Guidelines

What is digital preservation?
Digital preservation is a series of managed activities necessary to ensure continued access to digital materials for as long as they are needed.

What does this mean for you?
The more thoughtful you are about creating and managing your digital files, the longer they'll be around in the future.

What can I learn here?
You can learn best practices for preserving digital files, whether it's for your job or in your personal life. We're especially happy to help employees of the state of North Carolina, as well as North Carolina librarians, archivists, or other stewards of cultural heritage.
I create digital files

1 Use good file names

Make them unique, descriptive, and consistent.

Only use letters, numbers, underscores, or periods.

Include a version number or a date (YYYYMMDD) for easy sorting.

2 Back up your files

Store files in a place that is backed up regularly and automatically.

Store important files in multiple places - such as an external hard drive, network storage, or cloud storage - that are in different geographic locations.

3 Avoid proprietary file formats

If you can, save your files in open-standard instead of proprietary formats.

Open formats include .png, .tif, .pdf, .a, .rtf, OpenDocument formats, .wav, .avi, .csv, and .txt.
I manage digital files

1 Plan for what you will manage

Identify the possible scope of what you will need to manage to ensure adequate storage space.

Store files you're preserving separate from working files or files used everyday. Your "preservation storage" should only be accessible to a limited number of people.

2 Keep the context

Metadata, or data about data, are pieces of information that describe a file. Work to keep metadata with a file, to help future managers understand (a) how the file was created (b) when (c) by whom.

You may want to consult the NC Preservation Metadata for Digital Objects to help you decide on metadata to record.

3 Run virus scans, fixity checks

Run a reputable virus scan with the latest virus definitions against each file prior to adding it to your preservation storage.

Run fixity checks (see sidebar) on files before you put them in your preservation storage and record the checksum in your metadata. Fixity is especially important for preservation of materials that must remain authentic, like public records. Without a fixity check, there may be no way to verify that the file you have in storage is identical to the one you initially received.
### North Carolina policies and guidelines

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<td>North Carolina Department of Cultural Resources digital preservation policy framework</td>
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<td>Preservation and file format guidelines for the State Library of North Carolina Digital Repository</td>
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<td>Preservation metadata for digital objects (NC PMDO)</td>
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<td>Records retention and disposition schedules for state agencies</td>
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### Policies from other states and institutions
Digital preservation-related policies and guidelines

Electronic records management policies and guidelines by state

Included below are links to statewide policies/guidelines for electronic records management (where found). Please contact us to add a policy/guideline to this list.

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Other digital preservation policies

SEE ALSO

- Concepts for developing digital preservation policies
- Digital preservation policies: Guidance for archives (.pdf)
- Digital preservation policy template (.pdf)
- Establishing a digital preservation policy
Further information and standards

What is Digital Preservation?

Digital preservation: Continued access to authentic digital assets (.pdf)

DigitalPreservationEurope (DPE) YouTube channel

Glossaries

Digital Curation Centre glossary
Universal Preservation Format glossary

How to do it

Digital Preservation in a Box
Digital preservation management tutorial
Digital records preservation: Where to start guide (.pdf)
Guidelines for the preservation of digital heritage (.pdf)
Personal archiving: Preserving your digital memories

Making the case

HANDOUTS
Digital preservation brochure (.pdf)
Digital preservation checklist (.pdf)

STILL NEED MORE INFO?
Digital curation and preservation bibliography
Digital preservation: Annotated reading list (.pdf)
Preserve bibliography on digital preservation
Rare book school preliminary reading list: Born digital materials: theory & practice
State employee checklist for digital preservation

If you need any assistance implementing these practices, please contact the Department of Cultural Resources at digital.info@nc.gov.

If I am creating a digital public record I need to remember to:

- Use good file naming practices (see the State Archives best practices for file naming document).
- Store the file in a location that is backed up, preferably to a remote location.
- Use open-standard software or save to an open-standard file format once I finalize the file.
- Give the files to a digital file management expert when I finalize them. For state publications the State Library should receive the digital file once it is finalized and for all other public records the files should be managed in accordance with the retention schedule.

If I am managing digital public records I need to remember to:

- Identify the scope of the content that I can manage and make sure I receive it all from the content creators.
- Run virus and fixing checks on the files at regular intervals.
- Store multiple copies of the files, preferably in different geographic locations.
- Maintain the accessibility of the files through migration, emulation, or some other preservation strategy.
- Create and store access copies of the files in a location where they are available for use by authorized individuals.

If I am using digital public records I need to remember to:

- Provide feedback to the person responsible for managing a file when I can’t access it.
- Provide feedback to the person responsible for managing a file when I can’t use the file in a way I need to.
- Acknowledge the care and work that has gone into maintaining the accessibility of the files I am using.
- Credit the managing institution for providing me with the files.
### Videos, Online Tutorials, Webinars

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<td>File naming tutorial (4 parts)</td>
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<td>Preservation planning and an introduction to PREMIS (archived webinar)</td>
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<td>Managing electronic public records: Recognizing perils and avoiding pitfalls</td>
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<td>Social media usage in NC state government</td>
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<tr>
<td>Someday they'll thank you: An introduction to digital preservation (archived webinar)</td>
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Information sources

Who should I follow?

**Blogs**
- Blog of the Long Now
- da (digital archive) blog
- DigitalKoans
- File Formats Blog
- FutureArch
- L’Archivia
- Neil Beagrie’s blog
- Netherlands Coalition for Digital Preservation weblog
- The Signal (Library of Congress, NDIIPP)

**Twitter**
- Bill Lefurgy, Digital Initiatives Manager, NDIIPP
- DlgPres11 (That’s us!)
- Lorcan Dempsey, Vice President and Chief Strategist, OCLC
- National Digital Information Infrastructure and Preservation Program (NDIIPP)
- National Digital Stewardship Alliance (NDSA)
- Trevor Owens, Digital Archivist, NDIIPP
- William Kilbride, Executive Director, DPC

**Institutions or initiatives to watch**
- Digital POWRR
- Digital Services Section, State Archives of North Carolina
- International Internet Preservation Consortium
- JISC (Joint Information Systems Committee)
- Library of Congress digital preservation site

**SUGGESTED CONFERENCES**
- **February**: International Digital Curation Conference
- **April**: International Internet Preservation Consortium General Assembly
- **June/July**: American Library Association annual meetings (“Digital Preservation Interest Group” events)
- **July**: NDIIPP Digital Preservation Conference
- **July**: Joint Conference on Digital Libraries
- **August**: Society of American Archivists annual conferences
- **December**: Best Practices Exchange (for state government employees)
Continuing education

• Webinars: Lyrasis, Library associations, and Archives associations (ASERL, SAA, etc.)
• Tutorials on YouTube, Vimeo
• Digital Preservation Outreach & Education (Library of Congress)
Patrons: Personal digital archiving

How to Preserve Your Own Digital Materials

Our photos albums, letters, home movies and paper documents are a vital link to the past. Personal information we create today has the same value. The only difference is that much of it is now digital.

- How to Share Your Personal Collections (PDF, 748 KB)
- How Long Will Digital Storage Media Last? (PDF, 83 KB)

- Why Digital Preservation is Important for You: Simple, practical strategies for personal digital preservation.

Chances are that you want to keep some digital photos, e-mail, and other files so that you—and your family—can look at them in the future. But preserving digital information is a new concept that most people have little experience with.

Ensure that your digital materials last a lifetime by taking steps to preserve them:

- Digital Photographs
- Digital Audio
- Digital Video
- Digital Mail
- Personal Digital Records
- Websites

This site provides some tips to help make your personal “born digital” information last. The guidance is basic and is meant to be a place to get started. You may want to get additional details about working with specific kinds of digital content.

Download Personal Archiving Brochure (PDF, 1.1 MB)

Personal Digital Archiving Day Kit

The Library of Congress has held Personal Digital Archiving Day events to provide this basic guidance to individuals about preserving personal and family memories in digital form. You can read about those events and link to data.

Are you interested in hosting your own personal digital archiving event? Take a look at our Personal Digital Archiving Day Kit for planning guidance and relevant information resources you can use to develop your own program.
Patrons: Save the original

You is blocking my getaway
Saving Social Media data

• Facebook allows users to export their data.
• Twitter does now, too.
• Wordpress & Blogger allow users to export their posts and comments.
• Third party tools for many social media sites (like Tumblr).
Saving data from a phone/mobile device

Minimum

• Cloud storage for that device, service provider
  – What if you want to change providers?
  – Is everything that you want to save being saved? How frequently are you saving?
  – Is it secure? Are you saving information you don’t want compromised if there is a security breach?

• Other cloud storage:
  – Google, Amazon, Dropbox
  – Is it secure? Are you saving information you don’t want compromised if there is a security breach?
Saving data from a phone/mobile device

Better –

• Back up to one or more external hard drives regularly

Ideal –

• store one of those hard drives in a different geographic area

Replace hard drives at least every five years
Thank you!

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