Digitization Best Practices

Improving Long-Term Access to Digitized Collections

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About the State Library

• Digital Information Management Program:
  http://statelibrary.dcr.state.nc.us/dimp/index.html

• Digital Collections:
  statelibrary.dcr.state.nc.us/dimp/digital/index.html

• Access to State Government Information

• Digital Repository Management

• North Carolina ECHO (Exploring Cultural Heritage Online)
  www.ncecho.org/

• State-wide Digitization Initiative

• Digitization Grants

• Training/Workshops

• Setting Standards for Digitization
Introduction
Print Resources

• Age: 500+ years
• Life cycle: estimated 1,000+ years
• Access: No special machines or devices required
• Maintenance: Environmental controls maximize longevity (i.e. temperature, humidity)
• Preservation: “Just in Time” strategy. Can wait until item is near the end of its useful lifecycle before preserving.
Digital Resources

- Age: 50+ years
- Life cycle: estimated 5 years
- Access: specific hardware and software required to access information
- Maintenance: to stay accessible, requires “migration” or upgrading to latest software/hardware specifications.
- Preservation: “Just in time” strategy is often too late. By the time the digital resource comes to the end of its life cycle, the software/hardware necessary to access it is no longer available.
Lack of Awareness

Photograph Digital Converter

Hammacher Schlemmer 74597

Product Details

The Photograph to Digital Picture Converter

This device quickly and easily converts photographs into digital images, allowing you to confidently preserve your memories for generations to come. Faster and easier than a conventional scanner, this device instantly captures the whole image using a 3 MP color sensor, the same found in digital cameras. With up to 3,000 dpi resolution, 10 bits per color channel, automatic exposure control and color balance, clear, accurate digital images are assured. Photographs are placed into a tray that slides into the converter; the touch of a button records the image instantly.

For photo transfer and storage, it has a USB cable that plugs into a PC running Windows XP (requires USB 2.0) and includes software that allows you to edit, crop, and resize your pictures. Accepts 3 1/2" x 5", 4" x 6", and 5" x 7" photographs.

6-3/4" H x 1-1/2" W x 6-3/4" D. (1 lb.)

Price: $149.95

YOU MIGHT ALSO LIKE...

Digital files last “for generations”!

CD-ROMs last “for centuries”!

Useful Life

CDs and DVDs are created with materials that are extremely stable. If properly stored and handled, most discs will last for decades—and probably centuries. Certain conditions, such as high humidity, or extended periods of high temperatures, rapid temperature changes, and exposure to certain types of light, can damage discs and shorten their useful life. Taking care of your discs by keeping them out of direct sunlight and away from heat and water will help them last longer. Not only will you save money, but you will also reduce the discs’ environmental impacts by preventing waste.
File Management

- Poor File Name Choices
- Versions of Files
- Files saved in numerous locations and on numerous media
- No file back ups
Technological Changes

### File Formats

- A: .aac | .ai | .alf | .app | .asf | .asp | .ask | .aw | .a2m | More...
- B: .bak | .bat | .bin | .bmp | .b5i | .b5t | .bac | .backupdb | .bak | .band | More...
- C: .cfg | .cpl | .com | .dll | .doc | .dp | .exe | .dll | .dll | .dll | More...
- D: .eps | .exe | .e00 | .eap | .ear | .ebm | .ebn | .esbuilder | .exe | .ef | More...
- F: .int | .fon | .f1 | .f2r | .f32 | .f3r | .f64 | .f60 | .fa | .sac | More...
- G: .gem | .gma | .gif | .gz | .g7z | .g7z | .g7z | .g7z | .gadget | .geb | .gb | More...
- H: .box | .htm | .html | .h | .hja | .ham | .has | .hex | .jdf | .hpl | More...

### Hardware

### Software

**Ami Pro 3.0**

*The Best Word Processor for OS/2*

**Complete Workplace Shell Integration**

*Drag & Drop*

With Ami Pro's Workplace Shell integration, you can use OS/2 Drag and Drop capabilities to drag documents from folders onto Ami Pro and open or import them. You can even drag and import WordPerfect, DisplayWrite, and every other format Ami Pro can import. You can drag documents from Ami Pro to any other workplace object such as the printer, shredder, or even Lotus cc:Mail.

**HPFS**

You can now name your files whatever you want, using characters, numbers, even spaces (up to 254 characters). Imagine being able to name a file "Minutes from August 4th board meeting" instead of 9-4BRDMIT.

**Templates**

- Body Setup
- Times New Roman
- 11
- PRODUCT
With Great Power There Must Also Come Great Responsibility!
Strategies for Improving Long-term Access
Do Your Research

- Read the literature
  - D-Lib Magazine: www.dlib.org/

- Participate in the community
  - Digitization 101 blog: hurstassociates.blogspot.com/
  - digiStates mail list: lists.mdch.org/bin/listinfo/digistates
  - NC ECHOShare mail list: lists.ncmail.net/mailman/listinfo/ncechoshare
  - WebWise Conference: webwise2008.fcla.edu

- Research standards and best practices
  - Digital Imaging Tutorial: www.library.cornell.edu/preservation/tutorial/contents.html
  - NC ECHO Digitization Guidelines: www.ncecho.org/guide/toc.html
Determine File Naming
Conventions

- Establish logical and consistent folder structures for file storage
- Establish consistent file naming conventions
- Document all decisions
Determine Storage Capabilities

- Active Working Storage
  - Computer Workstation
  - External Hard Drives
  - Servers
- Permanent Storage
  - CD/DVD ROMs
  - External Hard Drives
  - Servers
- Document all decisions and justifications for them
Follow Scanning Best Practices

- **Recommended Scanning Resolutions**
  - 600 true dpi preferred
  - 300 true dpi minimum

- **Recommended File Formats**
  - master image: tif
  - access image: jpg or jp2
  - avoid proprietary formats
Follow Metadata Best Practices

- North Carolina Metadata Best Practices
  - NC ECHO Dublin Core: www.ncecho.org/ncdc/
  - Online Dublin Core Tool: www.ncecho.org/ncdc/template.html
  - PMDO Access Database: www.ncecho.org/presmet/NCECHO_PMDO.mdb
• Document all metadata decisions
• Create instructions
• Save in a central location
• System for updating documentation

• Examples of the State Library’s metadata documentation:

**Contributor**

Element: Contributor
Mandatory: No
Repeatable: Yes

Crosswalk: 700?x5a5b5c5d5e5f5g5h5
710?5a5b5c5d5e5f5g5
711?5a5c5d5e5f5g5
720?5a

Controlled vocabulary: LCNAF (with modifications)

Description: Persons or organizations who made significant intellectual contributions to the resource, but whose contribution is usually secondary to the person or organization specified in the Creator element. Examples include co-author, editor, translator, illustrator, etc. Any names in 7xx fields in the MARC record will crosswalk to a Contributor field in DC.

Input Guidelines:
1. Separate multiple contributor names with semicolon-space.
2. Use the LCNAF authority form of the name (http://authorities.loc.gov) (but see #4 below).
3. If the name does not appear in the authorities file, establish a heading as instructed in the Creator element and in Anglo-American Cataloging Rules, 2nd Edition, 2002 Revision. For personal names, this will usually be in the form “Last, First.” For corporate names or state agency names, this would be described in Chapter 23 (corporate headings).
4. For state agencies or (other entities) that have changed name, one form will be chosen as the “authoritative” form (as CONTENTdm cannot accommodate complex cross-references). It may be necessary to edit the form of the name that was crosswalked from the MARC record to match the authoritative form in the CONTENTdm controlled vocabulary.

Examples:
Contributor: White, Julie
Contributor: Muley Engineers and Consultants
Access Systems

- Information easily migrated
- System is stable/reliable
- Good user support
- Documentation freely available
- Test system before buying
Preserving Digital Content

- Migration
  - Software
  - Storage
  - File Formats

- Emulation
  - Software
  - Hardware
Questions? Comments?