“Meeting the NARA M-23-07 Mandate”
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OUR PRESENTERS

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TODAY’S SCHEDULE

• NARA M-23-07 Compliance Deadline
• Digitization Challenges
• Collection Discovery
• Digitization Solutions
• Digital Preservation
• Crowley ONE Solution
MEET THE NARA M-23-07 MANDATE

In partnership with
The National Archives and Records Administration (NARA) M-23-07 compliance deadline is July 2024. NARA will only accept electronic format records and will no longer accept temporary or permanent analog formats. The mandate will require ALL:

- Permanent Electronic Records in Electronic Format
- Permanent Records in Electronic Format & with Appropriate Metadata
- Temporary Records in an Electronic Format or Stored in Commercial Records Storage Facilities
### NDSA* LEVELS OF DIGITAL PRESERVATION

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

COLLECTION LIFECYCLE MANAGEMENT CHALLENGES

BUDGET
Limits or restraints on budget

NARA COMPLIANCE
Achieve NARA Compliance quickly to meet the deadline

RESOURCING
Staff, office space, budget, training and time

KNOWLEDGE
Core knowledge to manage digitization at full scale

STORAGE FACILITIES
Locating storage facilities for secure physical storage

PRESERVATION
Digitally preserving files that can be read and trusted over decades
COLLECTION DISCOVERY

Megan O’Hern
Director of Archives & Information Management
Goal: The Collection Discovery phase provides an opportunity to take stock of your collection and plan for a smooth digitization initiative.

**TO DETERMINE WHAT COLLECTION DISCOVERY APPROACH IS BEST FOR YOU, ASK:**

- Do you have effective physical control over your collection?
- Do you know the retention requirements for the records in your collection?
- Do you know the formats contained within your collection?
- Do you know the extent of your collection?
- Do you know the condition of your collection?
- Do you have a clear vision for what digitization outcomes you want?

**IF NO: CONDUCT & ASSESSMENT FIRST**

An assessment is a high-level examination of your collection. It includes both review of your assets and well as discussions and visioning sessions with stakeholders to help define your needs and goals.

**IF YES: CONDUCT & INVENTORY**

Creating an inventory prior to undertaking digitization allows you to use descriptive metadata in the digitization process, making digitized content immediately accessible.
DIGITIZATION SOLUTIONS

Meghan O’Brien
Senior Business Development Manager of Imaging Services
We Make It. We Use It. We Support it. You Benefit.

- Only firm in the industry that manufactures and distributes scanners, uses them in-house and supports them
- This allows Crowley to understand, accept, adapt to, foresee and react to any digitization challenge throughout the full life cycle of digitization

How Customers Benefit:

DIGITIZATION PRODUCTS
- Direct and immediate access to the leading hardware brands

DIGITIZATION SERVICES
- Immediate access to Crowley’s tenured imaging specialists and project managers

SUPPORT SERVICES
- Crowley’s tech team supports all manufactured and distributed scanner brands, enhancing maximum performance and investment longevity
DIGITIZATION SOLUTIONS

Crowley provides high-volume and production-level conversion solutions for all media/services including:

- Document & Paper Scanning
- Microfilm, Microfiche & Aperture Cards
- Cultural Heritage Scanning
- Bound & Large-format Scanning
- Graphic Arts Scanning
- Newspaper Scanning
- Digital Microform Hosting
- Full-cycle Solutions

Unique services include calibration consultation and training, off-site project management and FADGI capture.
Crowley is uniquely capable of meeting or exceeding nearly any quality standard parameters, including FADGI (up to 3- to 4-star).

**Equipment**
A well-equipped facility with state-of-the-art FADGI-compliant scanning and software technology

**Experience**
An expert staff of project managers, imaging and quality control specialists and technology professionals

**Expertise**
A trusted partner in digitization solutions and records management process
Crowley offers comprehensive specialized on-site scanning services for highly-sensitive or frequently-accessed material that cannot travel off-site.

Crowley will provide specific scanner(s) and expert staff needed to safely capture your collections.

Crowley takes into consideration your material safety and security needs.
DIGITAL PRESERVATION

Preservica
Active digital preservation

Mike Davis
Senior Solutions Architect
PRESERVICA CAPABILITIES
TRUSTED DIGITAL RECORDS PRESERVATION FOR US GOVERNMENT
NARA DEFAULT FORMAT PROFILE

Format profiles

Profiles define sets of rules and preservation actions that apply to your assets based on the file format.

- NARA rulesets
  - Preservation rulesets

- Preservica recommended
  - Preservation rulesets, Access rulesets
### NARA RULESET PROFILE

#### NARA rulesets

**Name**

<table>
<thead>
<tr>
<th>NARA rulesets</th>
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#### Preservation rulesets

- **NARA document normalisation**
  - This Preservica-created RuleSet is based on NARA Transfer Guidance for preferred document formats and creates normalized versions of various document formats.

- **NARA presentation normalisation**
  - This Preservica-created RuleSet is based on NARA Transfer Guidance for preferred presentation formats and creates normalized versions of various presentation formats.

- **NARA spreadsheet normalisation**
  - This Preservica-created RuleSet is based on NARA Transfer Guidance for preferred spreadsheet formats and creates normalized versions of various spreadsheet formats.

- **NARA born digital photo image normalisation**
  - This Preservica-created RuleSet is based on NARA Transfer Guidance for preferred born digital photographic image formats and will migrate photographic formats to the preferred format, TIFF.
### NARA documentation normalisation rules

This Preservica-created RuleSet is based on NARA-Transfer guidance for preferred document formats and creates normalised versions of various document formats. This is currently performed by using LibreOffice to migrate the content to OpenDocument Text (ODF). This RuleSet specifically does not migrate ODT versions earlier than 1.3, which are already handled according to NARA-Transfer guidance.

<table>
<thead>
<tr>
<th>Format Description</th>
<th>Normalisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microsoft Word for Windows Document 2.x (fmm/20)</td>
<td>Normalise word processing document to ODT using LibreOffice</td>
</tr>
<tr>
<td>Microsoft Word Document 6.x/9x (fmm/26)</td>
<td>Normalise word processing document to ODT using LibreOffice</td>
</tr>
<tr>
<td>Microsoft Word Document 97-2003 (fmm/40)</td>
<td>Normalise word processing document to ODT using LibreOffice</td>
</tr>
<tr>
<td>Rich Text Format 1.0-1.x (fmm/45)</td>
<td>Normalise word processing document to ODT using LibreOffice</td>
</tr>
<tr>
<td>Rich Text Format 1.3 (fmm/46)</td>
<td>Normalise word processing document to ODT using LibreOffice</td>
</tr>
<tr>
<td>Rich Text Format 1.5 (fmm/47)</td>
<td>Normalise word processing document to ODT using LibreOffice</td>
</tr>
<tr>
<td>Rich Text Format 1.2 (fmm/48)</td>
<td>Normalise word processing document to ODT using LibreOffice</td>
</tr>
<tr>
<td>Rich Text Format 1.4 (fmm/49)</td>
<td>Normalise word processing document to ODT using LibreOffice</td>
</tr>
<tr>
<td>Rich Text Format 1.6-1.x (fmm/60)</td>
<td>Normalise word processing document to ODT using LibreOffice</td>
</tr>
<tr>
<td>Rich Text Format 1.8 (fmm/51)</td>
<td>Normalise word processing document to ODT using LibreOffice</td>
</tr>
<tr>
<td>Microsoft Works Word Processor 1-3 for DOS and 2 for Windows (fmm/83)</td>
<td>Normalise word processing document to ODT using LibreOffice</td>
</tr>
<tr>
<td>Microsoft Word for Windows 2007 onwards (fmm/41)</td>
<td>Normalise word processing document to ODT using LibreOffice</td>
</tr>
<tr>
<td>ClarisWorks</td>
<td>(generic) (fmm/799)</td>
</tr>
<tr>
<td>ClarisWorks Word Processor 4 (fmm/728)</td>
<td>Normalise word processing document to ODT using LibreOffice</td>
</tr>
<tr>
<td>ClarisWorks/ApplesWorks Word Processor 6 (fmm/744)</td>
<td>Normalise word processing document to ODT using LibreOffice</td>
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</table>
COMMITMENT TO SUPPORTING NEEDS OF GOVERNMENT AGENCIES

Ensure instant access to your long-term records

Save time. Serve your citizens. Meet mandates.

Fulfill records requests in minutes with secure self-service for your departments and citizens.

Try for free
CROWLEY ONE SOLUTION

Meghan O’Brien
Senior Business Development Manager of Imaging Services
DIGITIZATION WORKFLOW

1. Collaborate consultation with customer, preservation vendor and digitization services vendor.

2. Agree on project specifications, including access goals and metadata needs. Establish a timeline.

3. The digitization vendor receives materials and begins digitization and metadata project deliverables.

4. Test upload of digitized content and related metadata in preservation vendor platform.

5. Full project completion, quality assessment testing at intervals as batches of content loaded in preservation vendor platform.

6. Constant communication throughout the project, ensuring alignment to customer expectations.

7. Project completion and debrief.

www.thecrowleycompany.com
CROWLEY ONE SOLUTION

The Crowley Company is offering a one-stop full-cycle solution to meet the NARA M-23-07 compliance deadline in July 2024.

With **ONE Solution** and **ONE point of contact** for every step of the digitization process, Crowley can manage and capture digital collections to offer secure physical storage and digitally preserve images for all collection volumes or media types.
Thank You for Joining Us!
FOR MORE INFORMATION

CROWLEY
DIGITAL PRESERVATION SOLUTIONS

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