NIST Celebrates 50 Years in Maryland
Archiving the National Institute of Standards and Technology's Gaithersburg Campus

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BACKGROUND

The National Institute of Standards and Technology (NIST), previously the National Bureau of Standards (NBS), was given permission by Congress to relocate from Washington, DC to Gaithersburg, Maryland in the 1950s. The new building was dedicated by President Johnson on November 15, 1966. The NIST Information Services Office (ISO) has developed an archive of photographs, reports, publications, and artifacts that document NIST's history over the last 100 years, including the agency's last 50 years in Gaithersburg, Maryland.

OBJECTIVE

To digitize, apply metadata, and provide access to the Gaithersburg Campus Photographic Collection and other photographic collections for use in the 50th Anniversary of the NIST Gaithersburg Campus exhibits and marketing materials.

METHODS

Digitization
Photos in the NIST archives are scanned using an Epson flatbed scanner and saved as TIFF files. Once metadata has been embedded, the files are saved as JPEG files for digital access. Artifacts and archival materials that can't be scanned are photographed using a Canon EOS Rebel T3i, and TIFF files are created from the raw CR2 files. Fifty Gaithersburg Campus architectural artifacts (sample boards, watercolors, and furniture plans) needed to be photographed. A proposal outlining how the artifacts should be photographed was written by the field study student and submitted to the ISO management team.
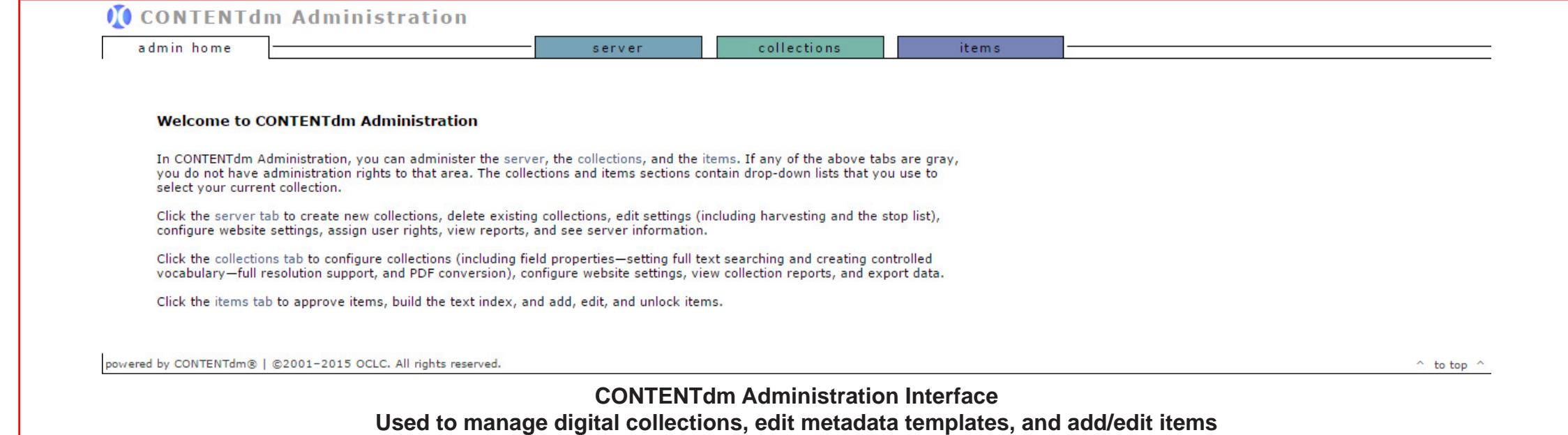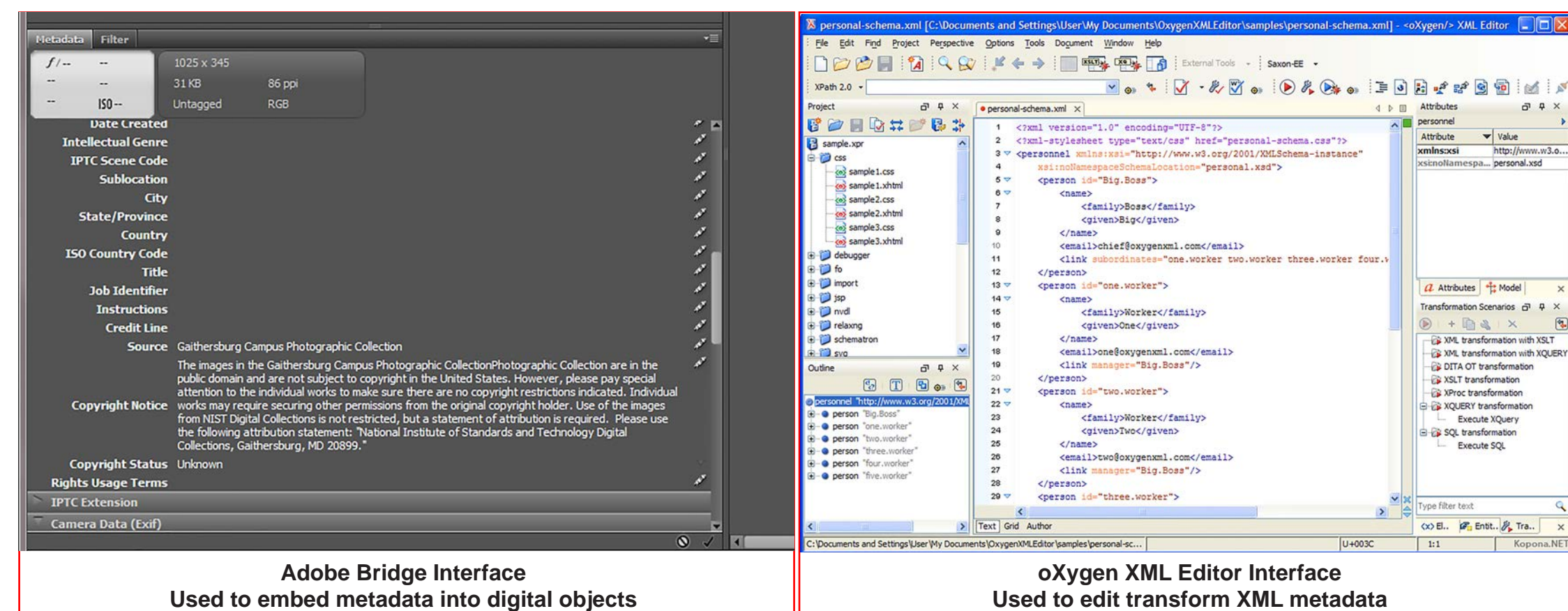
Metadata
Metadata was applied to digital objects using Adobe Bridge CC, using Dublin Core and NIST-specific schemas.
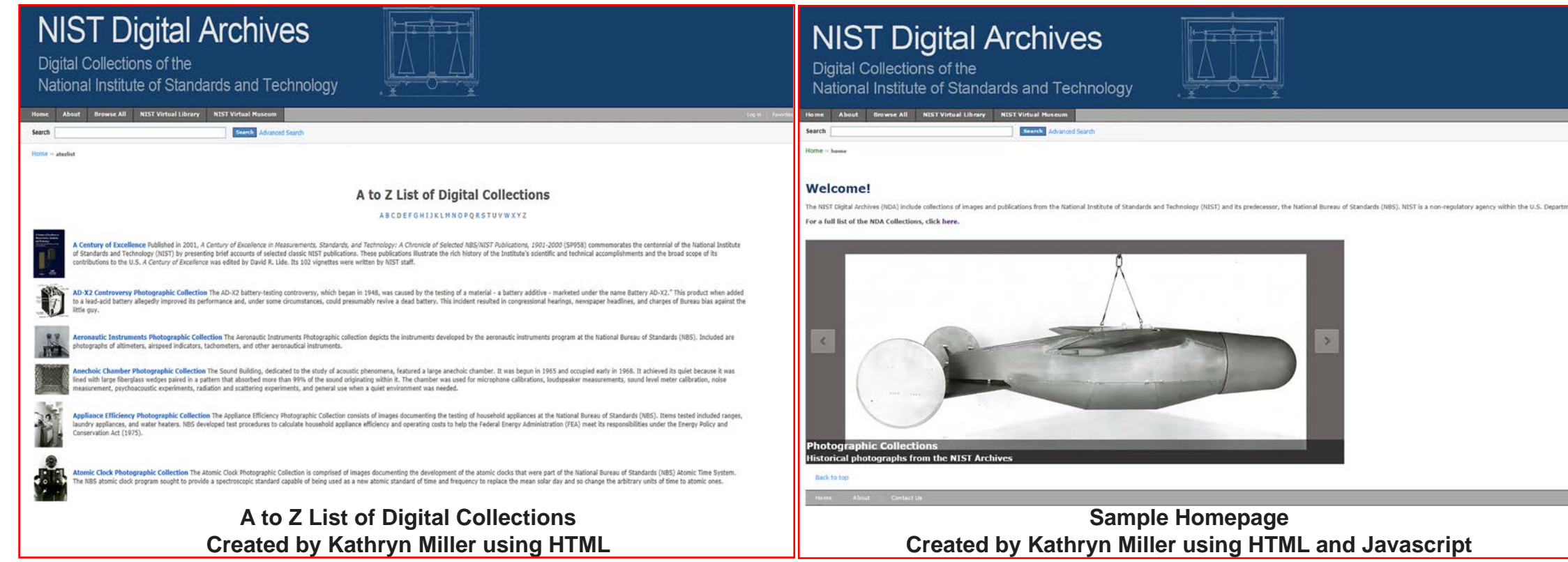
METHODS (CONT'D)

Access

Digital objects and metadata were uploaded to the NIST Digital Archives (NDA) website using CONTENTdm. Embedded metadata was converted to separate XML and text files through use of ExifTool and oXygen XML Editor.

Adobe Bridge Interface
Used to embed metadata into digital objects

oXygen XML Editor Interface
Used to edit transform XML metadata

CONTENTdm Administration Interface
Used to manage digital collections, edit metadata templates, and add/edit items

RESULTS

In the course of this field study:

- Four webpages were created for the NDA.

A to Z List of Digital Collections
Created by Kathryn Miller using HTML

Sample Homepage
Created by Kathryn Miller using HTML and Javascript

RESULTS (CONT'D)

- A proposal and corresponding documentation was created to photograph 50 artifacts according to archival standards.
- Sample photos were taken to prepare documentation for NIST ISO staff members to complete the full digitization project.
- The Gaithersburg Campus Photographic Collections were fully processed and added to the NDA.
- Over 300 photos with metadata were added to the NDA.

EXPERIENCE GAINED

- Practical application of archival education, including researching and writing metadata, preserving artifacts, and collection management
- Technical and software skills, including using Adobe Bridge for metadata; writing and editing XML with ExifTool and oXygen; Javascript; advanced HTML; and CONTENTdm
- Professional experience working in a government agency