

**Spartan Archive:
An Electronic Records Archive at Michigan State University
NHPRC Project #RE-10025-10**

NHPRC Interim Narrative Progress Report, October 1, 2010–March 31, 2011

In late 2009, the Michigan State University Archives & Historical Collections (UAHC) received a three-year, \$251,079 grant from the National Historical Publications and Records Commission (NHPRC) to develop policies and procedures to appraise, ingest, process, describe, and preserve institutional electronic records. UAHC will thus use a proof-of-concept approach to build and test an archival solution for the long-term access and preservation of four large electronic records series produced by MSU's Office of the Registrar (RO): the full catalog of Academic Programs, the Description of Courses offered each semester, the annual Student Directory, and the Schedule of Courses. The original grant proposal and supporting documents for the project, "Spartan Archive: An Electronic Records Archive at Michigan State University," may be found at http://www.archives.msu.edu/about/sap_project_documentation.php. (Note that UAHC decided to include the Schedule of Courses in the project, even though it was not included in the original grant proposal.)

Project team members include Cynthia Ghering, director of UAHC and project director; Lisa Schmidt, electronic records archivist and project manager; Ed Busch and Whitney Miller, archivists; Richard Burgis, UAHC's project information technologist; and Ajay Patel, information technologist from Administrative Information Services (AIS) and project technical advisor. Kristin Schuette, Associate Registrar for Technology, has been the acting RO systems analyst on the project since Fall 2010.

The Spartan Archive project team undertook the following activities listed below during the reporting period.

Spartan Archive Project Workplan

• **Search for/Hiring of Project Information Technologist (PIT)**

The search committee for the Project Information Technologist (PIT) position interviewed five candidates through the month of October 2010. An offer was extended to Richard Burgis, a highly qualified candidate who was retiring from the State of Michigan after having worked there for many years. Burgis began working at UAHC on January 17, 2011.

• **Survey of community needs and expectations**

Schmidt documented what the RO currently offers users online and how the Spartan Archive records have historically been handled by UAHC in their paper form. These documents may be found on the project website at

<http://www.archives.msu.edu/documents/RegistrarsOfficewebsite.pdf> and <http://www.archives.msu.edu/documents/UAHC--CurrentHandlingSARecords.pdf>, respectively.

During the February project team meeting, the team identified the following stakeholders in Spartan Archive: RO, university faculty, university staff, students, former students, other universities, CIC-UAG, researchers, general public, and news organizations. By interviewing

the RO team, the UAHC reference staff, and a group of reference librarians from the MSU Libraries, the project team was able to solicit the information needs of all of these communities. With assistance from Ghering, Schmidt developed surveys for these designated communities.

On March 2, several members of the project team, including Ghering, Schmidt, Burgis, and Miller, met with Schuette and other RO team members to learn more about the needs of this designated community. For each of the four Spartan Archive records series, RO was asked about the source of the data, where it is stored, the format, how it is made accessible to users, who the users are, and what the users are looking for. Concerns over the privacy of student information were raised, with acknowledgment that the Spartan Archive system would take privacy into account. Also, the RO advised that the system be designed to thwart “screen scraper” activity; that is, the systematic collection of data from an online source.

Later in March, Schmidt interviewed UAHC and MSU Libraries reference staffs about the habits and identities of researchers making inquiries into the Spartan Archive data. The librarians provided a “wish list” of other university-related reference information they would like to see in the Spartan Archive. They also have excellent ideas for access interfaces, and have agreed to meet again when we are at the interface design stage of the project to explore these ideas in depth. On March 22, Schmidt also interviewed a student researcher referred by a UAHC archivist regarding his use of these records.

Results from the interviews with UAHC reference staff, MSU Libraries reference staff, and the student are included as an addendum to this report and may also be found at <http://www.archives.msu.edu/documents/SADCInterviews--public.pdf>.

As an addendum to our quarterly report to the CIC-UAG for the period ending March 31, 2011, we invited feedback from our colleagues as to whether the results of the interviews corresponded to the experiences at their respective institutions.

- **Implementation of Archivists’ Toolkit (AT)**

Patel procured and set up a server for the implementation of Archivists’ Toolkit (AT). UAHC’s instantiation of AT operates on Oracle, the DBMS for which MSU has a site license. (Note that it appears to be rare for AT to be implemented on Oracle.) Patel advised against implementing Oracle on UAHC’s current production server and recommended a separate server environment.

With Burgis, Patel deployed an AT sandbox; he then handed off management of the software to Burgis. With assistance from Busch and Miller, Burgis identified the metadata to populate repository fields, lookup lists, and locations; developed and implemented a crosswalk between MicroMARC and AT; tested the export of databases; and created and tested scripts for data migration and loading. Conversion and migration of data, cleansing of data, and documentation of the processes has begun. Ghering is leading the UAHC staff in defining a new accessioning and processing workflow to work with AT. This includes mapping AT fields to the Describing Archives: A Content and Data Standard (DACS) rules to create internal conventions for output to MARC and EAD.

- **iRODS workshop preparation**

Schmidt finalized arrangements and registered participants for the April 7-8 iRODS workshop. As of March 31, about 40 participants were expected, with contingents from the University of Michigan, Ohio State University, the University of Illinois, and Michigan State University, as well as colleagues from other CIC partners and other Michigan universities.

- **Repository software and tool evaluation**

Schmidt created a list of repository software and pre-ingest/ingest tools to consider for use in Spartan Archive. These include: Fedora (repository framework); TAPER (submission agreement builder); Bag It (file transfer and fixity); ARK and NOID (persistent identifier); and DROID, JHOVE, JHOVE2, the New Zealand Metadata Extractor, and FITS (various combinations of file identification, file validation, metadata extraction, and fixity).

- **Accessioning of records to “digital shelf”**

Busch and Schmidt accessioned electronic records from various campus units, including University Relations and the MSU College of Human Medicine and College of Osteopathic Medicine. The digital files, most of which are sent to UAHC on removable media, are copied over to storage on a shared drive—the “digital shelf”—in anticipation of future transfer to the Spartan Archive preservation environment.

- **Electronic records workflows: accessioning**

With assistance from Busch, Schmidt documented the current accessioning process for digital records (for internal use).

Some project activities scheduled through this phase of the project, which ended on March 31, 2011, will be carried over to the next phase, which runs April 1-September 30, 2011. These include continuations of several of the activities listed above along with the following:

- Development of appraisal criteria for the RO database records
- Definition of metadata for the RO database records

Presentations and Proposals

- **Digital Preservation Management Workshop instruction**

On November 4, Ghering and Schmidt presented on the “Digital Preservation Tools and Workflows” segment of a Digital Preservation Management Workshop sponsored by the Inter-University Consortium for Political and Social Research (ICPSR) in Ann Arbor. The presentation included descriptions of the Spartan Archive project and current digital archives accessioning practices, as well as discussion of the ingest and other tools that are being examined for use with Spartan Archive. The presentation is available on the project website at <http://www.archives.msu.edu/documents/ICPSR-TW-GheringSchmidt-final.pdf>.

- **Midwest Archives Conference (MAC) 2011 session proposal**

The session proposal for the 2011 Midwest Archives Conference (MAC) meeting was accepted. The session entitled “Streams in the E-Record Workflow: Developing Elements of the Archival Process for Electronic Records of Historical Value” will be chaired by Ghering. Other session participants include Schmidt, Jackie Esposito of Penn State University, and Pat Michaelis of the Kansas State Historical Society.

- **Mid-Michigan ARMA Meeting**

On November 16, Ghering and Schmidt delivered an informal presentation on the Spartan Archive project to the Mid-Michigan chapter of ARMA, which held its monthly meeting at UAHC.

- **SAA 2011 session proposal**

The “work in progress” session proposal was not approved. The Program Committee felt that it would benefit from further project development, and suggested resubmission in a year or two. As an alternative, Schmidt and Ghering are planning on submitting a proposal on the Spartan Archive project to the SAA 2011 Research Forum.

- **MSU IT Conference session proposal**

Schmidt submitted a proposal to the MSU IT Conference for a session on digital preservation projects at UAHC, including the development of Spartan Archive and the implementation of Archive-It for preserving websites. The conference, an annual event hosted by MSU’s Vice Provost for Libraries, Computing and Technology, provides an opportunity for university staff involved in IT to come together and share their technology experiences and contributions through a variety of informational sessions. This year’s MSU IT Conference will be held on June 7, 2011.

Publications

- **MSU News article**

Ghering and Schmidt were interviewed for an article on the Spartan Archive project for the *MSU Weekly News*. The article, “Grant helping to preserve MSU’s digital records,” which was published on October 26, 2010, may be found at http://news.msu.edu/story/8507/&keyword_search=University%20Archives&keyword_action=all_words.

- **MAC Newsletter article**

Ghering, with assistance from Schmidt, wrote an article on Michigan State’s electronic records program, with a focus on the Spartan Archive project, for the “Electronic Currents” column of the *MAC Newsletter*, December 2010 issue. A copy of this article is available on the project website at http://www.archives.msu.edu/documents/EC_MAC_newsletter_1_11.pdf.

- **MSU Alumni Magazine article**

Ghering wrote an article on the Spartan Archive project for the Spring 2011 issue of *MSU Alumni Magazine*, published as a “Michigan State Moments” in the “Around Circle Drive” section. Along with other items in that section, it is available online at <http://www.alumni.msu.edu/magazine/archive/viewarticle.cfm?articleid=1573>.

Conferences, Workshops, and Classes

- **Digital Preservation Management Workshop, November 1-5**

Busch, Ghering, and Schmidt attended the ICPSR Digital Preservation Management Workshop in Ann Arbor. The workshop was segmented by topic, with Busch attending the “Introduction” and “Tools and Workflows” segments, Ghering attending the “Tools and Workflows” segment, and Schmidt attending the “Tools and Workflows” and “Legal Issues” segments. The team learned about tools, techniques, and intellectual property issues that will aid in the handling of current electronic records accessions as well as the development of Spartan Archive.

- **6th International Digital Curation Conference, December 6-8**
Ghering and Schmidt attended the DCC conference in Chicago and gathered more information and ideas for tools to use with the Spartan Archive project.
- **Digital Curation Curriculum (DigCCurr) Winter Institute, January 5-6**
Schmidt attended the second part of the DigCCurr Professional Institute, during which each participant gave a brief presentation on the status of their project since the first part of the Institute in May 2010; she presented on Spartan Archive. The institute provided a “safe” environment for participants to share triumphs, concerns, and ideas on overcoming roadblocks to project success. It also provided an opportunity to learn about other technologies and processes that might be used in Spartan Archive, and to build on relationships with colleagues.
- **“Overview of Student Records” class, February 21**
Ghering, Schmidt, and Burgis attended an MSU class that provided an overview of the different systems used by the university to maintain student records.

Other Related Activities

- **University of Denver Records Authority Grant Project**
Since November, Ghering and Schmidt have participated on partner conference calls for the NHPRC-funded “Records Authority” grant project spearheaded by the University of Denver (DU). UAHC volunteered to partner with DU and test the open source software for records management administration that the grant is funding. Other partners include American University, the City of Seattle Clerk’s Office, and Wheaton College. These calls are held on a monthly basis. Burgis has come up to speed on the technical aspects, and will also be participating in the calls and testing as necessary. DU will start testing the software in the spring.
- **Digital Curation Planning Project activities**
At the request of the Bentley Historical Library at the University of Michigan, on December 16 Schmidt met with Bentley staff to discuss UAHC’s recent Digital Curation Planning Project. On March 18, Schmidt delivered the keynote address at the spring meeting of the Michigan Academic Library Council (MALC). The focus of the meeting was institutional repositories, and Schmidt spoke about the Digital Curation Planning Project and UAHC’s idea about building a federation of repositories at MSU. On March 25, Ghering and Schmidt presented on the project at the MSU Instructional Technology and Computing Café, which included presentations on the creation of open courseware and other types of repositories at the university.
- **Research data curation planning**
On January 5, Ghering led a “Data Management for Research” course for MSU faculty. The course included discussion and advice on understanding and complying with the new National Science Foundation (NSF) policies requiring submission of a data management plan as well as the Federal requirements for clinical research data. Ghering also attended the Research Data Access and Preservation (RDAP) Summit in Denver, March 31-April 1.
- **Archive-It implementation**
In January, UAHC officially began an Archive-It subscription with the Internet Archive to preserve the university’s websites. Busch is the lead on identifying websites of interest and

setting up the crawls. On March 17, Busch and Ghering gave a presentation on the project to the MSU WebDev Café. Busch and Schmidt have participated in informational webinars on Archive-It provided by the Internet Archive.

- **Enterprise Business Systems Project: Revisions to university policy and procedures**
Ghering proposed revisions to current university policy and procedures as part of Michigan State's Enterprise Business Systems Project implementation. On January 1, 2011, the university began a "paper-sparse" business workflow for finance and human resources transactions. This will result in the creation of more born-digital records that will require preservation in a permanent electronic records archive.
- **Retention schedule reviews**
Ghering reviewed office practices and records retention schedules with the Office for Inclusion and Intercultural Activities, College of Social Science, and Residential and Hospitality Services. With Miller, she revised specialized retention schedules with MSU Technologies (the former Office of Intellectual Property.)



Cynthia A. Ghering
Project Director



Lisa M. Schmidt
Project Manager