MEMO

Date: August 2, 2011
To: Lucy Barber, NHPRC
Cc: Lynn Backstrom-Funk, Project Administrator
    Office of Research & Sponsored Programs
From: Nancy Allen, Dean and Director
Subject: Interim Report #3, July 31, 2011

Executive Summary

The Records Authority (RA) software developed under this grant was moved into production at the University of Denver at the end of February of 2011, a full three quarters ahead of the projected schedule in the original grant proposal. Simultaneously with the readying RA for rollout, the University of Denver Records Management department completed initial development of a new retention schedule for the institution - and used RA to publish it on the University web portal.

Records Authority (RA) has now been live at the University of Denver for six months, during which time it has been actively used by the Records Management team to help staff and faculty and positively received by them.

After the go-live, in March and April, the project team focused on minor clean-ups of the software. Most of these changes had to do with ordering of display elements as opposed to data integrity or functional issues. By May the team had developed the first edition of the RA User Guide and established close working relationships with the grant partners. Starting in late April the partners had the opportunity to begin testing the software. By mid-May they had begun investing their time in earnest. Next, for those partners who intend to go live with RA at their institution, the project team will assist with software installation planning, implementation, and fine tuning.

Whereas all of the partners have engaged in testing RA, Wheaton College has already registered their intention to go live with it and have set a date of August 17th for moving the software into production. Michigan State University is also seriously assessing the potential for using RA in production at their institution.
In summary, the project overall is on track with the work plan in the original grant proposal. All of the tasks scheduled to take place through Q4 2010 have been addressed. Of the high level tasks projected in the proposal for each quarter thereafter:

Q1 2011
- The XML related tasks were both completed. The TAPER Project Interoperability Report was shelved after some initial high level analysis showed the utility of potential results to be low.

Q2 2011
- Travel to partner sites to help install the software has been deemed unnecessary (by the relevant partners). Support will be provided via phone, web, and email.
- The other two major tasks projected for this timeframe are still underway: partner testing and evaluation of DU response to the software. Instead of a single thread schedule for testing, it has proven more effective to accommodate each partner by creating a one-off schedule for each of the three institutions.

Q3 2011
- The team is on track for the projected tasks: write case study for journal submission and present project at a conference.

Staffing

The make-up of the project team has changed yet again. Despite personnel changes during this and the prior reporting periods, the project has continued to meet and exceed its goals. In May Lindy Naj relinquished her role as University Records Manager to transition into private sector records management and in June Greg Colati relocated to the East Coast. Lindy was able to see the project through the go-live of the RA software, the publication of the new DU retention schedule through RA, and the creation of the User Guide. Greg was able to see the project through the establishment of close working relationships and initial testing with the partner institutions.

During 2010 Robin Dean, Records Management Assistant, and Evan Blount, Programmer, were instrumental in ensuring the continuity of the project. During the recent changes described above, Joanna Lamb, Assistant DU Records Manager, and Evan Blount have continued in their roles and have provided coordination and highly responsive contact for the partner institutions, both of which are key aspects to the success of this phase of the project.

We do not anticipate needing to add staff to complete the project. I will act as Principle Investigator and have submitted my CV to the NHPRC. Joanna Lamb and Evan Blount will continue to provide the user and technical support required to complete the project. Lindy Naj and Greg Colati remain associated with the project on an as-needed basis to help with documentation, presentation, and publication activities.
Software Development – Overview

Software development during the last reporting period has been focused on improving convenience and capabilities for retention schedule administrators and on improving the end-user experience provided by the public interface.

In parallel with ramping up to go live with RA, the Records Management (RM) team in Business and Financial Affairs constructed a new retention schedule for the University of Denver. Developing a retention schedule entails a great deal of analysis and many decisions about both structure and content. This work enabled the team to iteratively fine-tune many aspects of the interface design, especially of public and administrative dashboard displays, and to test the tool with live data. The database architecture was left largely untouched.

Feedback from the RM team on public search screen display elements and layout and on the behavior of administrative functions allowed the programmer to address minor bugs like text display truncation and to introduce improvements to justify text and increase font size prior to involving the other partners in testing.

Sample Improvements:

<table>
<thead>
<tr>
<th>Public Features</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Persistent Headings</strong></td>
<td>Static column names for easier ‘deciphering” of retention rules</td>
</tr>
<tr>
<td><strong>Link to Public Search</strong></td>
<td>Easily check public display for reference or post-update</td>
</tr>
<tr>
<td><strong>Multiple Category Search</strong></td>
<td>Select more than one Division/Department to search</td>
</tr>
</tbody>
</table>

**Admin Features**

<table>
<thead>
<tr>
<th>Admin Features</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bulk Publish/Un-publish</strong></td>
<td>Select multiple records to expose or remove from indexing</td>
</tr>
<tr>
<td><strong>Link to Admin Dashboard</strong></td>
<td>Easily jump to administrative functions to make corrections</td>
</tr>
<tr>
<td><strong>Audit Schedule Changes</strong></td>
<td>Upgrade to log both before and after state of any change</td>
</tr>
<tr>
<td><strong>Import Rollback</strong></td>
<td>Undo most recent import</td>
</tr>
</tbody>
</table>

As with most projects, some tasks were tackled ‘out of order’ relative to the original work plan, but we believe the earlier ‘real-world’ testing provided a more robust product for the partners to test, enabling them to focus on substantive items rather than the tedious, initial shakeout of software.

Software Development – Details
The primary goal of the project has always been to deliver a stable and lightweight yet highly functional product based on records management best practices. As we have continued to adapt the software to meet a variety of records management requirements, some original tasks have been modified or replaced by other tasks to better accomplish the ultimate goal of the project.

**Data Exchange**

An API to exchange data with other applications

As was noted in the last interim report, neither the team’s work at DU nor its discussions with grant partners indicated a specific need for exchanging significant amounts of dynamic data or to enable real-time connectivity to the Records Authority database. For that reason we decided not to invest project resources in the development of a full-blown API and deferred for future review the development of XML export capabilities.

Instead we decided to use straightforward comma-separated value (CSV) files for both loading and extracting data. Once modifiable load/import and export functions had been developed and tested, the team returned to the idea of developing a XML “exporter” to make the product as flexible as possible.

Export Data

In the last interim report we noted that RA already supported two methods for extracting retention schedule data: a comma-delineated file or formatted printouts for hard copy distribution. As of recently, Evan Blount also rolled out a XML export that he made available from the dashboard.

As originally planned the team looked at potential interoperability with the Tufts TAPER project, specifically for the purposes of export, the Records Creator Records structure used by that project. The team determined that a less targeted data scheme was likely to be more appropriate for RA and selected the Model for Functional Requirements or MoReq2 ([http://www.moreq2.eu/home](http://www.moreq2.eu/home)), an EU standard that defines generic requirements for an electronic records management system, or ERMS.

First, an absolute mapping was undertaken: taking each RA database element and finding a similar component counterpart in MoReq2. The second step was to determine the XML Schema Definition (XSD) most appropriate for each function. After two iterations the development team believed that the resulting “crosswalk” would support the necessary flexibility. Once the mapping
incorporated an overall XML wrapper, Evan Blount built the XML export and made it accessible from the Administrative Dashboard.

Import Data
Loading pre-existing retention schedule data from a CSV into the RA database was already available as of the last interim report. During this reporting period the team seriously exercised this function, loading and reloading DU's new retention schedule prior to its formal publication in February 2011. As a result the function was refined to minimize the manual steps required of administrators and to introduce a roll back function to clear the most recent import.

Surveys and Inventory Forms
An initial goal of the project was to give records management administrators the ability to create surveys for collecting additional data beyond the initial survey, the record inventory form, and the record group form that populates the retention schedule.

There are already many avenues for creating and distributing records inventory forms online. Because of this and the fact that the DU Records Management department had no plans to use the inventory function extensively in the near future, further fine tuning of the survey and inventory features was deferred until such time as one or more partner institution could provide compelling requirements for that work. However, survey editor enhancements are tentatively scheduled to take place in the last reporting period.

Extended Audit Trail
Prior to this reporting period, the software collected date/time and action stamps (add, change, delete). It also stored in a special purpose “recycle bin” deleted records until such time as an administrator either purged (hard deleted) or restored them.

During this reporting period session and user info were added to the log file along with reporting capabilities. Additionally, the reporting also shows the before and after state of changed records.
Public Search and Display Refinements
Prior to go-live a great deal of work was done to tighten up the display in the Public Search interface to make it easier for users to quickly identify content or components they need and to conform as much as possible to mainstream expectations for look and feel. From font-size and alignment to help links the team reviewed the entire presentation of RA and made feasible changes accordingly. Next the team will determine the modifications needed to support baseline branding by institutions who will obtain the software in future from the open source repository.

Additionally, in advance of partner testing, we initiated proactive research to obtain further detail than is readily available in online documentation about the way the Solr engine produces search results in its “out-of-the-box” state and about the feasibility of implementing search term autocomplete and suggest features.

Documentation
By early May the first edition of the Records Authority User Guide (for Records Managers who are RA administrators had been distributed to the partners for feedback and review.

The RA Technical Guide is under development. The current plan is to complete this documentation in conjunction with the work to assist partner institutions with installation in their infrastructure.

Partners
Participants
As of the last reporting period the partner institutions were:
- American University,
- City of Seattle Clerk’s Office
- Michigan State University
- Wheaton College

During this reporting period, American University re-assessed its involvement in the project and in April respectfully requested to withdraw from the project due to resource constraints and organizational concerns. However, in May, the team received unsolicited contact from a new potential partner. Emily Rafferty, Associate Librarian & Archivist at the Baltimore Museum of Art requested information about the Records Authority software and its availability. She and her organization are currently evaluating whether they will be able to participate in testing.
Communication
Early in the project, the team established a Listserv for communication about Records Authority. The use of the listserv has continued to be primarily one-way: from the project team to the partners. Even as the frequency of status update conference calls and then planning calls picked up over the course of the winter and spring and as the partner institutions were drawn into testing in earnest this did not change. Finally, the project team solicited input from the partners on the method of communication they felt would best serve their needs. To an institution each partner team reported that they preferred email communication and institution-specific conference calls.

Because the organizational and records management culture of each institution is so varied – as are the roles and responsibilities of the individual participants – and because the total number of participants is manageable, the project team agreed to provide this level of “high touch” support. Joanna Lamb is the lead for logistics and scheduling and Evan Blount has assumed responsibility as the primary point of contact for user and technical support.

Demo and test server/facilities
As was reported in the last period the then new DU RM department, and its focus on business records and compliance requirements, had necessitated adjustments in the RA software. In order to make these changes prior to debuting the software to the partners, the team decided to delay release a demo server until the software reflecting the new direction was production-ready at DU. At the time of the last report, the launch of the DU production instance was estimated to be late February 2011 and it was late February when the DU production instance went live!

In not only going live with RA, but using it immediately to publish the DU retention schedule the team was able to streamline the approach to providing a test environment to the partners. The new approach consisted of the following steps:

1. Rather than set up an entirely new instance for partner testing, the team decided to re-deploy one of two development instances for demo/testing. This test instance would be populated with a copy of DU retention schedule data so that the partners could see firsthand the behavior of a fully configured and populated installation as well as “play with” the features and content therein.
2. Deploy virtual server instances, one per partner institution. These virtual servers were set up as blank slate installations for the partners to configure as desired and populate with their own data, test or actual.
Presentations and Publications

Preparation is underway for the panel presentation at ARCHIVES 360°, the 2011 SAA Annual Meeting to take place August 22-August 27th in Chicago, Illinois. Greg Colati will moderate the panel; Veronica A. Martzahl will provide information on the potential records management applicability of accessioning tools developed by the NHPRC-funded TAPER project at Tufts University; David Read and Lindy Naj will discuss the inception of the RA software and the lead up to its release to production respectively.