

11-21-2017

Manipulating Data and Moving Forward: Transitioning to a Shared Cataloging Environment

Jessica Lee

Valdosta State University, jessicalee@valdosta.edu

Guy Frost

Valdosta State University, gfrost@valdosta.edu

Follow this and additional works at: <https://digitalcommons.du.edu/collaborativelibrarianship>

 Part of the [Cataloging and Metadata Commons](#)

Recommended Citation

Lee, Jessica and Frost, Guy (2017) "Manipulating Data and Moving Forward: Transitioning to a Shared Cataloging Environment," *Collaborative Librarianship*: Vol. 9 : Iss. 3 , Article 8.

Available at: <https://digitalcommons.du.edu/collaborativelibrarianship/vol9/iss3/8>



This work is licensed under a [Creative Commons Attribution-NonCommercial-No Derivative Works 4.0 License](#).

This Peer Reviewed Article is brought to you for free and open access by Digital Commons @ DU. It has been accepted for inclusion in Collaborative Librarianship by an authorized editor of Digital Commons @ DU. For more information, please contact jennifer.cox@du.edu.

Manipulating Data and Moving Forward: Transitioning to a Shared Cataloging Environment

Jessica Lee (jessicalee@valdosta.edu)

Electronic Resources Librarian, Odum Library, Valdosta State University

Guy Frost (gfrost@valdosta.edu)

Cataloger, Odum Library, Valdosta State University

Abstract

In May of 2017, the University System of Georgia (USG) finished migrating to Alma, a single, shared catalog for all its colleges and universities. Prior to migration, all the University System's colleges and universities maintained an Integrated Library System (ILS) from Ex Libris, Voyager, which provided a virtual catalog comprising a union catalog, while each institution managed its own database. The current migration took nearly four years from early planning stages to go live. Migrating to a cloud-based shared bibliographic environment where master bibliographic records were not "owned" by anyone was a new concept for USG libraries. Valdosta State University was involved with the migration process from the beginning. In addition, Valdosta was a key player in new collaborative initiatives for cataloging in the University System. The following case study attempts to shed light on the University's experience migrating to a new Library Management System (LMS).

Keywords: Valdosta State University, shared bibliographic environment, consortium catalogs, Ex Libris Ltd.

University System of Georgia and the Work of Committees

The University System of Georgia comprises twenty-eight universities and colleges, the Georgia Archives, and the Georgia Public Library System, which contains sixty one library systems. Of the universities and colleges, four are research institutions, four are comprehensive institutions, ten are state universities and ten are state colleges. The University System enrollment in the fall of 2016 comprised of 321,551 students.¹

The University System of Georgia launched a collaborative initiative in 1995 that would expand resource sharing across all the University System institutions, "public K-12 schools, public libraries, technical colleges, a group of private

academic colleges and universities, and a group of private K-12 schools." Georgia Library Learning Online (GALILEO) serves as a portal for over 2,000 Georgia institutions to "licensed, commercial databases and selected free internet resources" as well as resources in the Digital Library of Georgia (DLG), which includes the Georgia Government Publication database (GGP), Georgia historic newspapers, and institutional repositories, all of which are searchable from a single discovery interface.² The new Library Management System (LMS) chosen, which would comprise individual catalogs and a union catalog, would also be integrated into the GALILEO discovery interface.

The University System of Georgia migrated to Voyager, an Integrated Library System (ILS), in June 1998. Since that time, library catalog needs



Lee & Frost: Manipulating Data and Moving Forward

have rapidly evolved, especially in regards to managing electronic content, making the transition to a new system long overdue. Recognizing the need for this transition, the University System began the process of developing a Request for Proposal (RFP). As to be expected, committees and project teams would be needed in all areas to help see all institutions through this process. In early fall of 2013, nine implementation teams were formed and met for the first time at a kick-off event held September 13, at Middle Georgia State College in Macon, Georgia. These teams were part of the initial planning phase to develop the required documents needed for the RFP of a next generation Library Management System (LMS).³

GALILEO Interconnected Libraries (GIL) is an extension of the GALILEO Initiative, which “adds access to the physical collections of the USG Libraries.”⁴ Under GIL, twelve functional committees provide guidance, policies, and procedures for the development and use of Voyager. The GIL Cataloging Functional Committee and its subcommittee for Best Practices provides leadership in cataloging issues. Another committee is GIL Support Services, which provides assistance to all libraries in the University System for the Union Catalog and each institution’s local catalog. Members of GIL Support were assigned to each of the nine implementation teams.

The Cataloging/Metadata Implementation Project Team began looking at what the next system would need to meet the needs of a rapidly changing environment. Erin Grant of Southern Polytechnic State University led this group to determine requirements for providing current MARC21 bibliographic data, but also other metadata schemes such as Dublin Core and XML.⁵ Of particular interest to all groups was the expectation that the new system would have cloud capabilities. Numerous RFPs were con-

sulted throughout the process with Orbis Cascade Alliance’s for a Shared Library Management System providing the best model.

In addition to an expected cataloging team, a second team was formed called Collaborative Technical Services (CTS). The CTS team, headed by Cathy Jeffrey of Clayton State University, began looking specifically at what it means for Technical Services to work collaboratively in a shared environment. The charge for this team was “making recommendations that were not dependent on any specific system.”⁶ As such, the CTS team reviewed periodical literature and online documentation dealing with any type of library currently working in a collaborative environment. The final report, submitted to the Regents Academic Committee on Libraries (RACL) on February 19, 2015 covered the following areas: 1. Training and Communication; 2. Acquisitions; 3. Collection Development; 4. Collection Management; 5. Cataloging Best Practices; 6. Cataloging and Materials Processing; 7. Electronic Resources; 8. Partnering with Other Consortia or Groups of Libraries.⁷

This report introduced University System staff to collaboration in technical services and the significant changes a shared cataloging environment brings. It was recognized that many technical services personnel had subject expertise that could benefit others within the University System. The combined efforts of the Name Authority COoperative libraries (NACO), which establishes authorized forms of names, corporate bodies, and titles used in library catalogs and the Subject Authority COoperative libraries (SACO), which establishes new Library of Congress Subject Headings (LCSH) would also provide data-rich enhancements that would help not only the University System catalogers but library data user communities at large. At the same time, it was noted that more individuals would need to be trained in all Program for Co-operative Cataloging (PCC) areas. In addition to NACO and SACO, two other PCC programs are



Lee & Frost: Manipulating Data and Moving Forward

CONSER, or Cooperative ONLINE SERIALS program, which is the authority for serials cataloging, and the monographic BIBLIOGRAPHIC RECORD COOPERATIVE program (BIBCO), which provides comprehensive descriptions of cataloging records with fully controlled NACO and SACO access points. All of these programs would need to be expanded to help ease the burden in cases where there are too few institutions with those specialized skills.⁸ In order to insure consistency, best practices would need to be developed. A centralized place to house policies and procedures vetted by the newly established Best Practices Subcommittee of the GIL Cataloging Functional Committee and the Cataloging/Metadata Implementation Project Team would also be needed.

In June of 2015, the Library Management System had been chosen: Alma by Ex Libris. The Next Generation Planning Teams transitioned into Alma Implementation Teams or Project Teams with old members cycling off and new members coming on. Three institutions were chosen as “Vanguards” for the initial testing: Valdosta State University (VSU), University of Georgia (UGA) and Georgia Southern University (GS). All three institutions were Federal and Georgia Depositories and managed locally licensed electronic content. In March 2016, a test database, or sandbox, of migrated data from the Vanguards was provided to validate data, to learn the new functionality of the Alma system, and to test new procedures.

From the beginning, adjustments needed to be made by the Acquisitions and Cataloging staff. Bibliographic records, holdings records (which provide a mechanism for showing the location and call number in the public catalog) and item records (which house the barcode used for circulation) remained largely the same. However, staff needed to learn new terminology and functionality that was far from intuitive. Cataloging would now be called Resource Management and Circulation would now be called Fulfillment.

What was once a local catalog became an Institutional Zone (IZ), a Union Catalog became the Network Zone (NZ) and a new entity, called the Community Zone (CZ) was added for electronic collections. Electronic resources are placed in “portfolios” rather than the traditional data fields in the bibliographic or holdings records. This Community Zone is a global “shared repository” of “authority records, bibliographic metadata, and electronic materials knowledge base,” which allows all Alma institutions to better manage electronic content.⁹ Physical items are dubbed “inventory,” and, unlike the Voyager catalog, which is location driven, Alma is inventory driven, relying much more heavily on data at the item level. For example, what is usually coded in the Specific Material Designation (SMD) of the Physical Description in a holdings record (e.g., online access versus a physical DVD for electronic resources) can also be recorded in the item record with an expanded predefined list of material types. Additional steps needed in publishing bibliographic and holdings records to the Institutional Zone or Network Zone are also necessary as each bibliographic and holdings record needs to be “released” to see changes in addition to being saved.

Data Cleanup and Preservation

Performing data cleanup prior to migration cannot be overemphasized. Yeh and Walter noted in their qualitative study on successful migration to a new Library Service Platform (LSP) the importance of data cleanup. Of the four libraries used in this study, the one library that did not perform data cleanup had “data-integrity issues after it went live.”¹⁰ Valdosta State, in its effort to clean up data prior to migration designated staff time to address cleanup projects suggested by Ex Libris, as well as those known by the institution. A few of these recommendations included cleaning up duplicate bibliographic records with the same 035 OCLC¹¹ number, and records missing the 035 OCLC number, bound-



Lee & Frost: Manipulating Data and Moving Forward

withs (multiple titles bound together), preserving local data (e.g., donor acknowledgements), correcting location mismatches (locations in the holdings record and locations in the item records not in agreement), deleting obsolete or unused locations, and addressing bibliographic records lacking titles, and/or holdings records.¹² In addition, Valdosta State recognized local practices that would have a negative impact on data integrity in the catalog, such as print and microform formats on a single bibliographic record with the format of choice being microform, or item records lacking barcodes.

With so many data issues that needed to be addressed, prioritization was essential. Preservation of local data, which was also deemed a public relations issue, was at the top of the list. Shared bibliographic environments drastically alter the ownership of bibliographic data. In single catalog bibliographic environments, the institution controls and has ownership over the bibliographic, holdings, and item records. In a shared bibliographic environment, all institutions lose ownership of the bibliographic records but retain full control over holdings and item records. This practice causes problems with local notes as well as name and subject heading authorities. Historically in Georgia, university libraries would keep item specific note fields (e.g., a MARC21 field for Immediate Sources of Acquisitions note for donor information) in the bibliographic record. However, in a shared bibliographic environment, only those institutions providing the “master record” will see this data after migration. In addition to causing confusion to patrons, it is also possible that these notes could be lost when replaced by updated OCLC records. In 2015, a presentation at the University System’s annual GIL User’s Group Meeting (GUGM) on the topic of preserving local data provided the first warning to the USG catalogers of this shared catalog problem. The presentation provided possible solutions to preserving the

data: for example, moving the data from the bibliographic record to the corresponding fields in the holdings record.¹³

Alma also provides options, although limited, for preserving local data using local field extensions. Along with the local call number fields, local note fields, and local subject heading fields, a designated range of MARC21 local fields are recommended to be used in the Institutional Zone (IZ).¹⁴ The Cataloging Implementation Project Team added a suite of local fields to correspond with the most commonly used fields for local information in the USG (e.g., the 700 personal name additional author entry field becomes field 952).¹⁵

The systems librarian at Valdosta generated a report locating every instance of the library’s MARC21 Organization Code recorded in the bibliographic record.¹⁶ The presence of this data allowed the quick identification of those records with known local data needing to be preserved, which helped expedite the cleanup process. In addition, known donors of material with recognition in the general notes were identified and converted. Valdosta used both approaches to record local data in the bibliographic record and holdings records, limiting local access points to local fields and moving non-access point data to the holdings. The caveat to placing data in the holdings record is the inability of Primo, the public search interface, to display the data in these fields. The ability to provide a designated field for reports outweighed this display issue. The Cataloging Implementation Project Team and Primo OPAC Team have approved Primo to be configured for display of this holdings data, but as of this writing this practice has not been implemented. Primo would also need to be configured to index and display local data in the bibliographic record. Regardless, the data has been preserved, which was the goal.

Cataloging at Valdosta, at the request of faculty in the Department of Education at Valdosta



Lee & Frost: Manipulating Data and Moving Forward

State, has added specific awards for children's literature to the Awards Note field. Many of these awards were standard, such as Caldecott and Newbery which are often already present in bibliographic records. However, several of them were from Georgia groups. In order to preserve this useful information, staff converted these to local note fields designated by Ex Libris for migration.

Another top priority was the reconciliation of holdings and item record location mismatches. Valdosta had over 65,000 of these discrepancies and cleaning up this data was not a small task. The systems librarian identified and corrected these problems. In addition to this project, the systems librarian generated other reports from the recommended data cleanup lists. A catalog librarian worked on each of these reports. Before the first deadline for *Vanguards* to have the cleanup project done, Valdosta had touched nearly 70,000 records.

Electronic Resources

Another priority that needed to be dealt with for the first *Vanguard* test phase was electronic resources. Prior to migration, all University System institutions needed some combination of the following to effectively manage electronic content: *Voyager*, *EZProxy* (an OCLC product that provides seamless authentication to electronic resources), *SFX* (an Ex Libris product providing a pathway to locally licensed online content), *EDS* (EBSCO Discovery Service, a searching interface for all library content), *Full Text Finder* (FTF, EBSCO's version of *SFX*), *Serials Solutions*, and/or *CORAL* (electronic resource management systems). Valdosta State added bibliographic records for electronic books, electronic journals, and streaming media into *Voyager* and activated these electronic titles within *Full Text Finder*. In addition to locally licensed content, free content such as archival finding aids, government documents and resources in the institutional repository was also addressed.

A major learning curve for most USG librarians was transitioning from managing electronic content in either the bibliographic or the holdings records to placing all of that information into Alma's portfolios. The Ex Libris definition of a portfolio is:

"...the specific coverage, services, and link information relevant for a particular electronic title. Portfolios may be defined as standalone entities or as part of an electronic collection. Alma enables you to create and update portfolios separately from the workflow used to add local electronic collections."¹⁷

The practice of adding portfolios melds the worlds of both cataloging and Electronic Resource Management (ERM). The creation of portfolios for locally licensed electronic content requires knowledge of cataloging standards, *EZProxy* (used to authenticate allowed users of content), coverage data, embargos (publisher coverage limitations of full-text content, usually with a moving wall [e.g., latest year not online]), and other relevant information in order to not inhibit a patron's ease of access. In order for *Voyager* electronic resources to migrate to portfolios, content need to be identified and added to a required P2E file (print to electronic – an Excel spreadsheet identifying what electronic resources need to be converted to portfolios). *GALILEO* purchased, consortia-owned, electronic content would be managed by *GALILEO's* GIL Support staff. Valdosta, along with other USG institutions, would have to manage its own locally licensed content.

Prior to migration, Valdosta State used 152 locations in *Voyager*. Some of the off-campus satellite libraries, campus satellite libraries or in-house collections were obsolete. Ex Libris suggests libraries "consolidate, rename, and retire locations."¹⁸ Valdosta deleted 78 locations in order to prevent these locations from migrating. An additional six electronic resource locations



Lee & Frost: Manipulating Data and Moving Forward

were changed to suppressed locations prior to migration in order to be assessed for retention after go live. The decision to move these to suppressed locations was two-fold. First, it was cumbersome to delete bibliographic and holdings records out of Voyager when purchase orders are attached. Second, since Alma came with a built in Electronic Resource Management System (ERMS), the extra bibliographic records for electronic content were unnecessary.

Vanguard Testing Environment

Valdosta State managed its acquisitions data in Voyager. Vendor passwords, license agreements, and terms that could not be managed in Voyager were managed in CORAL, and usage statistics in Microsoft Excel. Migration of purchase order histories, funds, and ledgers from the acquisitions module to Alma did not migrate as desired; ledgers for serials migrated unencumbered. The vendor data, which included addresses and contact information, did migrate as expected. Licenses which included terms and agreements, vendor website login information, and usage statistics could not be migrated from CORAL. Valdosta State obtained usage statistics across different publishers and vendors for electronic content using COUNTER, which “provides the Code of Practice that enables publishers and vendors to report usage of their electronic resources in a consistent way.”¹⁹ SUSHI (Standardized Usage Statistics Harvesting Initiative) is the protocol used by COUNTER that is an “automated request and response model for harvesting e-resource usage data.”²⁰ In May 2017, Ex Libris released an update to Alma which allowed libraries to upload COUNTER reports manually or via SUSHI.²¹

Much of the remaining data in the first phase migrated as it should have. Valdosta’s local data, bound-withs, foreign language scripts, and much other data that Ex Libris suggested should be reviewed migrated as expected. As testing was done, documentation was created and

shared amongst the Vanguards as well as larger cataloging community before these institutions had their own data to evaluate. This documentation assisted those institutions in their own data cleanup, something all of them had begun to do. A good example was the documentation for bound-withs, which Alma does differently than Voyager. It was during this stage of evaluation that new data cleanup projects emerged.

Valdosta State, during the process of populating its local electronic content titles onto the P2E file, accidentally omitted some resources (both paid and free content). This caused the electronic content holdings records with URLs to migrate as print holdings with dead links (in Alma) and non-existent links in Primo. Primo does not display electronic links to full text resources when they are recorded in the bibliographic or holdings records. While learning of this mistake, Valdosta’s librarians began discovering just how different electronic content is managed in Alma and Primo. This new knowledge helped make local decisions on how locally licensed and free electronic content was handled, such as government documents, finding aids, electronic dissertations and theses, and other digitized content found in Valdosta’s institutional repository. Alma allows for the creation of Electronic Collections, which in turn provides a means to manage like content in sets. It is easy to create an electronic collection and assign a meaningful name. For example, Georgia Government Publications was the name chosen for full text Georgia documents found in the Georgia Government Publications database in GALILEO. Alma also provides a means for searching on the names assigned to these collections.

Alma’s Community Zone houses electronic content in packages (e.g., EBSCOhost Ebooks). The University System of Georgia strongly urged all USG institutions to move away from individual bibliographic records for electronic content and instead utilize the Community Zone in Alma,



Lee & Frost: Manipulating Data and Moving Forward

which is “Ex Libris maintained resources available to all Alma institutions. Incorporates the Knowledge Base, the Community Catalog, and Global Authority Files.”²² The benefit of utilizing the Community Zone is that institutions no longer have to rely on manually maintaining links to electronic content for licensed packages (e.g., JSTOR). When the Community Zone has updates, they are made for all institutions who have activated this content.

Valdosta State managed electronic content in Voyager with bibliographic and holdings records. This content was also added to the Full Text Finder link resolver which means all electronic content was maintained in at least two separate places. Migrating Voyager electronic content and activating it in Alma’s Community Zone would cause duplication in title results in Primo. During testing, it was also discovered coverage information recorded in the 866 free text holdings field for electronic journals did not migrate into a portfolio upon conversion and would have to be reentered manually. Taking this into consideration, Valdosta State chose to put approximately 432,253 electronic bibliographic records into suppressed locations to be deleted from Alma after migration. Utilizing the Community Zone for managing electronic content reduced the workload significantly. The URL and linking parameters are managed for the institution Ex Libris, which puts the weight of updating URL changes on the managers of the Community Zone Knowledge Base, not on the institution. Valdosta activated the electronic packages from the Community Zone, which quickly repopulated the electronic content in the Institutional Zone and Network Zone.

The Community Zone’s bibliographic records can be incomplete including: missing subtitles, subject headings, authors, and many other fields. These records could also be foreign language records, which are not accepted per policy of the Cataloging Implementation Project

Team. Some institutions and consortia use work-arounds to ensure that their local catalogs use correct bibliographic records but that is not an ideal situation for all institutions. For instance, the University of Minnesota imports records from WorldShare Management System (WMS) and batch loads them into its local catalog. Once in Alma, the records connect to the Community Zone which maintains the URL level information.²³ At Valdosta State University, only one librarian maintains all subscription-based electronic content which includes journals, electronic books, and media in addition to the print journal collection. This makes a workflow of selecting, evaluating, and importing better records for locally licensed content time consuming when electronic content packages contain hundreds or thousands of titles. An added restraint of not being able to update or enhance Community Zone records requires accepting records that are of lesser quality.

In preparation for the next Alma test load, which would include all USG institutions, Valdosta chose to utilize Google Sheets to record cataloged digital assets in the institutional repository as well as random links to resources, and to remove the bibliographic record completely from Voyager. After go live, OCLC records were reimported allowing the catalog to have the most up-to-date OCLC records. Additionally, government publications currently cataloged as composite records (single bibliographic records used for print and electronic resources) would have their formats separated out onto separate bibliographic records. As such, the decision to migrate both federal and Georgia electronic content marked with a review location gave the staff a mechanism to quickly identify these resources and make post-migration decisions of keeping, correcting, recording the material type (e.g., map), or removing the record altogether. The material type coding is similar to the item material types in item records for physical titles.



Legacy Practices and Cleanup before Go Live

Creating holdings for different formats on a composite record was a common practice that most libraries have done in the past and many libraries are still doing. Prior to the new cataloging standard, Resource Description and Access (RDA), microform and/or electronic resources used these records, especially with government documents. Valdosta State chose, at the request of the Reference Department faculty, to attach the current newspaper issues to the microform bibliographic record, removing the General Material Designation (GMD) (e.g., [microform]), while at the same time indicating in OCLC that both records were owned. This choice necessitated a revisit of these bibliographic records to break them out onto their proper record.

In the early days of Voyager, determining what was withdrawn or suppressed was a cumbersome task. Many of those records could not be deleted because purchase orders were attached to them. Several institutions in the University System, including Valdosta State, addressed this issue by adding in all capital letters the words withdrawn, withdrawn/suppressed, suppressed, lost, duplicate record, or missing to the titles to immediately identify these in results lists. Although eventually abandoned when Voyager allowed for the change in background color in results lists to indicate suppressed record, the number of volumes this workflow was applied to was significant. During the second phase of Alma implementation when all University System libraries were performing data validation in the Alma test environment, it was discovered that Valdosta State provided master records for these withdrawn or suppressed titles even though these records were migrated as suppressed. This became a high priority cleanup project as well as a more thorough review of suppressed records. In all, approximately 11,000 bibliographic records were reviewed and either removed, significantly altered to remove all match-point data (e.g., ISBN, titles, and OCLC

numbers), or replaced with new OCLC records to make them current.

Another legacy database issue was corrupt holdings data from the previous DRA (Data Research Associates) to Voyager migration in 2000. This migration created a tripartite data structure of bibliographic, holdings, and item records from the bipartite structure of bibliographic and item records in DRA. Holdings data was created using Valdosta States' Local Data Records (LDR) created in WorldCat showing the volumes owned by the institution. After a failed first attempt at creating this data, a second load provided holdings data patrons could use to identify what volumes were owned, however, all of this data needed revision. Although the task of cleaning these records up occurred, the lack of a full time serials cataloger prevented this cleanup from being completed. For the holdings data cleanup project, volumes held by Valdosta State were recorded in coded data fields rather than free text fields. Holdings were updated to Level 4, or detailed issue level showing all missing issues, rather than Level 3, which generally provided only the first and last issue held regardless of completeness. This decision would have a negative impact upon migration to Alma, as the Primo interface does not harvest data in the coded fields. Primo only populates the free text data fields that correspond to the coded fields. Ex Libris provided a script, which adds holdings data in free text fields, but retains the coded fields, which could be an issue in future data migrations. In addition, the field and sequence numbers (i.e. 1.1, 1.2, 1.3, etc., which force data recorded in the coded fields to be displayed in the desired order) would be mis-recorded in the free text fields.

Changing Behavior (or, Old Habits are Hard to Break and New Habits are Hard to Learn)

The inability to move records in and out of the local catalog goes against years of normal practice. Alma requires additional steps of first



Lee & Frost: Manipulating Data and Moving Forward

checking in the Institutional Zone for the title followed by the Network Zone to see if others in the University System have the title. For many acquisitions and catalog staff, having to look within the Network Zone before importing records from OCLC or vendors adds additional time to workflows. Another disadvantage is that acquisitions staff needed to attach purchase orders to bibliographic records in order to properly invoice materials. Searching in the Network Zone can also become an arduous task especially for electronic content because eISBNs and eISSNs are not always readily available or obvious since vendors can at times provide limited information. Title changes in serials, either print or electronic, can be difficult to manage due these constant changes. The addition of alternate titles access points for minor title changes and variants made it difficult for some Acquisitions staff to identify the correct record. Likewise, the inability to recognize legitimate title changes caused many issues to be added to ceased records.

The concept of cataloging directly in a union catalog is one that many in the University System still find hard to grasp. Rather than making edits to records in the Network Zone, any content deemed of value should be permanently added to the OCLC master record. Keeping bibliographic records current in the Network Zone is achieved with the OCLC's WorldShare Collection Manager, a service offered by OCLC and initiated by GALILEO after go live, that provides updated cataloging records for all University System library holdings. Making permanent enhancements in OCLC would benefit all patrons of WorldCat, reduce the duplication of effort, and is at the heart of working collaboratively.

Collaboration

Throughout the second phase of testing before go live, the Cataloging Implementation Project Team and the Best Practices subgroup of the GIL

Cataloging Functional Committee worked collaboratively to develop policies that would govern the new shared environment. These policies and procedures would be posted on the project teams' wiki as they were developed. In addition, members of the wider cataloging community writing their own procedures based on those policies would share them with the wider USG community. Essential to the dissemination of this content was a centralized place to house cataloging documentation as well as documentation related to all other areas within Alma and Primo. In early March 2017, a public repository was launched to include all of the policies established by the Implementation Project Teams. The Cataloging Section would also provide links to documentation developed by the Best Practices subgroup and other librarians and staff from all USG institutions.²⁴ Dubbed a Training Wiki, it would fulfill one of the recommendations made by the Collaborative Technical Services Group in its report.

The Cataloging Implementation Project Team perceives the Network Zone as the place that would house a mirror master OCLC record. As such, working directly in the Network Zone is limited to a small number of people. Library staff needing assistance deleting Network Zone records, merging two records together, and sometimes replacing records would need to contact one of six librarians that have the privileges to work in the Network Zone. This new procedure has been frustrating to some, but overall, the idea of helping other cataloging staff and receiving assistance from those with the expertise who are willing to help has been successful.

To facilitate this assistance, another service initiated in June of 2017 was LibAnswers. This is a triage system that allows all of the USG institutions to submit help tickets and fulfills another of the recommendations outlined in the Collaborative Technical Services report. This system is monitored by five catalogers representing four



Lee & Frost: Manipulating Data and Moving Forward

institutions within the System: four NACO librarians, one SACO librarian, one CONSER librarian, and one librarian that manages satellite libraries, is a coder, and is in charge of the Cataloging Section of the Training Wiki. Along with these five librarians, an additional eight librarians from the University System, GALILEO, and GIL Support have agreed to answer questions assigned to them by the monitors because of their expertise. Questions can be posted to LibAnswers directly through a web form or via email.

What We'd Do Differently: Training

The need for understanding cataloging rules, and, fundamentally, how the new Library Management System works is more important than ever for Technical Services staff. The cataloging expertise at Valdosta State has varied widely among Acquisitions and Cataloging staff over the years. Most of the institutional knowledge for legacy practices and decisions is gone due to retirements, departures, or changing of positions at the institution. This is especially true for serials cataloging but held true for monographic cataloging as well. In both Acquisitions and Cataloging, some staff can semi-successfully import accurate records from OCLC while others struggle to find or recognize English language records. This is a legacy problem stemmed from a lack of training. Indeed, it was never considered an issue for Acquisitions staff because the catalogers would review and replace any records as needed. Additionally, Valdosta's incorrect acquisitions records would not have a negative impact so long as they were properly reviewed by cataloging. With the migration to Alma, the need for adequate training for the Acquisitions and Cataloging staff became of utmost importance. Acquisitions staff throughout the University System now place orders directly in the Network Zone records by attaching Purchase Orders to existing records, downloading records from OCLC, or if necessary, creating a brief skeletal record. Identifying the correct edition or

language record, or creating a brief record for exactly what is being ordered, is necessary.

Cataloging and Acquisitions staff were provided training and exercises on MARC21 records during the technical services freeze just prior to go live. Utilizing Google Drive, each staff member was given access to a personalized folder within an umbrella folder for Technical Services. Documents that needed to be shared with everyone would be placed in this folder, whereas the individual staff folders allowed them to work on their assignments and exercises. The staff could also add their own materials, such as notes, useful documentation, etc. The trainers would also be able to review progress and make comments to guide them if necessary. During the first of these training sessions, staff were provided instruction in constructing more precise search criteria in OCLC and reviewing OCLC records in results lists especially for language of cataloging agency, as well as specific MARC21 fields in the full record that help them identify and select appropriate records.

A subsequent training session looked at creating brief records in the sandbox when an appropriate record did not exist in OCLC. A variety of samples were used from Amazon, Abebooks, and small press publishers. It would have benefited everyone involved had this training taken place before the freeze, as staff could not use their own data from their own catalog, nor Alma templates for creating brief records developed by the Acquisitions and Cataloging Librarians. Rather, they had to be trained in the sandbox using someone else's data and templates. Despite this drawback, staff gained a lot of experience using the system with these hands-on assignments. It should be noted that the down time during the freeze was recommended as a training period by the Project Implementation Team leadership.²⁵

Future Projects



Lee & Frost: Manipulating Data and Moving Forward

Several University System members encouraged an OCLC reclamation project prior to migration, but timing as well as lack of recognized need by higher administration prevented it from occurring. Four USG member institutions did have reclamation projects recently, the latest in 2016. Not going through the reclamation resulted in over 101,801 multi-match records in the Network Zone.²⁶ Through much discussion by the GIL Support Team, steps were taken to reduce this number during the implementation process. For the final load before go live, approximately 4,610 bibliographic records were multi-matches for the entire USG, with Valdosta having 159 records of that total. Completing the withdrawn and suppressed cleanup projects noted above, VSU's number of multi-matches was greatly reduced with the elimination of records designated as duplicates. Previously called a Database Reclamation, the USG is planning a Data Sync with OCLC to provide the most up-to-date OCLC numbers for the bibliographic records.

Another planned project with the University System will be to contract out with MARCIVE to do a "data wash" of all Network Zone bibliographic records. This project will correct AACR2 headings (e.g., Dept. to Department), remove foreign language subject headings, remove initial articles from access fields, add the new FAST headings (Faceted Application of Subject Terminology) and Library of Congress Genre/Form Terms (LCGFT) for those resources lacking them, and add a LEXILE Framework for Reading and Accelerated Reader notes. For this latter addition, a project to add this data to OCLC will need to be coordinated.

A future project specific to Valdosta will have staff record the Award Notes mentioned previously to the OCLC master record. This would benefit not only Georgians in the University System, but the greater library communities that utilize WorldCat. Additionally, a project to normalize all print serial holdings to the free text

fields, removing the coded fields, will be an ongoing activity. The decision for removing the coded fields is three-fold. First, staff may not remember to update both. Second, in consideration of a future migration, the presence of both versions may cause the data to be displayed twice in the new system. Finally, having two versions, both needing to be updated, would be a very inefficient workflow. Correcting the sequence number will also need to be addressed.

Closing: Letting It Go!

The hardest part of migrating to a shared bibliographic environment is losing control over "your" bibliographic data as well as accepting what others have imported into the shared bibliographic environment. It would be nearly impossible to fix all the insufficient records that are either added incorrectly by another University System institution or that are activated at the consortium level from the Community Zone. Thus, as a consortium, there is a need to strive to uphold the University System's cataloging policies as populated on the Training Wiki. Perfection will not be achieved and inferior quality bibliographic records will be ever present. However, working collaboratively with designated librarians will increase the database integrity and ultimately help the patrons that use this data.

An example of letting go involved the sub-indexing of music resources (adding author-uniform title access points). Many libraries in the University System have catalogers with music backgrounds and they enhanced these records locally but did not put them in the master OCLC record. Valdosta's database was loaded sixth out of twenty-eight institutions. If any of the first five libraries also owned Valdosta's enhanced material but had not invested time in sub-indexing its own bibliographic records, those enhancements were lost in the final load. Likewise, Valdosta was an early adopter of the new cataloging standard Resource Description and Ac-



Lee & Frost: Manipulating Data and Moving Forward

cess (RDA) and was locally enhancing all imported OCLC records to conform to the new standard. All of these RDA enhancements were lost unless Valdosta contributed the master record. Accepting that locally enhanced data will be lost during the merging process is something all of the University System libraries had to come to terms with.

Developing in-house policies and procedures is also governed by the Network Zone policies approved by the Cataloging Implementation Project Team. Ann Miller from the University of Oregon and Chair of the Collaborative Technical Services Team of the Orbis Cascade Alliance spoke at the 2013 Georgia Users Group Meeting (GUGM) and provided an overview of their experience. One of the most important factors of migrating to a shared bibliographic environment is that each library “will need to make decisions which don’t benefit the local institution now but will benefit the consortium as a whole down the road.”²⁷ Cataloging for the University System and not the individual institution is now the new normal.

Whether moving from an Integrated Library System to Integrated Library System or an Integrated Library System to Library Management

System, each migration will require an incredible amount of manpower and planning for data cleanup as well as adjusting to the idiosyncrasies of the new system. Valdosta State University’s transition, through its dedication to data preparation for the transition, proved to be a worthwhile endeavor for its success. The end result was not completely without problems, but as with any migration that is to be expected. Regardless of how prepared institutions are, there is no amount of training or data cleanup that can wholly encompass all of the issues to have a migration without any problems. Valdosta State University is fortunate to have transitioned successfully. In addition, Valdosta State University is fortunate to have multiple librarians involved in the early stages of the process on cataloging and acquisitions committees, as well as in continued leadership roles post-migration. All implementation teams and functional committees have now been merged into the GIL Committees. The Cataloging Committee continues to work collaboratively with other GIL committees to ensure users have access to the resources the University System and individual intuitions provide.

¹ University System of Georgia, “USG facts,” accessed August 19, 2017, <http://www.usg.edu/news/usgfacts>.

² University System of Georgia, GALILEO, Georgia’s Virtual Library for the 21st Century,” accessed August 19, 2017, https://about.galileo.usg.edu/docs/website_docs/GALILEO_factsheet_082115.pdf.

³ Merryll S. Penson, e-mail to Regents Academic Committee on Libraries, August 26, 2013; *Next Generation Library System Planning Kick-off*, September 13, 2013, Middle Georgia State College, Macon, Georgia.

⁴ GALILEO Interconnected Libraries, “About GIL: Overview,” accessed August 26, 2017, <http://gil.usg.edu/>.

⁵ Bill Clayton, “Characteristics of a Next Generation Integrated Library System,” (presentation, Middle Georgia State College, Macon, GA, September 13, 2013); MARC21, or MACHINE-Readable Cataloging is a data format used by machines to exchange, use, and interpret bibliographic data. Dublic Core (DC) is a data schema used to describe resources with greater interoperability between data exchange platforms. The Georgia Government Publications database uses



the Dublin Core schema. XML, or eXtensible Markup Language stores data in a plain text format with greater exchange capabilities across data platforms.

⁶ Cathy Jeffrey, e-mail to Elijah Scott, Merryll Penson, RACL Executive Committee, and Collaborative Technical Services, February 23, 2015.

⁷ Collaborative Technical Services Team, "Collaboration in the University System of Georgia Libraries: Report to the Regents Academic Committee on Libraries" (unpublished manuscript, February 19, 2015), Microsoft Word file.

⁸ As of this writing, The University of Georgia is the only CONSER library in Georgia. The NACO Georgia Funnel is relatively new having been formed in 2014. Some of those that trained in NACO have since left the University System; University of Georgia is also the only Series and Music NACO contributors.

⁹ Ex Libris, "Alma Community Zone Intro and Task List," accessed August 21, 2017, https://knowledge.exlibris-group.com/Alma/Training/Extended_Training/Alma_Community_Zone_Intro_and_Task_List.

¹⁰ Shea-Tinn Yeh and Zhiping Walter, "Critical Success Factors for Integrated Library System Implementation in Academic Libraries: A Qualitative Study," *Information Technology and Libraries* 35, no.3 (September 2016): 25, doi:10.6017/ital.v35i2.9255.

¹¹ OCLC is currently known as Online Computer Library Center and is the organization that produces and maintains WorldCat. This is where master bibliographic records are housed. The 035 OCLC number is an accession number equivalent to a file name.

¹² GALILEO Interconnected Libraries, "G3 Alma Implementation Project - Data Cleanup Tasks"

(unpublished manuscript, October 27, 2015), Google sheets.

¹³ Guy Frost and Jessica Lee, "RDA and Items: Preserving Local Data in a Shared Catalog" (presentation, 2015 Georgia Users Group Meeting, Macon, GA, May 14, 2015).

¹⁴ Ex Libris, "Alma Migration Considerations for Consortia," in *Ex Libris Knowledge Center*, under "Local Extensions (MARC)," accessed July 12, 2017, https://knowledge.exlibris-group.com/Alma/Implementation_and_Migration/Migration_Guides/Alma_Migration_Considerations_for_Consortia.

¹⁵ GIL Alma & Primo Training. Cataloging, "USG Cataloging Policies," accessed July 12, 2017, <https://sites.google.com/view/g3almatraining/cataloging/usg-policies>; Two policies are provided: *Local Policies Migration Mapping* and *Local Field Extension Definitions*; the base for these locals fields are taken from *In the Zone* a presentation by Lori Robare, University of Oregon of Orbis Cascade Alliance, accessed July 12, 2017, www.orbiscascade.org/file_viewer.php?id=2015.

¹⁶ The MARC21 Organizational code is an alphabetic code representing an institution. It is frequently used in shared bibliographic environments to distinguish data that only pertains to that institution.

¹⁷ Ex Libris, "Managing Portfolio Collections," *Ex Libris Knowledge Center*, accessed July 12, 2017, [https://knowledge.exlibris-group.com/Alma/Product_Documentation/Alma_Online_Help_\(English\)/Resource_Management/050Inventory/020Managing_Electronic_Resources#Managing_Local_Portfolios](https://knowledge.exlibris-group.com/Alma/Product_Documentation/Alma_Online_Help_(English)/Resource_Management/050Inventory/020Managing_Electronic_Resources#Managing_Local_Portfolios).

¹⁸ GALILEO Interconnected Libraries, "G3 Alma Implementation Project - Data Cleanup Tasks" (unpublished manuscript, last modified May 1, 2017), Google sheets.



Lee & Frost: Manipulating Data and Moving Forward

¹⁹ Project COUNTER, "About COUNTER," accessed August 21, 2017, <https://www.projectcounter.org/about/>.

²⁰ National Information Standards Organization (NISO), "Standardized Usage Statistics Harvesting Initiative (SUSHI)," accessed August 21, 2017, <http://www.niso.org/workrooms/sushi/>

²¹ Ex Libris, "Acquisitions - February 2017 Enhancement," in *Ex Libris Knowledge Center*, accessed August 21, 2017, https://knowledge.exlibrisgroup.com/Alma/Release_Notes/0099_2017/110_February_2017/Alma_February_2017_Release_Notes/01Acquisitions_-_February_2017_Enhancement

²² Ex Libris, "Alma Glossary," in *Ex Libris Knowledge Center*, accessed July 11, 2017, [https://knowledge.exlibrisgroup.com/Alma/Product_Documentation/Alma_Online_Help_\(English\)/Alma_Glossary](https://knowledge.exlibrisgroup.com/Alma/Product_Documentation/Alma_Online_Help_(English)/Alma_Glossary).

²³ Stacie Traill and Thompson, Kelly, "Integrating Alma and OCLC Worldshare Collection Manager for ebook management," (presentation,

Ex Libris Users of North America (ELUNA), Schaumburg, IL, May 10-12, 2017).

²⁴ GALILEO Interconnected Libraries, GALILEO Interconnected Libraries (GIL) Documentation, accessed August 19, 2017, <https://sites.google.com/view/g3almatraining/getting-started>.

²⁵ GALILEO Interconnected Libraries, "Project timeline" (unpublished manuscript, last modified June 27, 2017), Google sheets.

²⁶ A multi-match record is a bibliographic record loaded in the catalog that matches on two or more records already residing in the database. Usually, one with the current OCLC number and one or more with obsolete OCLC numbers. The system not knowing which record to match on rejects it for the Network Zone and loads it only in the Institutional Zone.

²⁷ Ann E. Miller, "Orbis Cascade Alliance - All for One and One for All: Planning for a Consortial Next Generation ILS," (presentation, Middle Georgia State College, Macon, GA, May 16, 2013).

