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Old Wine in New Bottles: Repurposing MARC Records for Electronic Databases

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achievable through training, communication and IT support. Planners came to realize that the unit will be increasingly dependent on project work and added items involving learning, flexibility, and collaboration to the list. Action items fell into seven categories:

- Improving workflow between the CTS units and other departments
- Creating a CTS-wide program of training and cross-training
- Creating single point for CTS documentation
- Lobbying for improved technology and software
- Re-thinking authorities, non-Roman alphabet and video cataloging
- Redesigning work spaces to improve flow and communication
- Collaborating with others on metadata work

It has been two months since the unit's Kaizen Blitz. A presentation to the Libraries' executive officers has been made and work on initiatives involving inter-unit communication, non-MARC metadata, and redesigned work space are under way. While a traditional Lean process review might not have seemed suited to a unit such as Complex Cataloging, the initial assessment of the unit head and the

Libraries' executive staff is that the review has been productive and will do much to position the unit for the future.

Conclusion

We believe that both Lean reviews were successful. The action items generated by the reviews lay the foundation for continued bottom-up planning and ongoing collaboration within CTS. One of the tenets of the Lean method is that the review of workflows and priorities becomes permanent and ongoing. Continuous review enables an organization to look ahead and ensures our flexibility in a changing environment that is becoming increasingly project focused. A second tenet of Lean is a focus on customer needs, an outlook necessary if CTS is to remain relevant within the library. We believe that the combination of bottom-up planning, ongoing review, and a strong customer-focus are the keys to success in a time of transformational change.

Suggested Reading

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Old Wine in New Bottles: Repurposing MARC Records for Electronic Databases

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and **Gwen Gregory** (Head of Bibliographic Services, Tutt Library, Colorado College) <ggregory@ColoradoCollege.edu>



In exposing access to licensed electronic databases, **Colorado College's Tutt Library** has historically opted to provide links to these databases in two general areas: as part of our online Web presence and within the online library catalog. The work to describe these databases and maintain their links was done separately for each of these two platforms, though by the same library department. In investigating methods to update the library's overall Web presence and improve maintenance workflows, we specifically targeted the process of maintaining database links on the Website.

Here at **Colorado College**, we started out years ago with a Webpage containing an alphabetic list of the databases to which we provided access. In the beginning, it was a relatively short and simple list of a dozen or so titles. Over time, the list grew and grew. We added some titles that were available free of charge. We added extra entries for titles that were known by several names, such as

Lexis/Nexis Academic Universe (listed under L and under A). We also created a variety of special subject pages where only selected databases were listed; there were eventually several dozen of these. We continued to also fully catalog the individual databases in our online library system.

A cataloging staff member was responsible for keeping the Webpages up to date. This became an increasingly complex task as the number of Webpages and databases both increased. When we purchased access to a new database it might be added to as many as a dozen separate subject pages in addition to the main alphabetical list page. When a URL or a database description changed, we had to search out all these spots to change it. This caused more work and also increased the possibility of missing a step and not providing the correct link on any given page. Another cataloging staffer cataloged the titles into our online catalog.

Tutt Library certainly has not been the only

library to consider the problem of efficiently and effectively maintaining database links on the Web. Some libraries have chosen to build a database of databases, that is, a separate local database of database links and other information that is automatically and dynamically used to populate corresponding Webpages. The advantage here is that the database information can then be maintained in one place, in this database of databases, instead of manually across a number of static pages. When a single entry in this database of databases is updated, the change automatically propagates across all the Webpages that this system is responsible for generating. An example of this method can be seen in action at the **Emory University Woodruff Library** (<http://web.library.emory.edu/databases/>) where the data in the system is managed by their Research & Instruction Services department.

Another option is to provide access to these licensed databases via a federated searching or

continued on page 54

metasearch application. Maintaining updated lists of database links is arguably just one part of the larger problem of helping users select which of the library's various licensed databases is most appropriate for their search. Federated search and metasearch applications run around this problem by enabling users to search a number of databases all at once instead of individually. Some of these applications also seem to organize, and allow centralized updating of database information, which would help address the original problem of maintaining database links. **Tutt Library** did not have a federated search or metasearch application, however, and we had no immediate plans to implement one, so this possible solution was ruled out.

The advantages of constructing a system to dynamically generate these database pages seemed obvious. It would allow a staff member to update, for example, a changed URL in just one record instead of having to search for that URL and edit it across many individual static pages. And, though this had not been a major issue, database information across the entire Website could not help but become presented in a more consistent manner, since all the links and descriptions would be derived from the same store of information.

As we considered the notion of building a separate, local database to house this database information, there was also the realization that the library was already supporting a mature system designed to house and help maintain similar kinds of information. This was the integrated library system, locally known as **TIGER**, running on **III Millennium** software. Like many libraries, **Tutt Library** was already storing a great deal of access and descriptive information in the ILS, in the form of MARC bibliographic records. The ILS also had familiar client software for adding and editing this metadata. Additionally, we had already cataloged the vast majority of our licensed electronic databases in this ILS that we were then separately listing on the Website. To use the bibliographic records already in **TIGER** as the basis for dynamically generating database pages for the library's Web presence was definitely an intriguing prospect, and given our small staff and limited resources, perhaps even a wiser decision.

To create a separate local database of databases would have reduced the places to update database information from many down to two: the ILS and the new database of databases. To further reduce the list of places to update this information down to one was even more appealing. The decision was made to create dynamic database pages that would be automatically populated with data from MARC records in **TIGER**.

This new process requires that we add more information to the MARC record as a database is cataloged. Some of this information is not "standard" cataloging, but falls into the realm of local practices. We tried to use fields within the MARC record that would not cause prob-

against the grain people profile

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PROFESSIONAL CAREER AND ACTIVITIES: Currently Systems Librarian at Colorado College Tutt Library.

HOW/WHERE DO I SEE THE INDUSTRY IN FIVE YEARS: Further pulling together of information from various library systems. This project to pull data out of our ILS and expose it via a specific Webpage format is hopefully just a first baby step. 🐛

lems with standards or other elements of our catalog database. Specifically, we made these changes in the records:

1. Edit 85640: |zView online|uhttp://... proxy the 856 (references the proper URL for access to the title)
2. Add 946: ccweb (used for sorting out which records to use to create the list of databases)
3. Add 590 with description supplied by ordering librarian. Add Coverage: at end of Description (provides summary and dates of coverage as an annotation on the Webpages)
4. If title should appear different on database pages from 245, Add 2461 |iColorado College:|aOther title (provides title cross-references)
5. Add 690 with localsubject so title will appear on corresponding subject database pages. (used to generate subject Webpages)

The department previously had one staff member catalog the databases on **OCLC** and add the records to our online system and another person add links to our Webpages. One person now does the cataloging, adding the special fields which are used by scripts to create the Webpages, so we are spared all the work of making the pages separately.

Though we would be making use of the intellectual work contained within the cataloging records to populate our new dynamic database pages, we still had to build mechanisms for effectively transferring and displaying this information. For these tasks, we chiefly made use of **MySQL** for the database component and **PHP** for the necessary programming and to dynamically generate the Webpages. **MySQL** and **PHP** are both Open Source tools readily available on many Web servers, including the one used for the library's Website.

Though the bibliographic records for the databases would be stored in the database of the ILS, it was determined that repeatedly hitting our catalog server to look up and read those individual records would be unwise. Instead we opted to select all the ccweb database records

using **Millennium's Create List** function and export specific pieces of their bibliographic records in a tab-delimited text file, to be imported into a separate **MySQL** database. The dynamic database pages would actually be driven by data stored in this **MySQL** database, instead of directly from data stored in **TIGER**.

The necessary **MySQL** tables were relatively straightforward, with one table containing the bulk of the database records (including descriptive information and the URLs), another table indexing the multiple titles (main and alternate) associated with each record, and another table indexing the multiple local subject category assignments that might be assigned to each record.

The necessary **PHP** programming fell into two groups. There was one set of scripts designed to take the tab-delimited export from **TIGER**, parse the various MARC fields and import the results into the **MySQL** tables. There was another set of scripts designed to take the data in the **MySQL** tables and generate Webpages with the same look and feel and intent as the existing database pages. That is to say, this second set of **PHP** scripts needed to be able to display database information in the same existing ways: as a standard A-Z list where all of the links were proxied for off-campus access, as individual subject pages listing only the databases assigned to a particular local subject heading, and as an A-Z list where all of the links were direct to the database and none of the links were proxied. Because of all the work done in cataloging to organize the data fields, the programming to import the data and then display it turned out to be very straightforward.

The new database pages have only been live for a few weeks at the time of this writing, but there were a few lessons learned in the ramp up to implementation. The new database subject pages were not organized identically to the previous database subject pages. Namely, the new pages list their databases in alphabetical order, whereas in some of the previous database subject pages, the liaison librarians had manually organized databases in a different fashion.

continued on page 56

Old Wine in New Bottles ...
from page 54

As these new database pages had launched in a sort of interim period before we were going to launch the rest of the library's redesigned Web presence, we sought both a way to address this problem in the interim and a way to address this problem in the long-term. For the long-term, we decided that introducing lengthier subject guides that would help the liaison librarians organize and introduce all types of resources for a subject area, not just databases, would be ideal. In those subject guides, the librarian would be able to organize these resources in any order they liked. In the separate database subject pages, the listing would remain alphabetical. For the interim, with the lengthier subject guides not yet developed, for those librarians that preferred it, the **PHP** scripts for displaying the new pages were edited to acknowledge certain requests that should be treated as exceptions. For requests to list the databases for most subjects, the scripts would display its new version of the databases subject page. For some few exceptions, the scripts would know to redirect to the previous static databases subject page instead. There proved to only be three database subject pages that needed to be redirected in this fashion.

Also, as we considered inserting these dynamically generated database links into other types of Webpages, we realized that the links might have to acknowledge a certain history. For example, a liaison librarian might make a specific reference to a database in a course guide one year, and include the dynamic code to insert the link and description of the database into their course guide, but the next year, this might be a database to which the library no longer subscribes. Under the original programming, the link and description of the database would have just disappeared from the course guide, leaving perhaps references to the database elsewhere in the course guide, but no actual indication that there was once a link to a database there. This was not so much an issue for currently updated guides, where the librarian might just select another database to share, but for older unused guides that would be archived seemingly incomplete. To address this, we decided to edit the import scripts to

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Gwen Gregory

BORN & LIVED: Albuquerque, NM. Lived in Colorado, NM, and Arizona. But now I'm moving to Chicago at the beginning of October to be associate director for technical services and systems at **John Marshall Law School Library**.

FAMILY: Husband and cats.

EDUCATION: BA in anthropology, **University of New Mexico**. MLS, **University of AZ**. Master of Public Administration, **New Mexico State University**.

FIRST JOB: In the Mexican restaurant of the student union in college. Spent a lot of time making tortilla chips at 7 am.

PROFESSIONAL CAREER AND ACTIVITIES: Compiled and edited the book *The Successful Academic Librarian* (*Information Today*, 2005). Enjoy sharing information with other librarians. Make technical services work for everyone.

IN MY SPARE TIME I LIKE TO: Read, garden, do crafts, walk, play with my pets.

PHILOSOPHY: I want my work to be meaningful to others and to the world.

MOST MEANINGFUL CAREER ACHIEVEMENT: My book.

HOW/WHERE DO I SEE THE INDUSTRY IN FIVE YEARS: Libraries and the concept of libraries are powerful. The library as a place is becoming even more important. Libraries will continue to be the experts at finding and providing information. 🌱

look out for databases that had appeared in previous **TIGER** export but now did not. Instead of deleting those, the scripts would now mark those databases as no longer available with a date stamp. On the display end of things, if a librarian had inserted code to specifically refer to this particular no longer available database, some database information would still appear in their course guide, but without a link and textually marked to indicate the database was no longer available.

In cataloging we have learned several things from this project. First of all, we can use our MARC records for things other than the integrated library system. Rather than creating another database to populate our Webpage lists, we can use the same records we already have.

We have put a great deal of effort into these MARC records, including making the URLs work properly. We can avoid duplicating this effort by using this single source to create our database pages as well as our OPAC records. Second, it's fine to use some of the fields in the MARC record in new ways, especially the locally defined fields such as 590. This can make catalogers nervous, but we have found that it works. Of course, careful investigation of what the fields may be used for and testing of how they display and index in the catalog is needed. Finally, the benefit of actually reducing the workload necessary for handling electronic resources can override the reluctance to change our procedures. We were quite happy to streamline and simplify the process. 🌱

Rumors
from page 46

and we will have a conversation about it from 2-2:50 on Thursday of the Conference. If you can't make it to that discussion, there will be many other opportunities for you to get involved. Here is some preliminary information. **Cris Ferguson** (the new mother) <cris.ferguson@furman.edu> will be the **editor of the online ATG**. Yours truly will be heavily involved as well (are you surprised?). Our Webmaster is **David Lyle** <david@katina.info> and he is using **Drupal** software to mount

the database. Others who have been involved in developing the **online ATG** are **Greg Tananbaum** <gtananbaum@gmail.com>, **John Cox** <john.e.cox@btinternet.com>, **Toni Nix** <justwrite@lowcountry.com>, **Kristen DeVoe** <kedevoe24@yahoo.com>, and all the current editors of the print **ATG**. Approaches will be discussed during the Conference and we welcome your comments always. We will make **ATG** a community project for all of us!
www.against-the-grain.com

Speaking of **Greg** (above), what a pistol! He has joined the **SPARC Consulting Group** which was formed in 2002 to provide business,

financial, and strategic consulting services to universities and university presses, learned societies, and other academic and non-profit organizations. **Greg** is best known for his leadership as recent President of the **Berkeley Electronic Press**, and also we at **ATG** know him for his regular, always timely and informative, columns in **ATG**! In his earlier life, **Greg** was Director of **EndNote**. In case you didn't know, **Greg** has a Master's Degree from the **London School of Economics** and a B.A. from **Yale**.
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continued on page 65