



Smart LibrariesTM

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Smarter Libraries Through Technology

by Marshall Breeding

Maintaining a Balance

I find that one of the key challenges in covering the field of library technology is finding the right balance and perspective in both the selection and the development of the stories that you write. It's important to highlight emerging trends, especially when they have some potential to make a broad impact, but it's just as important to place any new developments in the context of the routine activities of the broader industry.



In this current phase of the evolution of the library automation industry, for example, we're seeing a lot of activity involving open source ILS products. For the last five years, an increasing number of libraries have adopted the open source approach, and there have been many interesting stories as this relatively new niche of the industry has unfolded. Still, this niche remains small relative to the entirety of the library automation industry. The library automation marketplace totals

over \$500 million in annual revenue per year; I estimate the open source portion of that at no more than \$5 to \$7 million.

It's typical that companies in an emerging sector of the market will trumpet every success. I regularly receive press releases for each new contract signed and for each library that successfully implements an open source ILS. It's great to receive that information and it provides important data that helps me document the trajectory of new trends. The volume of activity in press announcements, blog postings, and Twitter tweets or re-tweets can give the impression that open source has taken over the field. Yet in reality it remains a relatively small (but growing) competitor to the proprietary products that dominate the library automation economy.

It's not that I want less information from companies on new developments, but rather that it would be helpful to have more data on the routine business activities that comprise the mainstream of the industry. The established companies routinely make large deals that often get much less attention. The ongoing success of the companies offering proprietary library automation products do not necessarily spark a lot of attention in the press, even though they comprise the majority of the business activity.

As I select the events and issues to cover in this newsletter, I am continually aware of the need to frame the emerging and new developments into a broader context.

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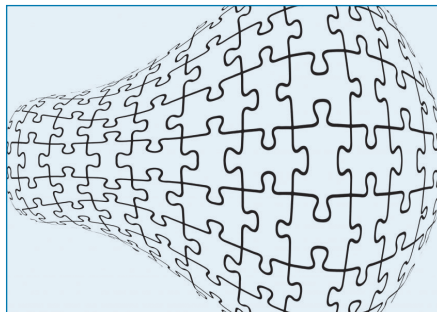
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Reshaping the Open Source ILS Sector

Several developments transpired over recent weeks related to the open source Koha ILS that reshape the niche of the library automation industry. Through its acquisition of LibLime, PTFS emerges as the dominant commercial support company for Koha. Equinox Software represents new competition as it expands its scope of interest beyond the Evergreen ILS to Koha. ByWater Solutions, though a small firm, continues to attract clients for Koha services and completed its first year of business. The rift between LibLime and external Koha developers continues. Those involved with Koha outside of LibLime recently established a separate Web presence.

LibLime initiated the open source ILS support niche of the library automation industry in the US when it was founded in January 2005 by Joshua Ferraro, who had been involved with the implementation of Koha at the Nelsonville Public Library in Athens County, OH. Building on the success of this first open source ILS deployment in the US, LibLime saw the opportunity to provide installation, development, and support services to other libraries interested in moving away from proprietary ILS products. The open source ILS alternative resonated with many libraries; by the end of 2008 LibLime had signed contracts with 108 library organizations, spanning over 500 library facilities, including large implementations such as the WALDO consortium in New York and the Northeast Kansas Library System. An important component of LibLime's business involved sponsored development, where libraries would contract for specific enhancements that would benefit other libraries using Koha. Many of LibLime's contracts involved significant development projects; WALDO alone sponsored over \$815,000 in enhancements specifically needed by academic libraries.

In the course of its business history, LibLime gained ownership of many of the key assets related to the Koha software



project. In February 2007, LibLime purchased the Koha division of Katipo Communications, the consulting firm that created the initial version of Koha for the Horowhenua Library Trust in New Zealand. This deal included the koha.org domain, the Koha trademark in the US, and copyrights to the code created by Katipo. LibLime also owned the copyrights associated with all the code and documentation created by its own employees and contractors. LibLime was not only the dominant support firm for Koha, but it also came to control much of the collateral intellectual property.

PTFS, a company involved in library technology since 1995, saw Koha as a potential extension of its business activities. PTFS' flagship product, ArchivalWare, provided a platform for the management and access of digital collections. The company's strategic vision included the creation of a Digital Library System that would combine ArchivalWare with an open source ILS to form a comprehensive platform for managing print and electronic collections. Initially, PTFS explored both Koha and Evergreen, announcing in June 2008 that it would provide services to libraries for either product. PTFS ultimately focused on Koha as its ILS component and by September 2008 they joined the ranks of companies offering support services. Over the next 15 months, about a dozen libraries representing 140 facilities had chosen PTFS for Koha support services. As a larger company of 130 personnel, PTFS entered the Koha support arena

with significant resources and business experience.

ByWater Solutions was formed in April 2009 as a small consulting company providing services to libraries for Koha implementation and support. This company recently marked its first anniversary. Though a small firm with only 4 employees, it continues to demonstrate momentum in attracting new clients. In March 2010, ByWater named Ian Walls, former Systems Integration Librarian at the New York University Health Sciences Library as Lead Development Specialist.

Equinox Software, established in 2007 to support the open source Evergreen ILS, announced in February 2010 that it would begin offering services for Koha as well, including hosting, support, and development. Galen Charleton, Equinox VP of Data Services, left LibLime in July 2009 and continues his role as Release Manager for the pending 3.2 release of Koha. Equinox brings a general knowledge of the open source support business as well as specific expertise with Koha as it expands into this niche. As of this writing, Equinox had not announced new library clients contracting for Koha.

LibLime stepped into some controversy in September 2009 when it launched LibLime Enterprise Koha, a premium version of Koha, hosted on the Amazon EC2 cloud platform, which included features and modules not available on the public version of the software. While the GNU license that governs Koha allows for these private enhancements on company-hosted servers, many among the broader group of individuals and companies involved with Koha reacted negatively to this approach. LibLime's software development and that outside of the company proceeded separately, resulting in a fork of the Koha software into multiple distinct versions. A more detailed accounting of the events surrounding LLEK and the subsequent fallout was covered in the November 2009 issue of SLN, "LibLime launches LibLime

Enterprise Koha, or, Rift splits the Koha development community.”

A recent outcome of the rift between LibLime and external developers involved the creation of a new Web site, apart from the LibLime-controlled koha.org. This site, koha-community.org, was quickly established through the efforts of a broad group of organizations involved in supporting or using Koha. This site now hosts the current non-LibLime distributions of Koha, documentation, news, and general information about this open source ILS.

PTFS entered the Koha support arena at full force through the acquisition of LibLime. This announcement was one of the major news events coming out of the ALA Midwinter Meeting in Boston in January 2010. Yet negotiations for the terms of the acquisition faltered and on Feb 11, 2010, announcements stated that the acquisition was cancelled. Interest shortly revived, and on March 15, 2010, PTFS announced that it had completed the acquisition of LibLime, in time for the annual Public Library Association conference in Portland, Oregon.

The LibLime name will continue; PTFS will integrate its own Koha operations with what it acquired and will form the LibLime Division of PTFS, headed

by Patrick Jones as Executive Director. PTFS recently hired Amy De Groff as its LibLime Transition Manager, arriving from the Howard County Library in Maryland, where she served as the Director for Information Technology. The aggregate customer base of Koha libraries now under PTFS totals 120 contracts involving 640 library facilities.

The events that have transpired over the last year have reshaped the open source ILS arena in the US. The prior clarity of one dominant company for Evergreen and another for Koha has been transformed into a more complex landscape. This corner of the library automation industry now sees more intense competition. This segment of the library automation economy represents a fairly small piece of the revenue pie, which now has several companies competing for a slice. The companies involved face the challenges of finding sustainable business models in a competitive arena with a finite number of contract opportunities, with lower contract values than may apply in the proprietary ILS scene.

The settling out of this niche also

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takes its toll on libraries. While many or most have found satisfactory solutions, others have experienced more difficult paths. Howard County Library, for example, announced its commitment to replace its SirsiDynix Horizon ILS with Koha in October 2007. Since that time, the library has continued to operate Horizon and in 2010 signed with Polaris. In Indiana, many small public libraries left Unicorn in 2008 to join the Koha-based Shared Catalog of Indiana Online with support from LibLime. In 2009, support shifted to PTFS; several of these libraries have since joined Evergreen Indiana, a growing consortium based on the Evergreen ILS. In normal circumstances, libraries retain an ILS for a decade or longer. As the open source ILS arena shifts into this new phase, libraries will benefit as some of the past uncertainties level out into a more stable business climate.

—Marshall Breeding

OCLC Reshapes its Content Strategy as it Expands WorldCat Local Discovery

A series of announcements from OCLC reveal a set of major changes in the organization's strategies for delivering and indexing content. In broad terms, OCLC will focus more on expanding WorldCat Local as a discovery platform that indexes a broad range of library content and will phase out its role in hosting and licensing subscriptions to commercial content. Those that are involved with the procurement of e-content products, especially in libraries that subscribe to FirstSearch products, will need to pay close attention to the specific resources changing hands. In terms of the evolution of the discovery services genre, these moves represent a fairly massive expansion of WorldCat Local in this increasingly competitive product category.

One set of announcements concerns OCLC's exit as a reseller of commercial content products. It has sold NetLibrary to EBSCO, and made arrangements with H.W. Wilson to discontinue offering its products through FirstSearch.

OCLC entered the publishing e-book content arena when it purchased NetLibrary out of bankruptcy in January of 2002. NetLibrary was launched in March 1999 by Tim Schiewe, who was one of the early players in the eBook arena for libraries, specializing in producing electronic versions of scholarly and professional books. Following this transaction, EBSCO takes ownership of NetLibrary's Boulder, Colorado-based operations, as well as its delivery platform and inventory of eBooks.

NetLibrary eBooks will continue to be indexed on WorldCat Local and discoverable to mutual subscribers.*

OCLC's FirstSearch will phase out resources resold from commercial publishers and retaining library-owned databases. The current FirstSearch platform will gradually transition to WorldCat.org. OCLC introduced FirstSearch in 1991 as an online reference service, prior to the emergence of the Web and when many databases were delivered to libraries on CD-ROM for use on local computers or networks. The overall landscape has changed radically since that time, with a variety of robust commercial products available. The need for OCLC as a reseller of these content products has diminished and its current priorities involve focusing resources on enhancing WorldCat, in terms of content and functionality.

One aspect of this transition involves phasing out databases from H.W. Wilson from FirstSearch. Libraries that have subscribed to Wilson databases through FirstSearch will be migrated to access through Wilson's own WilsonWeb platform. This shift will be implemented over the next 18 months. Much of the content in the Wilson databases will continue to be indexed by WorldCat Local and WorldCat.org.

As OCLC moves away from hosting and reselling commercial databases, it significantly extends the volume of content indexed through WorldCat.org and WorldCat Local. A new agreement with Gale results in the expansion of WorldCat Local by about 100 million records leading to full-text articles through the indexing of the metadata associated with Academic OneFile and General OneFile. This arrangement brings the volume of content indexed by WorldCat Local to over 420 million articles, loaded from over 100 databases in addition to the 170 million items cataloged directly through WorldCat.

Each of these moves guides the respective organizations toward the direction of their core strategic business. EBSCO gains NetLibrary to extend its portfolio of content products; H.W. Wilson loses OCLC as a reseller, but gains direct access to a potential pool of new subscribers; OCLC gains access to the metadata of Gale's flagship databases to populate WorldCat Local.

In the current discovery services arena, much of the competition centers on the ability to attract partners willing to provide their content for indexing. The main competitors in this arena include Serials Solutions' Summon, Primo Central from Ex Libris, EBSCO Discovery Service, and OCLC's WorldCat Local. Each of these products offers different search and interface features, but a critical distinguishing characteristic involves subsuming a broader range of content than the competition. The number of articles represented in the central index represents just one measure of the reach of a discovery product. Other factors include whether the index includes the full text of the article or only citation data. Full text indexing provides much more powerful retrieval capabilities, though it also introduces some complexities. As competitors mention the number of articles indexed, it's also important to consider whether the total represents unique articles, excluding duplications caused by coverage overlap of the products indexed. Each of these products aims to address as much of the books, articles, and other content represented in a library's collection as possible.

—Marshall Breeding

**Note: "Mutual subscribers" has come to be a key concept in the web-scale discovery arena. A library may select among different discovery products and naturally subscribes to many different content offerings. As the provider of a content product partners with a discovery service, in most cases the intent is for the indexing to appear only to users whose library operates that discovery service and that also subscribes to the content product. It would confuse users if items appeared in the search results that were not available to them. As the implementation of a discovery interface is configured for a library, it must be configured with the profile of the library's e-content subscriptions so that items appear in search results only if users have access to them. When a content provider provides its data to a discovery service, it does not mean that libraries with that discovery service get the product itself without subscribing, but rather provides a more efficient way to allow users to discover and use that content.*

Linda Hall Library Selects Voyager

While we don't often write about individual ILS sales, the selection of Voyager from Ex Libris by the Linda Hall Library of Science, Engineering and Technology stands out. This sale reinforces Ex Libris' ongoing development and support for this ILS product, which was acquired through its 2006 acquisition of Endeavor Information Systems. Although Aleph clearly stands as Ex Libris flagship ILS, the company has continued to support and enhance Voyager. With some of the most prestigious research libraries in the United States continuing to rely on

Voyager, Ex Libris has strong business interests in maintaining its viability. Thirty-five out of the 124 ARL member libraries, including the Library of Congress, currently operate the Voyager ILS. The selection of Voyager by this prestigious research library seems to be a mark of confidence that product that will endure until Ex Libris completes its URM, which it has positioned as the eventual successor for both Aleph and Voyager.

—Marshall Breeding

SkyRiver Update

The December 2009 issue of *Smart Libraries Newsletter* covered the launch of SkyRiver, a new company providing bibliographic services in competition with OCLC. Michigan State University, as noted in the article, partnered with the company as its first customer, and switched its production cataloging operations in November of 2009.

One premise of SkyRiver involves the option to continue to use OCLC or other resource sharing and interlibrary loan services even as a library adopts SkyRiver as its primary cataloging utility. Bibliographic records created through SkyRiver could be batch loaded into OCLC with holdings codes updated to maintain an up-to-date representation of the library's collection needed to fully participate as an interlibrary

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loan lender. MSU was prepared to maintain its annual ILL subscription fees and pay a reasonable amount for the batch loading records with holdings, referencing a published fee of \$0.23 per record. OCLC, however, saw the process as a more complex service, requiring a new kind of subscription fee that resulted in a net charge as much as \$2.85 per record,

cancelling out any savings in pursuing alternative cataloging services. This controversy continues to simmer pending any possible compromise.

In the meantime, SkyRiver continues to attract some new customers. In March 2010 Scottsdale Public Library announced that it has switched its cataloging operations to SkyRiver. West Bloomfield Public Library shifted to SkyRiver in January 2010. Two large library networks, Greater Western Library Alliance and Midwest Collaborative for Library Services now partner with SkyRiver to make the service available to their members, though no specific sales have yet been announced as a result.

—Marshall Breeding

WordPress for Library 2.0 and Beyond: Other Uses and Future Possibilities

This is the final article in this three-part series.



WordPress is truly a content management system. It can manage multiple types of content and can be used in ways that go far beyond its original intention. As we mentioned in Part 2 of this series, using plug-ins is one way to do this. Now we will discuss using themes to manage content in unique ways.

Themes are what allow you to display content to users. It is the “skin” for your site. They allow you to create custom user experiences that are tailored to your library’s purposes. To edit and create themes, you must have at least some knowledge of PHP, HTML (often XHTML), and CSS. The PHP needed for theme development mostly involves WordPress-specific functions, so extensive knowledge is not necessary. Colby Sawyer College’s Archives and Special Collections make excellent use of a WordPress theme (<http://archives.colby-sawyer.edu/>).

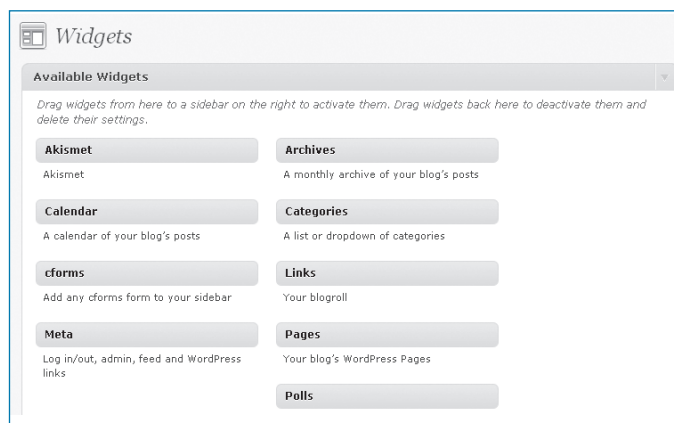
More important than knowing PHP for most purposes is the knowledge of CSS. If you do not know PHP and do not have the time to learn PHP, there are plenty of themes available that can do nearly every-

thing that you would like in a website and only require CSS for customization. If you have seen the amazing customization capabilities of CSS at work in sites like CSS Zen Garden (<http://www.csszengarden.com/>), then you have an idea of what can be done with pre-determined markup with IDs and Classes.

The following themes were developed to make it easy on the user to style a website using only CSS.

Sandbox

Sandbox (<http://www.plaintxt.org/themes/sandbox/>) was developed specifically for the purpose of allowing people with little or no PHP experience to customize the look and feel of



Widgets allow you to reposition the sections of your sidebar or other widgetized areas.

their theme. It has many CSS selectors available, so you can create a different look for every single page if you choose to. Sandbox makes it possible to alter the appearance of specific pages like blogs, single posts, pages, specific categories, author pages or tag pages. It offers fine-tuned customization capabilities. Sandbox also offers various machine-readable microformats for further extensibility.

Thematic

Thematic (<http://themeshaper.com/thematic/>) makes use of features similar to those used by Sandbox, but expands upon them. Thematic is available pre-packaged with SEO features, multiple widget areas, and a grid-based design with multiple layout options. Thematic is an excellent place to start if you want to customize your library's theme with very little work.

Other Themes

The WordPress Themes Directory (<http://WordPress.org/extend/themes/>) is an excellent place to start searching for themes that will fit your library's needs. If you find a theme that you enjoy but needs to be changed to meet your criteria, try to modify the CSS yourself if you are comfortable. If you are not comfortable modifying the theme yourself, there are many programmers available who will either modify an existing theme for a small fee or create an entirely new customized theme for a little more money.

Subject Guides

Subject guides are an excellent way to give patrons specialized content. WordPress creates subject guides remarkably well. One example of using WordPress to create a subject guide is to create bookmark categories and include the list of links within the category on specific pages (Biology-specific database links, for example). Another way would be to create new posts for

every item that is to be displayed within a specific subject area, giving the post a specific category or tag that is related to the subject area. After each post has been created, a simple WP_Query function can be implemented to display only the posts within that category. Our library uses the second method. To simplify the process, add the following code to your theme's functions.php file:

```
<?php function subject_panel_cat($atts, $content = null) {
    extract(shortcode_atts(array(
        "num" => '1000',
        "cat" => ''
    ), $atts));
    $my_query = new WP_Query('category_name='.$cat.'&
        orderby=title&order=asc&showposts='.$num.'');
    while ($my_query->have_posts()) : $my_query->the_post();
        $do_not_duplicate = $post->ID; ?>
        <div class="title"><?php foreach((get_the_category()
            )as $category) { echo $category->cat_name . ' ';
        } ?><?php the_title(); ?></div>
        <div class="content"><?php the_content(); ?></div>
        <?php endwhile;
    }
    add_shortcode("panelcat", "subject_panel_cat"); ?>
```

After that function has been added to the file, use the following short code (WordPress-specific code that simplifies complex functions) in one of your pages, replacing "Category Name Here" with the relevant category for the subject area you wish to display.

```
[panelcat cat="Category Name Here"]
```

This short code can be added multiple times to a page, which will allow you to pull information from several categories.

With a small amount of JavaScript and CSS, you can further modify this to be a clean-looking subject guide. For examples of how we use it at our library, look at the database section of the Carnegie-Vincent Library website (<http://library.lmunet.edu/databases>).

Online Public Access Catalog (OPAC)

We've already mentioned Scriblio, but it warrants a bit more detail. The metadata schema that is possible with Scriblio makes WordPress into a remarkable OPAC that rivals commercial products. It is possible to extend the capabilities of Scriblio with other plug-ins or additional programming. We do not yet know of a library using Scriblio as a circulation module, but it is a natural next step. Using Scriblio as an OPAC in conjunction with WordPress as your content management system allows you to keep a familiar interface so you will not have to learn different content management systems.

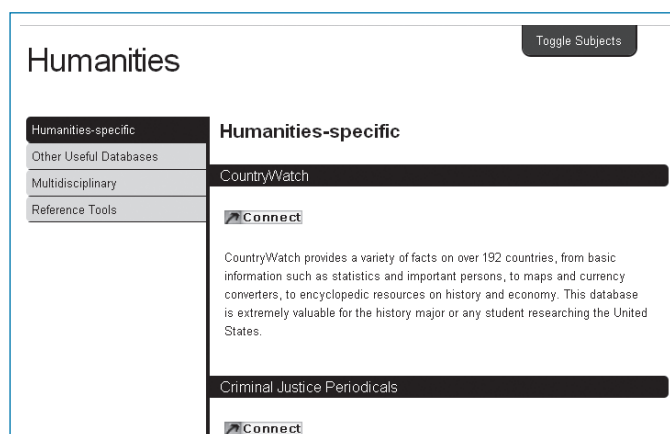
Institutional Repository

The need for academic libraries to have an institutional repository that houses the students' electronic theses and dissertations is becoming more prevalent. Scriblio already provides a way to store metadata about records, but it also allows you to associate an electronic file (PDF, Word document, image, video, etc.) to a record. This makes it possible to use Scriblio as a way to store information about something, but to also store the electronic version with the record. Out of the box, Scriblio has limited use as an institutional repository, but capabilities of expansion are endless. By default, Scriblio requires that a user be logged in to add information, so user submitted files are not as easy as they are with other systems. These default settings make it so that a librarian or other administrator must input the necessary metadata. For a small institution this might work well, but this is clearly not the best solution for a large university. The possibility of using WordPress in this fashion can spark the imagination to find other creative ways of using the system. Experiment to see what works for you, it could be that you find a solution in a way that you hadn't thought possible before.

Social Networking

BuddyPress and Mingle have been mentioned but are also worth mentioning again. They allow you to use WordPress as a social networking application in and of itself. Creating your own social network could benefit your library by connecting you with your patrons, connecting your staff, sending project information, giving assignments to student workers if you are at an academic library, sending out news items, giving tips to specific people. . . the list continues.

Creating your own network instead of just using Facebook or MySpace is beneficial because you will have more control over the appearance of the theme (so you can keep your brand), limit the members to only include those that you add, and display only information that you approve. P2 (<http://WordPress.org/extend/themes/p2>) is a theme that allows you to host your own Twitter-inspired service for your users. This could be an excellent way to post staff updates and



Subject guides at Carnegie-Vincent Library

news items. If you use this theme with a Twitter plug-in, you can syndicate the feed and post at both places simultaneously. If using Facebook, Twitter, or something similar works well for your library, by all means, you should continue using it. The Social Networking capabilities of WordPress are meant to be used alongside other social platforms.

WordPress is an excellent blogging tool and content management system. Through its extensibility, it allows for customization that can satisfy many website needs. It is an excellent foundation for web applications and worth considering for its library 2.0 readiness.

For additional resources, check out the following websites:

[WordPress.org](http://www.WordPress.org) (<http://www.WordPress.org>)

WordPress.tv (<http://WordPress.tv>)

[WPRecipes](http://www.wprecipes.com/) (<http://www.wprecipes.com/>)

[PerishablePress](http://perishablepress.com/) (<http://perishablepress.com/>)

[Smashing Magazine](http://www.smashingmagazine.com/) (<http://www.smashingmagazine.com/>)

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About the Authors

Joshua Dodson is the Technical Services Technician and Web Assistant for Lincoln Memorial University in Harrogate, TN. He specializes in developing Web sites with the WordPress framework. He has developed a system for creating library subject guides through WordPress that is currently implemented at Carnegie-Vincent Library. An article on this topic has been published through the Code4Lib Journal. He has presented on topics including information literacy, open source software, Web 2.0/Library 2.0 technologies, and using WordPress for library Web sites.

Laura Slavin graduated from the University of South Florida School of Library and Information Science in 1998 with a concentration in Cataloging. Since then, she has worked at Troy University as Cataloging Librarian, and currently at Lincoln Memorial University as Technical Services Librarian. She has presented on a variety of topics including live chat reference, open source software, and enhancing library Web sites.



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Editor

Marshall Breeding
615-343-6094
marshall@breeding.com

Contributing Editor

Dan Freeman
312-280-5413
dfreeman@ala.org

Administrative Assistant

Judy Foley
800-545-2433, ext. 4272
312-280-4272
jfoley@ala.org

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