Open Source Library Systems: A New Model for MVLC (and Massachusetts)

In July, MVLC, along with the NOBLE and C/W MARS networks was awarded a 2-year, $400,000 LSTA grant through the Massachusetts Board of Library Commissioners to select and develop an open source library system solution for Massachusetts.

Working together these three networks are looking to select an open source library system to replace their current proprietary systems (SirsiDynix Horizon and Innovative Interfaces Millennium), fund any necessary development to give it the features and capabilities needed by Massachusetts libraries and library networks, and, pending a successful outcome, implement the system as a replacement for their current systems.

What is an open-source library system and why are we, along with our sister networks, interested in exploring this option?

For most of the history of library automation, library systems were developed and maintained by private companies (CLSI, DRA, Innovative Interfaces, Dynix, etc.) Libraries purchased the hardware and licensed the software from the vendor, who then also provided system maintenance and, over time, added features and capabilities to the software). For libraries

interested in automating, there was no other approach (other than possibly developing your own system in-house).

In the late 1990's, this model began to change, with the development of the Koha library system in New Zealand. With Koha, libraries no longer had to license software from a commercial vendor. It was free to download off of the Internet. Because the underlying software used to create the system was all itself open source, (While the full definition of what makes a particular piece of software open source has many different aspects, the most important one for our purposes is free access to the program's source code) there are no yearly licensing fees to be paid to the vendor. System development is done by the users themselves, rather than by developers working for the vendor (although now LibLime, a Koha support organization, provides a much of the software development).

This approach offers several advantages. Most significantly, because libraries have access to the underlying code, they have far greater control over how their system works. They can set it up in such a way as to need their individual needs, and can develop additional functionality on their own. Also, because there are no software licensing fees

to be paid, the cost of operation can be lower than with a commercial library system. In the early days of open source, there were also risks, however. Because the systems were new, they did not have the rich feature set of an established system (which meant funding lots of software development). They also required a technical staff with the hardware and software skills to support the system locally, as there were no commercial support mechanisms available.

Koha began as a system primarily intended for small, stand-alone libraries. As the software has grown and developed, larger libraries and library systems with more complex needs have adapted it. In April 2009, around 308 libraries were using Koha.

In 2006 a new major player entered the open source library system arena with the roll out of Evergreen, a system funded and developed by the Georgia Public Library Service, to the 200-plus libraries that made up the PINES consortium. Evergreen was designed from the beginning to be a system for use by consortia (although it can also be run be small, stand-alone libraries). It stirred great interest in the library community and has since been implemented by a number of other libraries and library consortia.

As each system has grown, organizations have grown up to provide support for users of each system. Liblime, based in Ohio, is the major company currently supporting Koha. It was formed by developers who worked on one of the first large US implementations at the Columbus Public Library. Equinox is the major support organization for Evergreen. Based in Georgia, it was spun-off from the Georgia Public Library Service. Because there's no commercial vendor closely guarding the code base, other companies can also support these products, and indeed, other companies have come along to provide support. Within a few years it's likely there will be far more support options available for each system than there ever were in a world of proprietary

systems (where only the vendor provided support for that system). Self-support is also still an option for those organizations with the requisite technical staff.

What We're Doing in Massachusetts

The Massachusetts Open Source Project was born out of discussions among administrators of the nine regional automated networks a year or so ago. Frustrations with the cost, slow pace of development and concerns about the corporate stability of their current vendors and systems along with a realization of the growing maturity of open source library systems led several administrators to propose trying something similar to Georgia here in Massachusetts. All nine of the regional automated networks were invited to be part of the project. Three – MVLC, NOBLE and C/W MARS - opted-in.

Administrators from those networks met several times over the fall and winter to put together a grant proposal.

The group proposes to do several things as part of the grant.

The first step will be an in-depth look at the two contending open source systems (Koha and Evergreen) to determine which will best meet the complex needs of Massachusetts library consortia. This step will largely consist of an examination of the underlying architecture of each system – how the code is written, the table structure, etc.- to determine which can best handle the complicated circulation and resource sharing needs of large organizations made of independent libraries. The ability to support multiple rule set and parameters

is a feature we're calling "multiness." (Our needs are very different than those of county systems or of a main library and its branches, where there is a single administrative authority – and a single set of circulation rules). The underlying architecture of each system is, in the view of the group, the most critical factor in the decision process as it's the ultimate determinant of how well the system will function for consortia.

Based on this review, a through examinatin of each system's feature set and development plans, and conference calls with current users of each system, a recommendation will be made by the group regarding which platform to move forward with – a recommendation that will, hopefully, be adopted by the membership of each network. It's important to note that at this time MVLC's membership has only agreed to seriously explore the open source option through this project. While we are serious enough to commit time and funding to the project, no decision has yet been made on adoption or implementation. We are also serious enough that we will not be looking at proprietary library systems at this point, though that remains an option based on the outcome of the project.

Those who have been through previous system selections likely recognize that this represents a departure from the traditional selection process. Why have we opted to do it this way? Largely, this is also an outgrowth of the new model of open source. For this first time in a system selection process, we're able to actually take a look at the underlying code and see what the system really does and how it does it – and what the implications of how it does it may be – rather than simply relying on vendor promises that the system will work the way we want it to. Because of that, it seemed to make sense to leverage the long experience of the networks in running systems to do that deep, highly technical examination.

Be assured that the goal here is not simply to select the system that will be easiest to run or that will most benefit our respective central sites at the expense of users. Rather, what we're ultimately

looking at is how well the system design and architecture will allow us to serve our customers – both library staff and the public. For all three of our networks, the answer we least like to give our users is "Sorry, the software won't allow us to do that." The system that will allow us to most reduce the frequency of that answer will be the one that will, ultimately, best meet everyone's needs.

This is also not to discount the importance of other parts of the system – such as the public interface. Rather, it again reflects how the library system world has changed with the growth of open source. While the OPAC is of critical importance, it is, in some ways, a lesser concern, as today a system's native OPAC isn't as intrinsically tied to the rest of the system as OPACs historically have been. An OPAC can be far more easily changed and adapted than the underlying architecture, and any number of OPACs (either the native OPAC or another open-source product) can be used on top of whatever system we select (or as committee members have been saying, we can put any pretty face we want on the system, but if the underlying structure won't allow us to meet member needs, we're not going to be happy with our selection).

Once the platform has been selected, the second phase of the project – assessing user requirements and system development needs - will begin. This is the point in the project where library staff will begin to be heavily involved.

We are envisioning at least two meetings in different parts of the state to kick-off the project, educating libraries (in both participating and non-participating networks) as to what we're doing,

and what it means for them. One of these meeting will likely take place at MVLC.

To assess user needs, the group is developing a database of functional requirements (using software created by Ringgold, Inc.) that will be opened up to library staff to allow them to select those features that are most important to them. In a traditional selection process this step would be analogous to the writing of a request for purchase (RFP) that would be sent off to vendors for their responses and bids. This step will be somewhat modified in our process. We'll be using the resulting list of requirements not as a guide for vendors, but as a guide to ourselves for determining development needs. While individual staff members will be able to log in and make their selections, we may also hold special committee meetings or take advantage of already existing user groups to further document our requirements. As this is a departure from the traditional selection model as well, we're still working out the exact process that will be used.

Based on the requirements document and our own system assessment, a list of development needs will be generated. With this, a project coordinator will be hired. Working closely with staff from the three networks, the Coordinator will review the new system's options, parameters and data structure options and work closely with network staff to devise a scheme that could be used by all three networks. The Coordinator will work with network and library staff to further identify development needs, explore development options, and oversee the development process. The coordinator will also serve as the point of contact between the Open Source Project group and any vendors that are part of the development or migration process. The Coordinator will also work with network staff to develop training materials and system documentation and facilitate development of the project business plan.

By the second year of the project with development successful and sufficiently far along, planning will begin for the first network to migrate to the selected system. The pioneer network (pending Membership approval and successful development, that network could well be MVLC as we have the most critical need, currently being on an "orphaned" system – one which is no longer being developed) will begin to acquire the necessary hardware, set up the system at its central site (each network will initially run separate installations of the selected system) and begin test migrations of its bibliographic, patron, transaction, and other data from the current system to the open source system. Depending on the network, local staff may do the migration or a vendor may be hired. Staff training will also take place during this time Training may be conducted by network staff or a vendor may be hired to provide "train the trainer" sessions.

Once data migration and staff training have been accomplished the first network will transition to the new system – probably during the second half of the second project year, in the Spring or Summer of 2011. The other two networks will follow thereafter. If we can successfully demonstrate the viability of an open source solution for Massachusetts, we're hoping that some of the other networks may opt to move in that direction, also.

This is a huge project with much work that will have to be accomplished and many potential pitfalls along the way, but the payoff of successfully completing it will be significant. We'll have the potential to realize cost savings through no longer paying software licensing or hardware support fees to a vendor each year. (However, we may incur costs paying a vendor for a degree of support or for increased network staff). We may also realize savings in our telecommunications costs as we may, over time, be able to dismantle our network of expensive, dedicated circuits and provide library access to the database through a much less costly Internet

connection (and greatly increasing library bandwidth to boot)

Most importantly, we will have a system that's actually ours (we'll in essence be buyers, not renters) that we will be able to configure in a way to best meet our needs. Of course, we'll still need general agreement on how we want the system to work. While an open source system can accommodate a greater degree of individual variation than our current system, no system yet written can be configured to work in 35 different ways - the number of member libraries we have - some of which may be incompatible with each other or mutually exclusive. While we'll be able to things more individually, we will, at the same time, need to work more closely together than ever.

While open source won't solve every frustration that comes from working with an automated library system in a consortial setting, we should, over time, have a better, more sustainable system that will allow us to work more effectively, cooperate more easily, and provide a greater range of services to our patrons at a lower cost. These were the goals that brought libraries together into automation and resource sharing networks like MVLC, in the first place – and they can continue to guide us into a new era – and new model – of library automation.

August Training

Mailing List Administration - Covers the basics of administrating Mailing Lists on the MVLC Mail Server, including configuring them for common uses and a closer look at available features and options. Limited to 8 attendees. *Thursday, August 13th, 10:00 AM*. Contact Tom Berezansky at tsbere@mvlc.org to register.

Cataloging Training

Register for the Cataloging sessions by contacting Laurie Kulik (978-557-8204, lkulik@mvlc.org)

MARC Cataloging - For all new Catalogers and for those who need a refresher: Learn the terminology of a MARC record and how to input a brief workform (Bib Record) for on order books and paperbacks as well as items in hand. Then learn how to create and add item records for each Bib. Example adult and juvenile books will be supplied. *Wednesday, Aug 5th, 9:30 AM* Limited to 8 attendees per session.

Periodicals and Item Records - Periodicals and Item records will focus on how to search magazine titles, identify the correct current record and add the item with proper coding (iType, Location, Collection, and Item Status). Learn how to identify title and frequency changes and when to notify MVLC of these updates*. Tuesday, Aug. 11, 9:30 AM*. Limited to 8 attendees per session.

Authorities- *New & Updated* - Authorities Control has been totally revamped with the implementation of the Backstage Authorities project. Backstage will also do quarterly maintenance so it is more important to use existing Authorities and create new ones carefully. Examples will include what 'tags' are specifically Authorities and how to identify them. *Wedesday, Aug. 19th, 9:30 AM*. Limited to 8 attendees per session. **PREREQUISITE: MARC Cataloging**

A-V Cataloging – *Updated* - Audiovisual Cataloging has been streamlined to include new hints for entering sound recordings and Video recordings. Sound recordings will concentrate on musical and book compact discs and also audiocassettes, which are still used, particularly in children's music and books. *Tuesday, Aug 25th, 9:30 AM*. Limited to 8 attendees per session. **PREREQUISITE: MARC Cataloging**

MVLC CALENDAR

August 2009

Monday	Tuesday	Wednesday	Thursday	Friday
3	**4**	**5** **Marc Cataloging** 9:30 am MVLC Central Site	**6**	**7**
10	**11** *NEW!* **Periodicals** 9:30 am MVLC Central Site	**12**	**13** **Mailing List Administration Training** 10:00 AM MVLC Central Site	**14**
17	**18** **Fiscal Committee** 1:00 PM **Executive Committee** MVLC - 2:00 PM	**19** **Authorities** 9:30 AM MVLC Central Site	**20**	**21**
24	**25** **AV Cataloging** 9:30 AM MVLC Central Site	**26**	**27** **Reference Committee** 10:00 AM Haverhill	**28**
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