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# HELIN Library Consortium ILS Task Force Recommendation

HELIN Consortium. ILS Task Force

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# HELIN Library Consortium ILS Recommendation

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Prepared by the ILS Task Force

December 2015

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# HELIN ILS Task Force 2015 Final Report

December 2015

## Executive Summary

### The Consortium

The central purpose of the Higher Education Library & Information Network, Inc. (“HELIN” and “the Consortium”) formed in 1984 and incorporated in 2005, was the cooperative management of an integrated library system (“ILS”) which would promote the efficiency with which users of HELIN member libraries could identify and share tangible information resources such as books, journals and films. Corollary advantages of a cooperative ILS were the increased buying power of pooled funds which would permit the licensing from Innovative Interfaces, Inc., of a “state of the art” system, and cross-institutional dissemination of the intellectual capital of member library personnel.

Several key outgrowths of HELIN which benefitted the larger southern New England community were: a) the integration into the HELIN ILS of a serials union list for the Consortium of Rhode Island Academic & Research Libraries (“CRIARL”); b) integration into the HELIN ILS of bibliographic holdings and patron data for member institutions of the Association of Rhode Island Health Sciences Libraries (“ARIHSL”); and c) an initiative known as OneCatalog, which optimized user-initiated borrowing of tangible information resources between HELIN institutions and Ocean State Libraries (“OSL”), a consortium of Rhode Island public libraries.

### The Environment

In 2014 the HELIN Board signed a 2-year agreement with EBSCO and Innovative Interfaces to implement Encore Duet, a newly released discovery application which HELIN had been beta-testing. While the decision to sign the agreement had been guided by the unanimous approval of an advisory task force, not all HELIN institutions chose to actually implement Duet. For the institutions that did implement Duet, frustrations began to mount as the two vendors failed to resolve a range of technical problems with the application.

Over the course of 2014-2015, with tensions regarding discovery and the ILS increasing, three HELIN governing member institutions (i.e. Bryant University, Brown University, and the University of Rhode Island) announced plans to abandon HELIN membership and be fully withdrawn from the consortium by January 1, 2016. URI and Bryant had decided to migrate to an alternative ILS, URI to Ex Libris and Bryant to OCLC WMS, suggesting that dissatisfaction with the Innovative Interfaces ILS was at the core of the decisions to part ways with HELIN.

The three major ramifications of this announcement were:

1. loss of significant membership fee revenue for HELIN
2. removal of all bibliographic holdings and patron data for these institutions from the HELIN ILS
3. diversion of HELIN staff attention from system development to record extraction

One response of the HELIN Board to these events was to schedule several town hall style meetings. Personnel at all HELIN member institutions, were invited to participate in community conversations about the future of HELIN. Approximately 40% of HELIN library personnel participated. As follow-up to the meetings, the HELIN Board distributed a list of key takeaways derived from the exercise.

#### The Task Force

Shortly after the town hall meetings, the HELIN ILS Task Force 2015 (“the Task Force”) was formed at the request of the HELIN Board of Directors (“the Board”). Serving on the Task Force were two representatives of the Board of Directors and at least one librarian from each governing HELIN member institution except Wheaton College, Brown University, Bryant University and University of Rhode Island. Additionally, the two other full-time librarians employed as HELIN staff also served on the Task Force.

The Task Force was charged with comparing the integrated library systems (“ILS”) developed, owned and operated by Ex Libris, OCLC and Innovative Interfaces, and providing the Board with a report and recommendation by the second week of December 2015.

At the outset the Task Force determined that its work would be conducted in as distributed a manner as possible, involving as many Task Force members as possible so as not to unduly burden any one Task Force member. The Task Force further decided not to name a chair but to function on an informal consensus basis, relying on the sense collegiality between Task Force members to allow for the comfortable expression of conflicting opinions.

#### The Problems to Solve

With only two months in which to conduct a process more typically spread by other consortia over the course of 1-2 years, the Task Force determined that a reconsideration of the the HELIN ILS was intended to help HELIN solve the following problems:

- Disappointing functionality of Encore Duet, a “discovery” application licensed by EBSCO and Innovative Interfaces to HELIN for a two-year period beginning in 2014
- Outdated library workflows originating in the age of tangible rather than digital information resources
- Demand for greater member library autonomy without loss of unmediated resource sharing
- Declining HELIN membership

## The Process

Initially the Task Force set out to compare three integrated library systems: the current HELIN Innovative Interfaces system, plus Ex Libris and OCLC WMS. Representatives from the latter two companies had already been visible within the community, invited by various HELIN member institutions to conduct system demos. In an attempt at greater comprehensiveness, the Task Force also decided to include in its ILS comparisons the ByWater implementation of Koha, an open source system. Each of the four vendors was scheduled to deliver a one-day demo open to personnel from all HELIN and CRIARL institutions, as well as to the staff of OSL and the RI Office of Library & Information Services (“OLIS”). In order to assure the greatest possible participation in the demos, each vendor was also asked to provide live web-based participation in the demos.

Prior to the demos, the Task Force distributed to Ex Libris, ByWater, and OCLC, an RFI covering an extensive list of system functions that each vendor was expected to address during its demo. The Task Force intended to also use its RFI as a checklist by which it could consistently measure the systems. Due to extensive HELIN experience with its current ILS, Innovative Interfaces was asked to focus primarily on research and development as well as the current state of the company which had recently undergone significant changes in leadership.

## The Findings

Guided by responses of Task Force members to the vendor demos, feedback from an online survey distributed by the Task Force to demo participants, correspondence with representatives of consortia that had recently undergone system migrations, plus other research, the Task Force came to the following conclusions regarding each ILS:

Ex Libris	Excessively complex
ByWater/Koha	Incomplete functionality
OCLC WMS	NextGen functionality

Innovative Interfaces	Outmoded
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## The Recommendation

In reviewing how each ILS would address the four key problems faced by HELIN, the Task Force determined that OCLC WorldShare would address the four key problems faced by HELIN in the following ways:

**Problem:** Disappointing functionality of Encore Duet, a “discovery” application licensed by EBSCO and Innovative Interfaces to HELIN for a two-year period beginning in 2014

**Solution:** With fierce competition accelerating in the content-publishing industry, OCLC continues to have the best chance of remaining a “content-neutral” discovery service, and would therefore be able to maintain functional relationships with the largest number of competitors.

**Problem:** Outdated library workflows originating in the age of tangible rather than digital information resources

**Solution:** Using OCLC WMS would eliminate the need to exchange bibliographic holdings data between the world’s largest bibliographic utility (i.e. OCLC WorldCat) and a local ILS. The entirely cloud-based WMS would further eliminate the need to maintain local servers or install client software.

**Problem:** Demand for greater member library autonomy without loss of unmediated resource sharing

**Solution:** While allowing institutions to share the patron data required for optimized patron-initiated borrowing, each HELIN institution would have its own instance of OCLC WMS, eliminating the need for local management of a central ILS.

**Problem:** Declining HELIN membership

**Solution:** The cost of joining HELIN could be significantly reduced by elimination of the punitive fees charged by Innovative Interfaces to any library intending to migrate from a stand-alone Innovative Interfaces system to the HELIN system. Eliminating a central ILS could also reduce the number of HELIN staff dedicated to ILS management activities.

## Conclusion

In addition to the opportunities gained by a HELIN migration to OCLC WorldShare Management Service, the Task Force also recognizes that it would present other challenges, including:

- a. How to serve affiliate members such as ARISHL
- b. Licensing of an all-inclusive system, whereby institutions pay for the discovery service whether or not they plan to use it
- c. A less than perfect discovery service, still in development
- d. Elimination of the OneCatalog initiative in its current iteration

Finally, the Task Force acknowledges the inevitable impact that such a migration would have upon HELIN staff, an impact that could be perceived as both opportunity and challenge.

## **2. HELIN Integrated Library System (ILS) Task Force Charge:**

- Formulate a Request for Information (RFI) for an Integrated Library System (ILS) to be used primarily as a checklist during ILS demonstrations
- Schedule consortium-wide comprehensive demonstrations of *OCLC Worldshare*, *Ex Libris (Alma & Primo)*, *Koha Open Source ILS by Bywater Solutions*, and *Innovative Interfaces Sierra* during the Fall 2015 semester
- Evaluate each ILS function, paying particular attention to each discovery tool, and including:
  - A comparison of the up-front and migration costs for each system
  - A comparison of the user/programmer communities
- Obtain feedback from other academic or multi-type library consortia that have migrated from a III system to *some* other system, particularly *Ex Libris*, *Koha*, and *WorldShare*
- Prepare a final summary report on the strengths and weaknesses of each ILS with special emphasis on the future viability and effectiveness of each system for use by the HELIN Consortium. The report will be presented to the Executive Director by **December 4, 2015**.

## **3. HELIN Integrated Library System (ILS) Task Force Membership:**

Bob Aspri, HELIN Central Office

Sarah Edmonds, PC

Rosie Hopper, JWU

Sue McMullen, RWU

David Meincke, JWU

Cathy Poirier, CCRI

Jim Salisbury, CCRI

Martha Sanders, HELIN Central Office

Ruth Souto, HELIN Central Office

Judith Stokes, RIC

Olga Verbeek, SR

#### **4. HELIN Integrated Library System Task Force Meeting Schedule**

October 5, 2015

Johnson & Wales University

1:30 PM

October 22, 2015

Providence College

1:30 PM

November 20, 2015

Johnson & Wales University

1:00 PM

December 4, 2015

Johnson & Wales University

9:30 AM

#### **HELIN Integrated Library System Task Force Vendor Demo's Schedule**

##### **Ex Libris**

November 2, 2015

Salve Regina University

9:30-11:30 AM

1:00-3:00 PM

##### **Koha**

November 10, 2015

Salve Regina University

9:30-11:30 AM

1:00-3:00 PM

##### **OCLC**

November 12, 2015

Salve Regina University  
9:30-11:30 AM  
1:00-3:00 PM

### **Innovative Interfaces**

November 17, 2015  
Salve Regina University  
9:30-11:30 AM  
1:00-3:00 PM

## **5. Methodology**

The Task Force used the following processes in order to arrive at its recommendation:

- Vendor request for information (RFI)
- Live ILS demos
- Online survey of ILS demo participants
- Vendor SWOT analysis
- Examination of ILS reviews by other consortia
- Professional correspondence with select consortia representatives

### Vendor Request for Information (RFI)

After comparing two separate examples of RFP documents, Task Force members compiled an RFI covering all relevant areas of an ILS. In order to help vendors prepare for demonstrating their systems, the RFI was e-mailed to each vendor at least one week in advance of their scheduled HELIN demo. The RFI was also used by the Task Force to create its own internal checklist to use during the demos.

### Live ILS Demos

The Task Force scheduled demos by four vendors, including Ex Libris, Bywater/Koha, OCLC Web Management Service, and Innovative Interfaces. Each demo consisted of two 2-hour sessions with a break for lunch. Each vendor was asked to cover discovery functionality during the morning session, management functionality in the afternoon session, and also address new areas of research & development. Staff at all HELIN member institutions, as well as leadership of the Consortium of Rhode Island Academic & Research Libraries, Ocean State Libraries, and the R.I. Office of Library & Information Services (OLIS) were invited to attend the demos in person or through video conferencing.

### Online Survey of ISL Demo Participants

Immediately following each demo, a representative of the Task Force distributed an email with a link to an online survey used to solicit demographic information about demo participants as well as participant feedback on the systems demonstrated.

### Vendor SWOT Analysis

in order to compare risk levels associated with the four ILS companies under review, a classic SWOT grid was formulated using industry reports from a variety of research sources including:

- PrivCo (library database of private company information)
- Business Insights Global (library database)
- Business Source Complete (library database)
- Glassdoor.com
- LexisNexis (library database)

### Examination of ILS Research by Other Consortia

To further inform its process, the Task Force analyzed the SWITCH Consortium Final Recommendation (March 2014) which covered a review of ILS systems conducted by the SWITCH Consortium, an academic library consortium based in Wisconsin. SWITCH had made a recent decision to migrate from an Innovative Interfaces ILS to a Koha ILS, serviced by ByWater.

### Professional Correspondence with Representatives of Select Consortia and Libraries

In addition to corresponding with a representative of SWITCH, several members of the Task Force corresponded with a representative of LIBROS, an academic library consortium based in New Mexico that had recently migrated from an Innovative Interfaces ILS to OCLC WorldShare, and with representatives of the Private Academic Library Network of Indiana (PALNI). Finally, the entire the Task Force conducted a joint conference call with two librarians from Bryant University, to learn about their experience migrating from the HELIN Innovative Interfaces ILS and EBSCO/Innovative discovery, to OCLC WMS.

## **6. Findings**

### **6a. Product Strengths and Weaknesses**

Innovative/Encore Duet

#### **Strengths:**

- Content neutral.
- HELIN requests from a shared catalog work well and are easily managed amongst HELIN institutions

- Proxy is well managed and working through WAM Proxy table.
- Encore Duet presents an affordable Discovery option, although there are many issues with a two vendor product.
- Global update capability
- Create Lists capability
- Offers built in authority control.
- Traditional OPAC (WebPAC Pro) for index searching.
- Integrated consortium-wide proxy server (WAM)
  - supports EZ Proxy
- Has mobile device capability for WebPAC Pro and Encore
- PDA (DDA) available through Encore Duet (without MARC records)
- Metadata for outside digital resources, such as HathiTrust, can be harvested into Encore. Already happening for Digital Commons.
- Allows flexibility as a “Plug n Play” option.
  - Ability for each library to choose own discovery layer (or none at all) available in 2016.

### **Weaknesses:**

- HELIN Librarians are not happy with Encore Interface. They have been further frustrated by having this interface as their discovery tool.
- HELIN librarians are not happy with Sierra response time since the server was moved, and no university has offered to host a server since URI left the consortium
- Updates are few and far between. Recommendations for Encore Duet made 2 years ago were never addressed. They are just now getting into the “Agile” development cycle, and that is only happening because HELIN invited demonstrations from competing systems-- not as a followup from our Encore Duet rep.
- III promised APIs that would allow us to use the EDS discovery interface – some may have been developed but they are not working with EBSCO and have to be seriously tweaked to allow EDS to be our default interface instead of Encore.
- III is a desktop installation, not a web-based client.
- There are too many versions of Sierra and Encore. Not everyone on the same version – too many levels of support for III. [is this a problem for HELIN or just for III?]
- III is driven by multiple modules even if they are still available in a single interface – there is no concept of clear workflow which requires many additional steps in different modules that could be reduced or eliminated. [e.g., (1) serials being canceled require virtually the same updates to order records as to check-in records, but only one record type can be accessed in a review file (and bibs do not have location information so they cannot be selected to be the record type); (2) call numbers in serials records are not indexed, so every title needs an item record in addition to a holdings record merely for that purpose; invoice approval process only allows access to order

records, so to read a note in an item record, the whole invoice must be suspended, because a different mode is required just to view a different type of attached record.]

- Z39.50 Links to WorldCat ILL are not clear and easily navigated so this makes resource sharing outside of HELIN difficult for the average user.
- No mobile phone browsing on Encore Duet (only Encore, not Duet).
- ERM does not allow storage license agreements [does in new web-based ERM] and has never been able to automate retrieval of statistics [SUSHI does not work well in any system; dirty data]
- Statistics are difficult to retrieve and for the most part not too useful to the individual library. [e.g., payment information retrieved from order records is organized by 1st, 2nd, 3rd payment, not by date of payment; cross tabulations only work if both criteria are in the same type of record (which is why holdings records usually have to have the same information that is keyed in the item and order records--vendor, call number, etc.). ]
- III is reengineering an existing system while competing ILS's have been coded from scratch
- Currently library staff needs to update III, OCLC and Full Text Finder when adding or withdrawing resources.
- May still need to maintain a separate knowledge base, such as Full Text Finder. May not still be true for new web-based ERM.
- Cannot create dynamic customized lists, such as New Books List without programming knowledge.

## **OCLC Worldshare**

### **Strengths:**

- Content neutral.
- Next generation library system.
- Unified release of versions with web-based clients.
- Streamlined workflow for ordering materials and cataloging.
- The interface is easy to navigate and understand.
- Even without a shared catalog ILL requests are streamlined. ILL service would be more efficient in handling anticipated growth in demand with ILLiad. For books, it would significantly decrease processing time.
  - There is an advantage to giving students a single borrowing mechanism for materials from within HELIN and beyond.
- Our holdings are already in OCLC so eliminates the need to update two systems (except for PC and hospital libraries).
- Each library has its own instance of Worldshare Discovery.
- Open Access Digital content is integrated. Seamless electronic availability of older U.S. Govt. Docs and other materials via open-access sources could be a significant benefit for some academic programs. Only OCLC will provide seamless access to HathiTrust materials, etc.
- Discovery, knowledge base and link resolver are included.

- provides seamless access to library holdings in its bibliographic database.
- Offers built in authority control.
- Has mobile device capability.
- The need for Marcive cataloging no longer necessary with OCLC (partially true but must continue working with Marcive to receive SuDOC barcodes)
- Has Serials module with issue prediction based on receipts of other WMS libraries.
- No cost to share holdings with other WMS libraries unlike III InReach.
- Uses E-Z Proxy
- PDA (DDA) titles only show to participating library.

### **Weaknesses:**

- No default OPAC product (index searching -- although index searching is available via widgets library can customize).
- Robust reports that provide in-depth collection analysis and usage are available, but at additional cost.
- License Manager available but at additional cost.
- Discovery product is still not robust. Many databases that libraries subscribed to are only available through Remote database search option. Although the results would be integrated, this would be a federated search for databases not in the central index
- Remote database search option included in price if the connection had already been built. In literature, it says it is available only if the library adds the Remote Database option to their subscription.

Sample of Databases not in Central Index, but available for Remote Database search

- Aquatic Sciences & Fisheries Abstracts (ASFA) - ProQuest
- ArtBibliographies Modern - ProQuest
- Art Index Retrospective - ProQuest
- Communication and Mass Media Complete – EBSCO
- Criminal Justice Abstracts – EBSCO
- Dissertations & Theses (A&I) – ProQuest
- GreenFile – EBSCO
- Historical Newspapers – ProQuest
- Index to Legal Periodicals – EBSCO
- Sociological Abstracts - ProQuest
- Many databases are not listed in the central content list or the Remote Database list. If we wanted connections for federated searching the cost would be \$500 per connection. Of particular concern are EBSCO's *PsycINFO*, *Gender Studies*, *MLA*, and ProQuest's *Biological Sciences*. When searching for specific humanities and social science topics in OCLC discovery there was a distinct lacking in relevant search results as compared to EDS.

Sample of Databases not in the Central Index or on the Remote Database List:

- Avery Index – EBSCO
- PsycINFO – EBSCO

- Gender Studies - EBSCO
- PsycArticles – EBSCO
- EconLit – EBSCO
- Philosopher’s Index – EBSCO
- Biological Sciences – ProQuest
- MLA – EBSCO
- Concerns about authentication for databases not in the central index. If they are being searched remotely, they require authentication for any user not on campus and OCLC does not have access to them. They are searched via federated searching.
- E-Z Proxy will have to be implemented for off campus access but at additional cost.
- Impact on ILL requests (as opposed to HELIN requests). Staff workflow will change in this area.
- Though not necessary, ILLIAD would provide an improved user experience and unmediated ILL for an additional cost for each HELIN library who subscribes to ILLIAD.
  - It would allow many articles to go directly to patrons without staff intervention.
  - More significant as ILL requests increase. A change in ILS could drive the number of requests up even more.
- Everything is bundled and must be bought through OCLC– Discovery, link resolver, knowledge base.
- Global editing is not available.
- No option to FTP orders.
- Order name required.
- Patron upload does not allow local intervention.
- No codes available in item and order records.
- Course Reserves requires a work around to upload PDF files.
- Hospital Libraries will have to pay for OCLC.

## **Ex Libris – ALMA & PRIMO**

### **Strengths:**

- ALMA presents a unified/integrated system with a unified workflow evident to all staff. Allows for automatically assigned tasks and push notifications.
- Has a License Manager component.
- Primo works well as a discovery platform. However, you have to buy Primo separately because ALMA (the ILS) has no user interface/OPAC.
- Strong reporting feature.

### **Weaknesses:**

- ILL does not work well with Ex Libris – URI folks have had to input all ILL requests manually.

- No default OPAC product (index searching). Only Primo is available as a user interface.
- Everything is bundled and must be bought through ExLibris – Discovery, link resolver, knowledge base. No flexibility for third party integration.
- Cost is much higher than other products evaluated. Especially migration costs.
- Proquest has just bought Ex Libris – what will this mean for its future development and discovery product?
- Ex Libris does not fully meet the stated Resource Sharing priority – “ability to seamlessly request items from anywhere – regardless of ILS platform.” *Seamless* discovery and request of other libraries’ holdings would be limited only to libraries using Ex Libris.
- No Serials check in functionality
- Batch updates
  - Must use short bib records at point of order which are overlaid with OCLC records in the evening. This is a step backwards.

**KOHA -- vended by ByWater Solutions** <http://bywatersolutions.com>

#### **Strengths:**

- Open source product available from a few different vendors. Data in Koha is transferable if you switch vendors.
- Allows flexibility as a “Plug n Play” option.
- All modules are web-based so login to the system is easy. Open source ILS that is functional but still engaged in continuous development.
- The Acquisitions module supports EDI. Reporting features appear very robust.
- Circulation and Cataloging modules are functional and appear to work well.
- Least expensive pricing for ILS but will require separate pricing for knowledge base, link resolver, and Discovery.

#### **Weaknesses:**

- Does not work with Internet Explorer.
- Concerns about Koha functionality at this time. Because Koha is mostly being used by small academics and public libraries, that a lot of the functionality that we need may not have been developed yet and we may have to pay additional development fees and be heavily involved in this development. Do we have the time and expertise to do this?
- Institutions seeing each other’s budget lines in acquisitions.
- Resource sharing seems to work like III – Z39.50 available.
- No License Management tool.
- No ERM
- Discovery and Catalog are currently separate search tools. They are working on an API with EBSCO to integrate the two in real time. Proquest does not answer their calls for integration. As for now – you would pick your own

Discovery Solution, link resolver and knowledge base (like SWITCH libraries). The catalog would be uploaded to Discovery – this is a model used at many libraries currently.

- This is not Next Gen – it is a traditional ILS with “plug n play” capabilities.
- Would need to switch to EZProxy. May be a strength.
- No Harvesting tool.
- Serials Module is same as Sierra – every institution can see each other’s holdings
- For HELIN *or* RWU, going with Koha requires making a substantial commitment to personnel with appropriate software development skills. For HELIN, it also requires a philosophical commitment to an open-source solution from all the libraries – a willingness to stick with the development of an ILS through thick and thin.

### **Advantages/Disadvantages of retaining current system**

#### **Advantages:**

- Staff at HELIN libraries are trained and generally happy with the individual ILS modules—Acquisitions, Circulation, Cataloging
- Costs have remained manageable by HELIN institutions but this is questionable in the foreseeable future.
- No Migration costs
- Current Discovery tool is more robust than WMS. The central index in WMS does not contain many databases that HELIN libraries subscribe to.

#### **Disadvantages:**

- Since 3 Rhode Island Libraries have left HELIN, resource discovery and sharing from within a shared HELIN catalog has suffered.
- Manageability of costs for remaining HELIN institutions may be questionable in the foreseeable future.
- Although the current Discovery is more robust there remain issues with the EDS knowledge base and link resolver.

## 6b. Company SWOT Analyses

### OCLC (WorldShare, WorldCat)

<p>Strengths</p> <ul style="list-style-type: none"><li>• Library-focused company</li><li>• 'Content Neutral' position</li><li>• Support for cyber-security standards (has ISO 27001 certification)</li><li>• Library Science researchers on staff continually improving products, publishing information</li><li>• Company seems to be stable (financially and organizationally) and relatively transparent in its actions</li><li>• Strong main line of products as well as well-received and widely-implemented complementary products (EZProxy),</li><li>• Company and products seem to have a clear direction, audience, and mission.</li><li>• Publicly documented support for accessibility features</li></ul>	<p>Weaknesses</p> <ul style="list-style-type: none"><li>• Relatively new to providing ILS support</li><li>• Possible issues with integrations of some 3rd party products</li><li>• Moving to a new system could be disruptive</li><li>• Occasional network downtimes have been reported for cloud-based products including WorldShare</li></ul>
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<p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>• library-focused research could ensure products stay up to speed with current library needs</li> <li>• Could prompt more interaction and development with other consortia and libraries</li> <li>• New CIO (Jeff Jacobs) could increase priority on security</li> <li>• Wide range of APIs could allow for future collaborative development</li> </ul>	<p><b>Threats</b></p> <ul style="list-style-type: none"> <li>• Effectiveness of discovery is tied to willingness of content-providers to not pull A&amp;I content from index</li> <li>• According to a few reviews on Glassdoor.com, current staff seem to find OCLC overly bureaucratic, which could potentially affect the responsiveness of the company to rapidly changing trends (Glassdoor reviews should be taken with more than a few grains of salt, however.)</li> </ul>
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OCLC (n.d.). In *Library Technology Guides: Company Directory*. Retrieved from: <http://librarytechnology.org/vendors/oclc>

### **Innovative Interfaces (Sierra/Encore)**

<p>Strengths</p> <ul style="list-style-type: none"><li>• Has an established, long-running connection with RI institutions (HELIN, public library system)</li><li>• Established knowledge-base in HELIN Libraries for working with backend functions (creating lists, reports, acquisitions, ERM, etc)</li></ul>	<p>Weaknesses</p> <ul style="list-style-type: none"><li>• poor track record of handling customer requests about Encore with HELIN in recent years</li><li>• difficulty managing integration of 3rd party products (see 'Encore Duet')</li><li>• Current products are outdated</li><li>• recent negative reviews of company by own employees that speak to weaknesses in company as it relates to management, vision, and commitment to library principles (see glassdoor reviews, which, as noted in the OCLC analysis, should be viewed with discernment and as only as a rough gauge of the current internal climate)</li><li>• venture capital and private equity ownership of company prioritizes short-term profit-maximization (within investment cycles) rather than stability of product and ultimate concerns of customers</li></ul>
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<p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>• Hoping to leverage Encore /Sierra API for both internal and 3rd party development</li> <li>• If iii revitalizes as promised during the demonstration, HELIN may have a new, fruitful relationship with them with a product customized to HELIN's enhancement requests</li> </ul>	<p><b>Threats</b></p> <ul style="list-style-type: none"> <li>• Future product plans do not inspire confidence in the company's ability to provide products that can meet the needs of a diverse set of stakeholders (now and going forward).</li> <li>• large backlog of issues to correct could lead to further customer dissatisfaction,</li> <li>• history of iii promises without delivery may prove to repeat itself</li> <li>• Private Equity/Venture Capital attitude of mergers/acquisitions could create further product line instability, chaos, and potential hidden costs</li> <li>• Uncertainty of future product lines with iii's purchases of VTLS and Polaris</li> </ul>
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**Ex Libris (Alma/Primo)**

<p>Strengths</p> <ul style="list-style-type: none"><li>• Strong, generally well-regarded products</li><li>• security standards compliant (ISO 27001 certified)</li><li>• Supports WCAG 1.0 accessibility guidelines (Level A)</li></ul>	<p>Weaknesses</p> <ul style="list-style-type: none"><li>• Products are most expensive on the market</li><li>• Company is currently in flux (going from private equity ownership to ownership by ProQuest)...so it is hard to evaluate at the moment</li></ul>
<p>Opportunities</p> <ul style="list-style-type: none"><li>• Likely to have well-indexed proquest content in Primo index</li></ul>	<p>Threats</p> <ul style="list-style-type: none"><li>• Absorption by ProQuest could lead to product line confusion with 'Serials Solutions' 360 index</li><li>• connection to proquest could make 3rd party index (and product) integration even more difficult</li></ul>

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## **Bywater (Koha)**

<p>Strengths</p> <ul style="list-style-type: none"><li>• Bywater is a company that allows for very customizable ILS implementations</li><li>• By nature of being part of the Koha community, Bywater is part of a larger software/developer community</li><li>• Has a partnership with EBSCO (in order to support EDS), a vendor used by many of the HELIN Schools</li></ul>	<p>Weaknesses</p> <ul style="list-style-type: none"><li>• Small support staff</li><li>• Discovery functionality depends on 3rd party integrations</li><li>• Limited discovery integrations for main product at the moment, with future integration possibilities being unclear</li><li>• Lack of some modules/functions that HELIN libraries want</li></ul>
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<p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>• The 'pay for custom feature improvements' model could allow for the customization individual HELIN institutions are looking for</li> <li>• Could prompt more interaction and development with other consortia and libraries</li> <li>• the nature of the Koha system makes it easier for a library to divest itself from Bywater if financially unnecessary</li> </ul>	<p><b>Threats</b></p> <ul style="list-style-type: none"> <li>• Being purchased</li> <li>• It is tied to popularity/support of the overall Koha Project, which, though stable and in active development, is itself dependent on a variety of external factors</li> <li>• Not being able to integrate with other 3rd parties for purposes of Discovery</li> <li>• Some products/features are reportedly upcoming, but timelines are uncertain.</li> </ul>
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**Notes:**

Goal:

To evaluate the strengths, weaknesses, opportunities, and threats of the four ILS companies in relation to a potential contract with HELIN.

Notes:

These analyses are viewed from the perspective of HELIN stakeholders, so it is slightly different than the traditional SWOT analysis of a company as viewed from the perspective of a potential investor/competitor.

Furthermore, for the purpose of this task force the company and its main product are closely tied, so I will be focusing on the company's aspects that directly pertain to the product we are investigating. This is not to be taken as a summary judgment

of a particular company, rather it is to be viewed as a diagnostic tool that was created in a short period of time to assist us as we make our decision.

This is not a professionally created, standard 'SWOT Analysis,' but rather an internal document that was initially created by David Meincke (with assistance from Joe Eshleman, head of Reference at JWU) and should be viewed as another aid to assist in making a complicated decision with many stakeholders.

Much of this is subjective, but in an attempt to increase the objectivity a wide variety of research materials were consulted; references and further reading can be found beneath each SWOT analysis.

The reader may note that the reports of OCLC and Innovative Interfaces contain more information; this is because the SWOT analyses were largely researched and compiled after Bywater and Ex Libris were removed from contention.

Explanation of terms:

**Strengths:** Current positives of the company (especially as it relates to the product in question and potential relationship with HELIN Schools). Also, what sets the company/product apart in a positive way? What sets the company's business model apart in a positive way?

**Weaknesses:** Current negatives of the company (especially as it relates to the product in question and potential relationship with HELIN Schools)

**Opportunities:** Areas in which the company has the opportunity to provide a higher-quality level of service to HELIN schools in the future

**Threats:** Areas in which the company can suffer setbacks that can affect their (and their product's) level of service/satisfaction in relationship to HELIN Institutions

## 6c. Plug & Play vs. "all-in-one" system

A core question for the HELIN ILS task force has been whether or not HELIN libraries want a "complete package" next generation library system OR the ability to select an ILS separately from a knowledge base, link resolver, and discovery tool. During the task force's evaluation process, 2 from each category were considered. OCLC WorldShare Management and Ex Libris Alma/Primo products represented the next generation library system while Koha and Innovative Interfaces represented "plug n play" options for selecting a knowledge base, link resolver, and discovery tool separate from the ILS.

Plug & Play Advantages:

- Ability to choose different products, individually.

- Easier to change products because the underlying metadata stays in the same place and you just are adding component or a discovery layer.

#### Plug & Play Disadvantages:

- Making multiple products work together seamlessly.
- Determining where problems are occurring with Multiple products
- Dealing with more than one customer support infrastructure.
- APIs for increased functionality are often not available or need further development.
- Need to upload catalog on a regular basis to Discovery tool depending on API development.

#### All-in-One Advantages:

- Fully integrated, only one vendor to work with.
- Tools are integrated for e-resource management and workflow management.

#### All-in-One Disadvantages:

- Discovery product is your main user interface. No “default” OPAC.
- Generally, you are tied to the Discovery product offered by the “system”. Only a handful of OCLC customers use a different Discovery tool and all Ex Libris libraries use their Primo
- Additional subscription costs if choosing a different Discovery tool; you pay for the bundled Discovery tool whether or not you use it.
- You are locked into one choice.

## **6d. Pricing**

## 6e. Feedback from migrated consortia

Discussion with Kirsten Leonard, the Executive Director of PALNI (Private Academic Library Network of Indiana)

- PALNI moved in 2 steps. First from a local environment running Aleph (Ex Libris) to a hosted environment (still Ex Libris) and added Primo as a Discovery layer. Second was to move from that environment to OCLC WMS.
- They saved 50% by switching to OCLC all due to ILS costs – WMS was 50% less expensive than Aleph (Ex Libris) and paying for server room space in a local environment, and paying to have the server maintained
- The link resolver issue is still an issue. She said, “Discovery is failing based on the linking” and that it is “not as robust”. Doing only an ISSN search, they had a 50% fail rate of things that should, or should not, have been there. Hathi Trust does not work well at all.
- WorldCat Local is more popular and favorable over WorldCat Discovery. Kristen said that “Discovery is a struggle” and that “it’s not there yet”.
- They had 7 Task Forces reviewing ILS selection, most were geared towards “modules’ (circulation, acquisitions, cataloging, etc.) so that the appropriate staff could weigh-in. Their time-line was: Demos in January, Reports in April, Board Decision in May.
- OCLC will push out updates/releases as needed. Frequency varies, and information about new features is sent prior to the update. Some staff have complained about the result of the update, finding it a matter of inconvenient timing.
- There was a realignment of personnel, as the focus shifted from on-site servers to hosted, to cloud-based environment
- The size of the staff has grown, a new full-time Knowledge Base / License Management position was added. This required a lot of work to set up and managing it required a full time staff person.
- Within the KB / LM, any changes or corrections to the knowledge base have to go through the community and be voted on. Kristen said this “can sit around for a while” before any action takes place.
- They have consortia staff to help the member libraries with circulation / fulfillment borrowing parameters, collection development, help merge workflows, EZProxy, etc.
- The consortia office will also handle trouble tickets, and will also help escalate the call as they have a direct line to the product managers.
- They have had some downtime all related to network outages on OCLC’s end. OCLC is working on the networking issue, and a patch is forthcoming.
- OCLC will do webinars to help get libraries up to speed on various processes.

- EDI is an issue for those who have complex budget allocations; those in PALNI are having a hard time working through this. OCLC is working on the problems.

The other consortia mentioned did not fit our consortial patterns:

- LIBROS Consortium is not a consortium as we know it (no central office) it is maintained by the University of New Mexico.
- SAALCK maintains two separate systems and is not unified.
- Orbis Cascade has moved from OCLC to Ex Libris.

## **6f. Results from the Satisfaction Surveys**

The satisfaction survey shows that OCLC WorldShare products rated more often as satisfied or very satisfied by respondents. Ex Libris products and Koha were also consistently rated at satisfied or above. There were some areas where both Ex Libris and Koha products were rated unsatisfactory. III products were most often rated as unsatisfactory. The comments for the overall products are listed below (edited).

Ex Libris

- I think it looked like a good product but I did not feel I got a good overview of the functions. Way too much time was spent on talking about the roadmap, what was being developed, analytics, etc.
- Ex Libris is a good product but presentation made it too complicated.
- Presentation lacked continuity, cohesiveness, and clarity
- The presentation was not well organized; presenter had good tech knowledge but would have appreciated walkthroughs of patron finding resource via discovery, demonstration of how a resource is acquired, cataloged, checked out.
- Very nice current tool! Good strategic planning!
- It was difficult to see how this product would work in a consortium. However, in general, both Alma and Ex Libris is a very sophisticated system with plans for upgrades and releases of new features over a timeframe—which means the product is not fully developed yet. They are looking for schools to beta test with, which would add to library staff workload, and that proved to be a waste of time considering that EBSCO/Duet has not performed well, and the beta schools were not even given a discounted price. We need a different vendor's product with a proven track record that is really ready to use out-of-the box (similar to Serials Solutions). Ex Libris customer service is also a cause for concern: They prefer to show you once how to do something then expect you to do the rest on your own. This system might require a lot of staff time to set up and maintain on a weekly basis or even more frequently--it suggests that you would be paying for the content/software, but very few services would actually be performed by Ex Libris staff

- Overall, I think this is a very nice product. Without using it first hand, it's hard to say how easy and effective it would be in a reference interaction or instruction setting.
- Overall, I am very impressed, especially with Alma. I think workflows would become much more streamlined, and I like their plans for the future.
- Alma is better than an ILS without silos – effective workflows such as you set up e-journals once and it's done-- in the catalog, in the journals list, in the link resolver.

#### Koha

- This is a really nice open-source product. It would probably be easier to have changes implemented than it would in a proprietary one (certainly, easier than getting Enhancement Requests implemented in III).
- Liked better than Ex Libris but concern that staff require more technical skill than what we currently have
- Like that it's open source and that there is a strong development community with ByWater creating a business model around development and support. Individual libraries and the consortium would need to think about how to re-structure to optimize maintenance and further development; and/or who to engage with ByWater as development partners.
- I was very impressed with this product. I like that it is developed by librarians and not by technicians who think they know what we need.
- It is underdeveloped and is behind the curve of Ex Libris
- For HELIN to "build their own system" you need experienced computer programmers to set this up either at a consortial level or at the individual library level. This will take time, and much of Koha will be under continual development. ILL is not even ready yet.
- I have concerns that Koha is mostly being used by small academics and public libraries so far. Because of this a lot of the functionality that we need may not have been developed yet and we may have to pay additional development fees and be heavily involved in this development. Do we have the time and expertise to do this?
- It's clean, seems easy to use and would give each HELIN library the flexibility to use what works best for their institution. The vendors themselves seemed very flexible and enthusiastic.
- This seems to be an inexpensive way to keep up with all the future changes that will inevitably be coming.
- There do seem to be some important improvements coming, such as the subject browsing and the more traditional cataloguing format (versus the labeled bib records, which looked very odd).
- I don't see this option as necessarily being better or worse than what we currently have, though I do think it has a lot of potential for improvements.
- Not robust enough, needs further development
- ByWater would be sufficiently competent to manage this product for HELIN
- The development/release/updates regularity is very appealing. The ByWater folks seem very available and willing to work with/support customers, but

- quite honestly I've heard that from vendors before who just fell down on the job after we purchased their product. So I'm always leery....
- It sure looks like a way better investment than Encore Duet!
  - I was concerned about their lack of knowledge about certain functionalities in Discovery, Acquisitions, and ILL.
  - Does HELIN have the staff, time, expertise and development money to help this product grow or is it time to give up on the traditional ILS model and move forward to the "next gen" ILS with discovery included.
  - I think the BEST part of all of this is the amount of support being offered by ByWater management. It is sometimes a struggle to get answers, to get things fixed, to even feel as though we are being heard or that we have a voice in the direction our software and systems should move in - but I left yesterday feeling confident that ByWater would be a responsive support team for us, and would make an effort to seek improvements and functionality on behalf of us.

### OCLC WSM

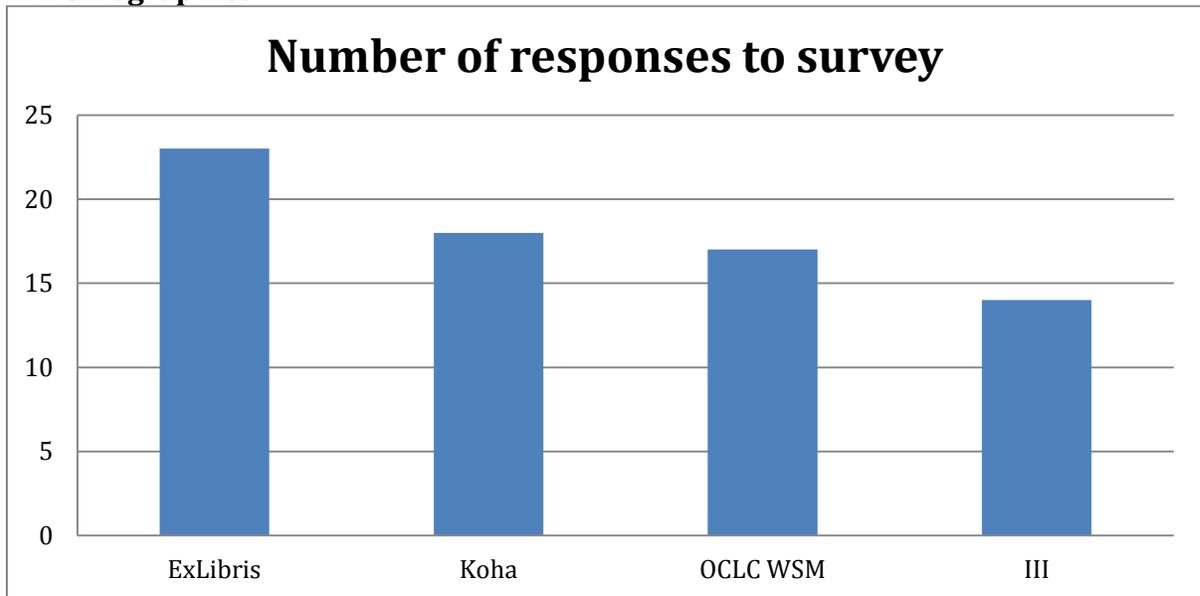
- This was the clear-cut winner over Ex Libris and Koha. If the pricing is as good as promised, can't see why we wouldn't buy this product.
- The ability to be able to share resources.
- Of all the vendors, OCLC seemed to understand the current needs of HELIN libraries. They are constantly improving their discovery tool so hopefully it will rival EDS and Summon soon.
- Seems like it could be a time saver for Technical Services staff but discovery tool is a little "dumbed down".
- Lack of subject browse is major problem.
- THIS PRODUCT WINS, HANDS-DOWN. The ability to leverage all of the data and resources from WorldCat from within WorldShare operations puts this ILS well above the rest. This applies to the patron interface as well - I think users will appreciate and easily understand the " In my Library", " in HELIN" "In other RI catalogs" and "in other libraries" feature of search.
- Concern is that OCLC may not provide on-site training. And, having to reach out to other libraries to ask for help solving an implementation or other issue puts a burden on both the inquiring library and the library who makes time to respond in addition to their own workload. But, overall, this ILS seems the winner compared to Ex Libris and Koah.
- Would save labor both at HELIN and in libraries.
- OCLC seems to be a very clean and intuitive ILS that provides many time saving features.
- I think we need to know more about the granularity in the staff permissions/loan rules, etc. in WorldShare. Quite frankly, what we have now in HELIN through Sierra is an absolute mess.
- Really sophisticated system that leverages the breadth of OCLC knowledge base and research services. Discovery platform much better than what we've got; like local customization and content neutrality

### III Sierra

- Unfortunately, we were not given a demo of a viable III product. We were shown the architecture plan for a product that is not yet available, and which has no specific timeline. Since we currently have their products, I had hoped that the demo would include solutions to the problems reported with Encore interface 18 months ago, but this did not occur either. We did see a timeline of enhancements for future releases, but none of our problems were specifically addressed. It is unclear to me how I can write an evaluation of a product I did not see, or recommend the use of the current product, whose deficiencies were not addressed at Tuesday's demo.
- My takeaway from their presentation is that III personnel were unprepared to present their product electronically. If III cannot manage an online presentation well, this fact does nothing to inspire confidence in their ability to do more complicated things well with regards to servicing their product.
- I was a little disappointed with the morning part of the demo. I thought it was too technical (speakers talking about the scripts, codes, etc.) instead of what we need to work with like the questions in this survey.
- They keep talking about how they are evolving and their timeline -- but I have not seen any improvements since moving to Encore Duet
- For my department in Access Services, Innovative works very well and we are quite satisfied with it. I know other departments are not and want a change.
- Most of what I saw was prototyping based on III's roadmaps. Will we remain waiting for III in one year, two years, five years to realize, test and implement what will clearly be a large undertaking. From our previous interactions and disappointments, I find it difficult to believe that much of this will be successfully realized in any realistic or useful timeframe, if at all.
- Encore Duet is a terrible product. We should not continue to use this. Both Primo & WorldShare Discovery are possible better alternatives.
- Focusing on an app instead of a bootstrapped version of the OPAC is ridiculous. Fine if the app is more robust, but they should be working on both. This is a glaring example of how they keep trying to tell their customers what they want, rather than actually asking what they want.
- We asked for a live presentation and III mostly showed Power Points of what "may" come. We've been down that road many times before and I am no longer a believer. I took part via the webinar and I'm pretty sure I heard III admitting that they went down the "wrong route" and are now taking a different path. Again, they won't bother making needed changes to their existing system because they are too engrossed in their development products and traveling to Hong Kong or skiing in the Alps. We need a vendor that will finally LISTEN to us.
- While this was a very different presentation from the others, it did not seem that they were very focused on answering questions. They had a canned presentation and did not seem prepared to answer the questions people had which did not relate to their presentation. Questions both on the chat and in the room were not repeated, and didn't seem to be answered.

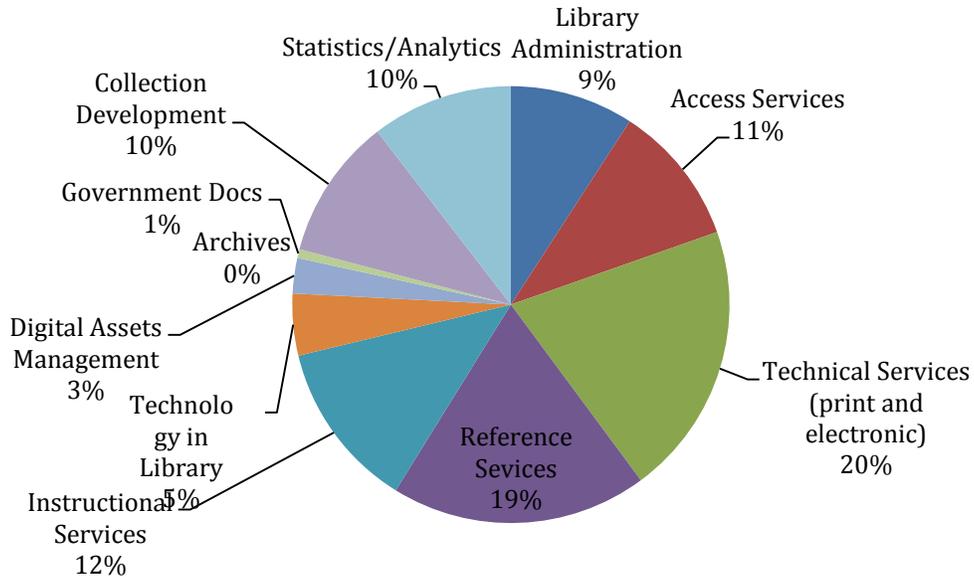
- I was very disappointed in the presentation yesterday. I think Innovative Interfaces has a long way to go to be "caught up" with most (if not all) of the other vendors we've seen recently. The improvements they are making (such as the mobile app and the web based circulation model) are great, but not even fully available to us at this time. The presentation did not seem to be customer-focused, and that's disappointing. I wish there had been more focus on, "What are you looking for, where can we help you, how do we support you" and less focus on "this is how our company works, this is the direction we are heading in".
- The company is way behind the curve. Their VP who made the presentation is a company hopper and promises made on development will be followed through?
- This was a waste of my time and energy. The presentation was essentially an unmitigated disaster. It was poorly organized, poorly presented, and professionally insulting.

**A. Demographics**



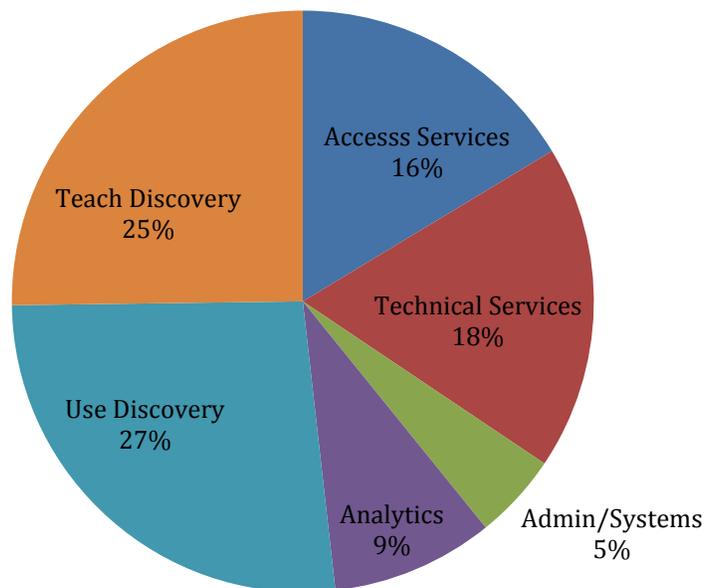
1. Twenty-three responded to the survey on the Ex Libris demo, 18 for Koha (ByWater), 17 for OCLC-WSM, and 13 for III demo.

## What do you consider to be your major job role(s)



2. The respondents were a good cross-section of roles in a library.

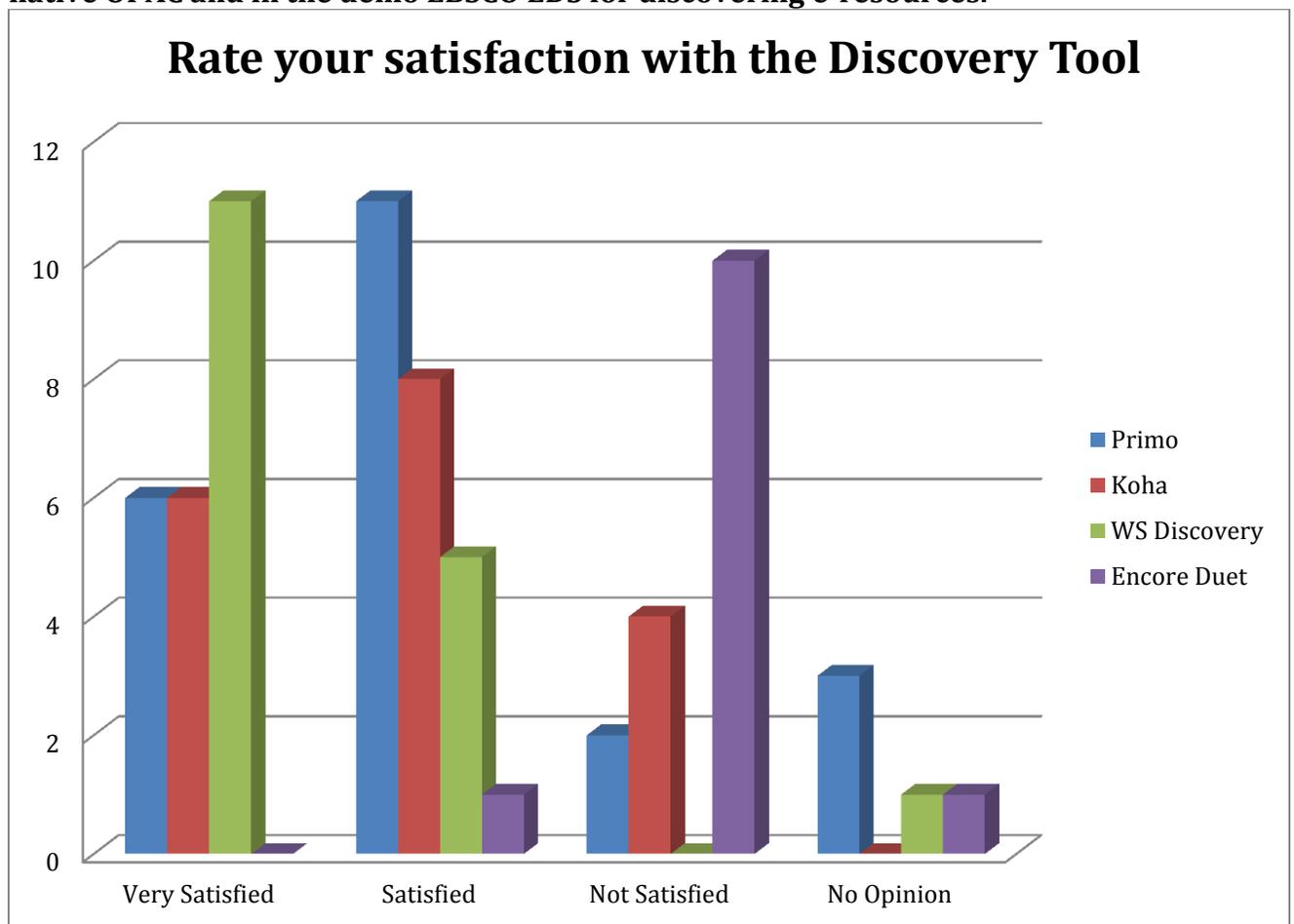
## Which of the following functions do you do on a regular basis?



3. Half of the respondents taught and used the Discovery tool. The other half used the staff functions.

### B. Discovery Tools

**Primo from Ex Libris, WS Discovery from OCLC, and Encore Duet from III are true discovery tools as both catalog and e-resources results are presented interleaved. Koha does not have its own discovery tool and instead has a native OPAC and in the demo EBSCO EDS for discovering e-resources.**



4. Seventeen of 23 rated Primo as satisfactory and above, likewise 14 of 18 for the Koha and 16 of 17 for WS Discovery. Notably 10 of 13 respondents found Encore Duet unsatisfactory.

### **From the survey comments: some of the best features and shortcomings of each product.**

#### ExLibris Primo

- All-inclusive functionality.
- Customizing available, subject limiting
- Personalization, eshelf, virtual shelf browse, citation trails, topic clusters, recommendations

- Subject browsing, advanced functionality to support high level academic research
- The interface and its customizability
- Primo is a mature, robust product. ExLibris seems to have a much more responsive model of service than our current provider. I also appreciate that each school can set up its own discovery platform and choose how to share resources.
- Its advanced backend options will also allow us to streamline our workflows. It's a modern ILS with a highly customizable discovery layer. I love it and hope we can get it.
- Facets work well, browsing by different fields
- The interface with the 3 availability facets centered across the page above the search results lists: Peer-Reviewed Journals, Available Online, Available in Library.
- The bibliographic export features are great.
- Alma and Primo must be purchased and used together for full functionality
- It seemed complicated and confusing
- Its lack of modularity (that is, the way the Primo Index seems to be inextricable from the Primo discovery front-end...it

#### Koha OPAC/EDS

- The front end: Flexibility in many areas (e.g., ability to customize discovery & catalog search in a way that makes sense).
- Nice clean interface.
- Truly robust advanced search. Friendly screen that handles Boolean logic for the user (without confusing them) and also suggests additional limits at the bottom of the screen.
- OPAC has indexed searching including subject
- OPAC single search box includes a drop-down menu allowing user to limit to titles, authors, etc. when desirable.
- Catalog is separate from a third party such EDS or Summon - no "one search" capability
- They are only working with EBSCO. You can choose - at an additional cost - another Discovery system, knowledge base, link resolver.
- The discovery side didn't seem innovative with its two interfaces that were not integrated
- No subject browse

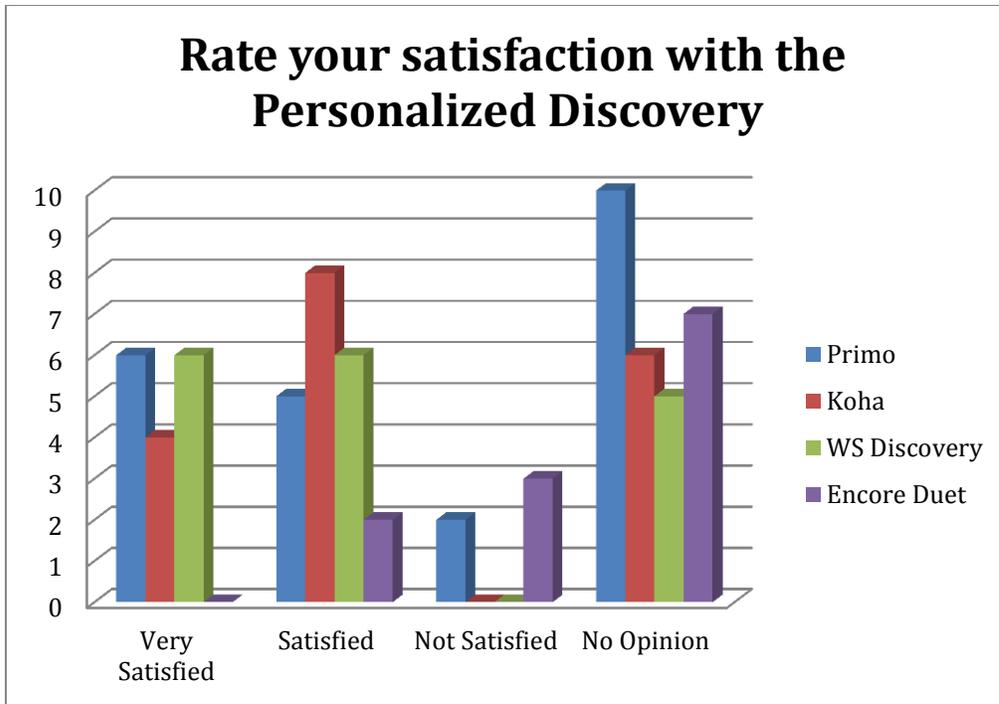
#### WSM Discovery

- Easy to use and navigate for the user
- The OCLC knowledge base.
- Ability to have our EBL titles display as part of our holdings
- The way the holdings are grouped providing seamless access to user.
- The facets work well.

- WSM offers the most seamless way to discover holdings of all libraries. It is the closest we are going to get to "one catalog" for Rhode Island
- OCLC is a neutral party when it comes to content, it potentially will be able to integrate any and all subscription content providers into its discovery system
- Requesting materials appears to be seamless. WSM allows users to request any materials they discover without having to go through a separate ILL process.
- OCLC's responsive interface design being able to respond to the screen size of the device being used to access it.
- Built-in access to WorldCat allows discovery of other freely accessible versions of result.
- An intelligent system, clean screens/interfaces.
- It's content neutral--no conflict of interest with selling their own suite of products/databases in addition to a discovery and link resolving service.
- Facets allowed you to apply simultaneously both library and relevance limiters to search results lists.
- Advanced search looks simple but gives you lots of options in the drop down menu.
- You can create single box search widgets with whatever limits you want to build in.
- You can get results for your own library and then your consortium first without having to filter out everything else.
- Neat, easy-to-read results display (looks better than Encore, and not/cramped in the center of lots of white space like III OPAC screens).
- Ranked searching
- The federated searching for databases not included within the central index.
- No subject browse but is available in cataloging

### III Encore Duet

- Discovery of e-resource content
- Capability of filtering down to something very specific quickly.
- One search interface
- Facets are confusing.
- Cannot choose multiple facets.
- Results not numbered
- User interface is clunky and not user friendly
- No title or author indexing, no subject hotlinks, no logic to the relevance ranking, bad links frequently reported.
- Advanced search does not work

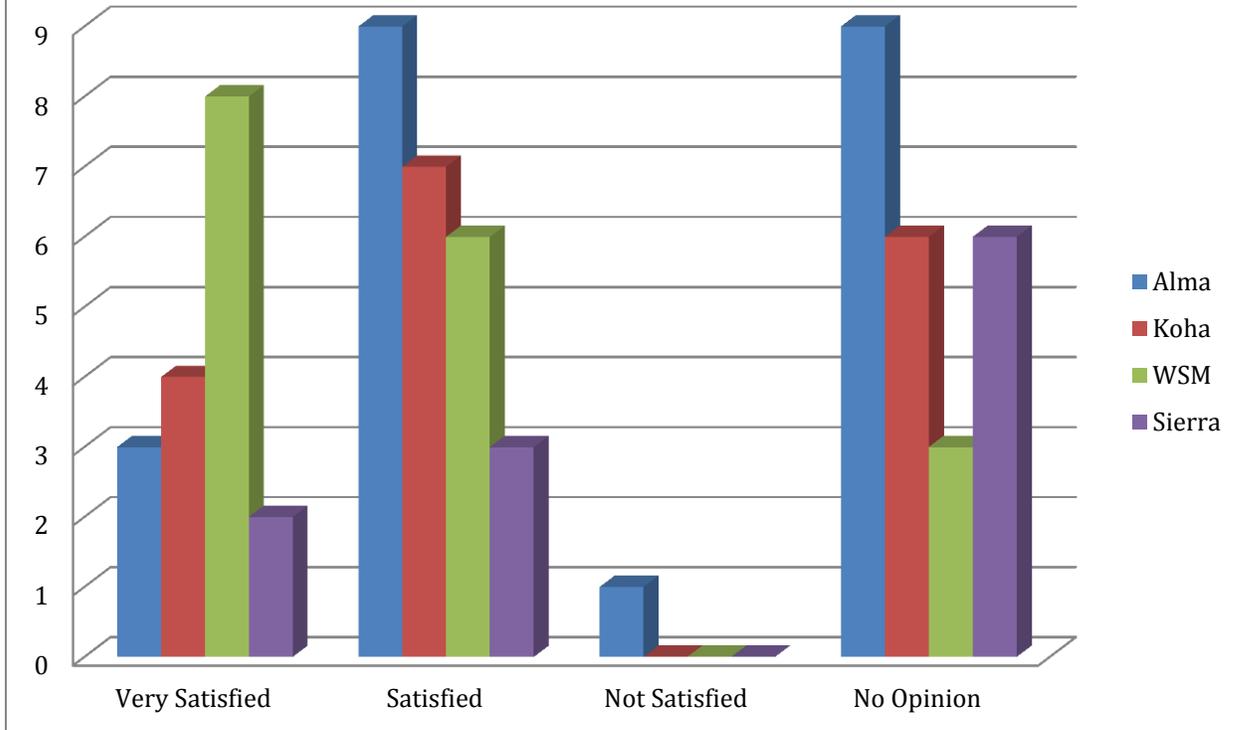


5. More than half the repondents were satisfied with the features provided by the personal login space for discovery. Notably, although this was demoeed for Primo, Koha and WS, many repondents but less than half, had no opinion.

#### **C. Staff Functions of the ILS**

**The staff functions are carried out in Alma from Ex Libris, World Share Management (WSM) from OCLC, and Sierra from III. Koha does not have a separate product name.**

## Rate your satisfaction with the Access Services



6. The response indicates that many had no opinion. But for those that did have an opinion on the functions of Access Services, most were at least satisfied with each of the products with WSM having the highest number of “very satisfied.” One respondent found Alma to be unsatisfactory.

### Access Service comments from the survey:

#### ExLibris Alma

- A simple way to handle automation of relatively complex-seeming tasks
- Simple and the fact that requesting will be seamless.
- Alma's pages are too busy because they have so many options. Also, the print is tiny and everything is squeezed in.
- Too much reliance on integration with other Ex Libris Products

#### Koha

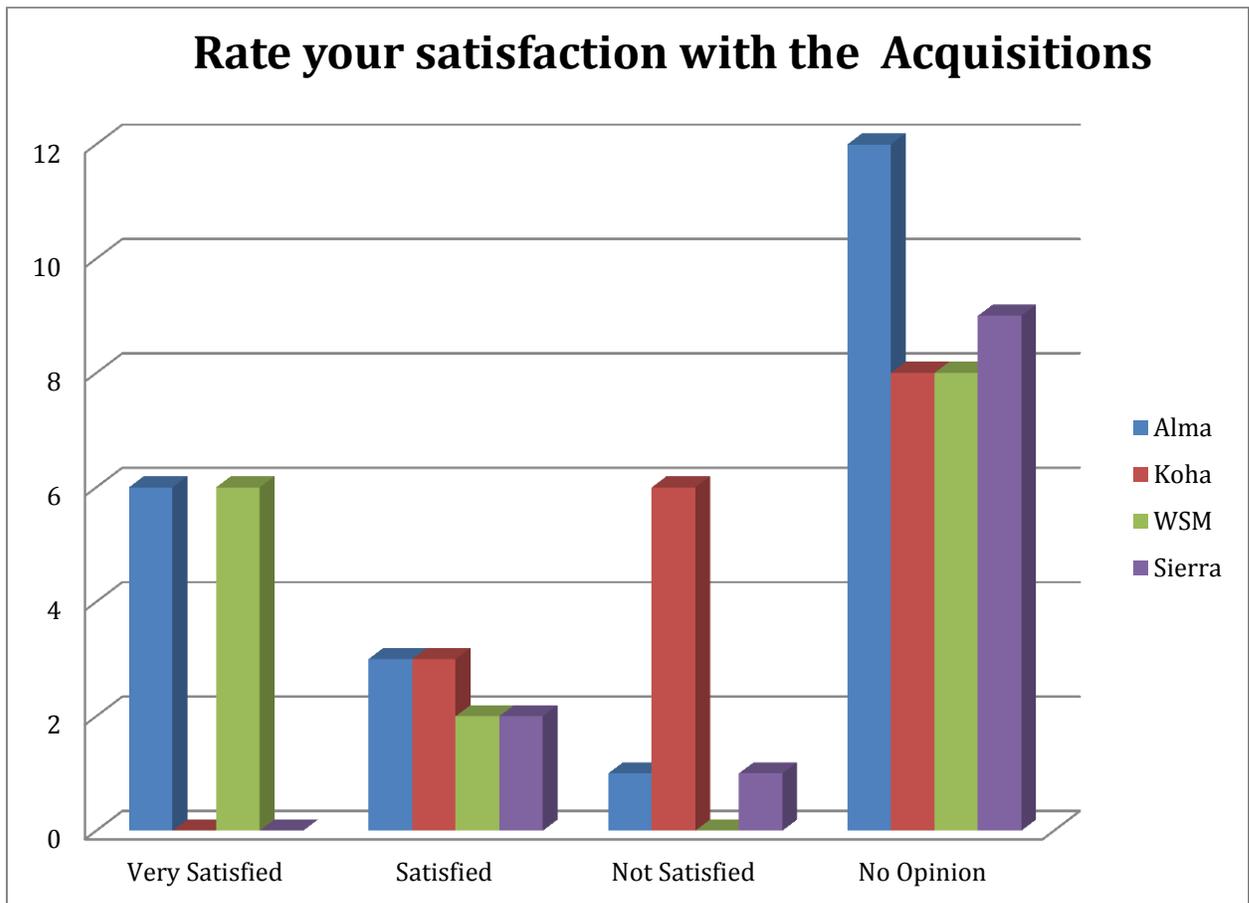
- Seems relatively easy to use. Mostly all functions can be performed on one page
- The ease of using course reserves.
- Some lack of functionality in course reserves - store e-resources outside system, need to edit 856 field, no password protection

### OCLC WSM

- Seamlessly Integrated ILL
- Does the basic access services functions in an effective manner.
- The course reserves system needs to be fleshed out a bit more,
- Lack of password on reserves

### III Sierra

- Future -ability to run Sierra on a web browser, apps for mobile devices.
- Billing is not integrated with university finance



7. The response indicates that many had no opinion. But for those that did have an opinion on the functions of Acquisitions, most were at least satisfied with each of the products with Alma and WSM having the highest number of “very satisfied.” Koha was rated as unsatisfied by 6 respondents.

### Acquisitions comments from the survey:

#### ExLibris Alma

- The interface looked modern, easy to navigate, and flexible. I very much liked its integration with the larger vendors
- Love everything

- Great! Automated holds for patron requested items! There were also some items under the roadmap that looked appealing (ex. integration with amazon, patron requests going immediately into acquisitions)
- Combined print and electronic resources workflow, task lists, e-resource activation informed by knowledge base data.
- More sophisticated than we need

#### Koha

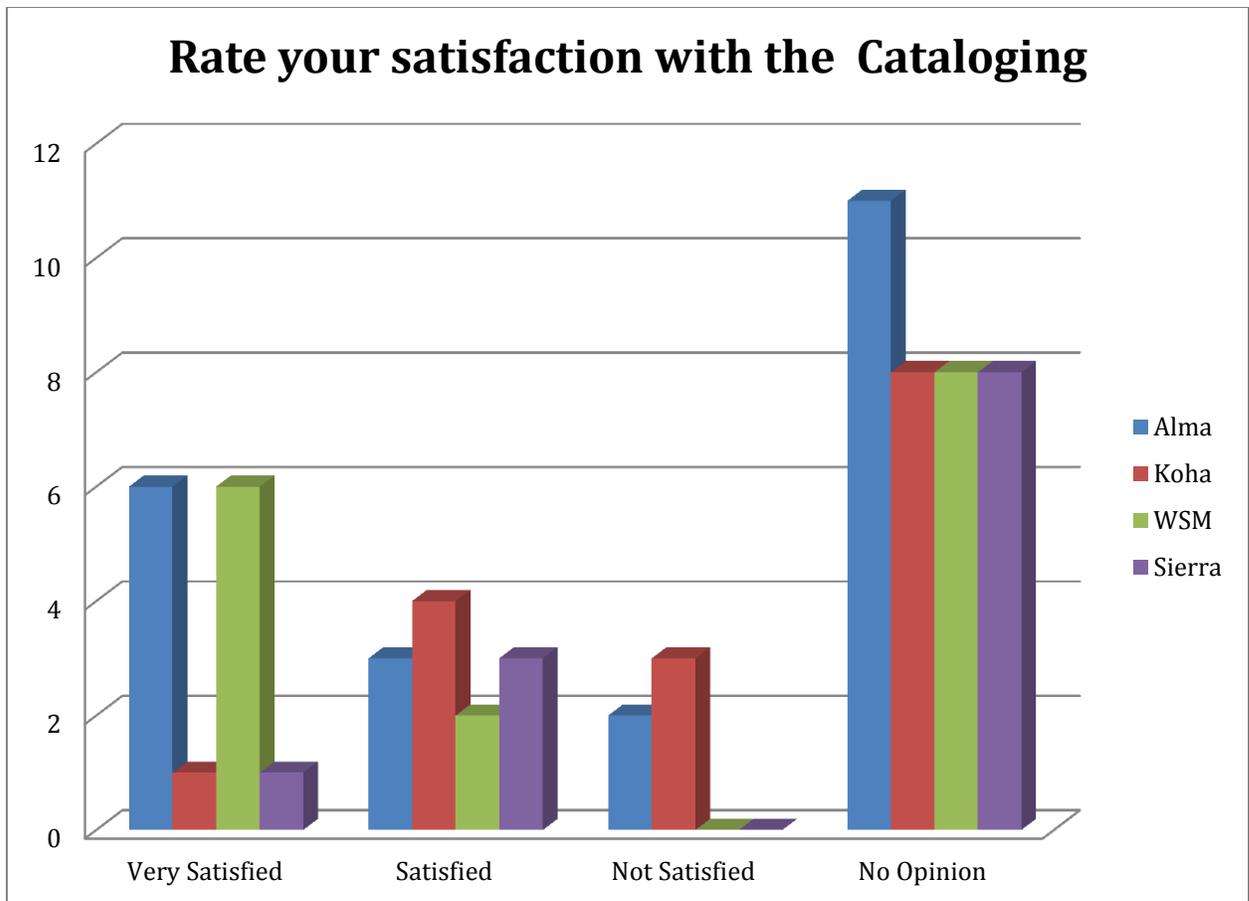
- Lack of ability to separate out budgeting and fund information between consortium instances
- No EDI
- I don't think it would improve our workflows at all

#### OCLC WSM

- There is little setup work for vendors and collections.
- I REALLY liked the feature that allows searching for keywords/subject areas right from the Acquisitions screen. Also liked ability to do processing of all resources (such as e-resource subscriptions and purchases), not just books. Also, no more need to use PromptCat or SkyRiver Record Match for brief order records from vendors. Those records will automatically be updated via data from WorldCat.
- It seemed very simple and I liked the budgeting tool especially how you could apply funds from several areas to one item.
- Manages subscriptions as well as books. Central vendor files. Simple easy to understand terms and screens.
- Reporting by FY, organized serials payment history (i.e., unlike III which exports all past payments in an undifferentiated stream.

#### III Sierra

- Easy importing of invoices.
- Although payments for serials are retained in order records, exporting them results in a jumble of text and numbers that is very difficult to parse and does not line up payments by date, only by sequence
- It's clunky - workflows are not smooth and easy.



8. Again the majority of the respondents had no opinion. It is notable of those that responded 2 thought Alma and 3 thought Koha for cataloging was unsatisfactory.

#### Cataloging comments from the survey:

##### ExLibris Alma

- Capability to harvest metadata from Institutional Repositories
- Automated processing of items is a neat feature
- The "rules" would definitely help workflow. I take a lot of "junk" out of records - it would save time and frustration to just be able to apply a rule to a record and have the system do it for me. On the roadmap they mentioned browsing while cataloging becoming available and that would be fantastic.
- Macros, normalization, and other tools
- Concerns about authority records

##### Koha

- We would still be exporting OCLC records so updating holdings would be part of the procedures. Possible to share one catalog with one instance of Koha
- Don't like the current interface for creating MARC records, but they did discuss a new interface that would be available.
- Interface unsuitable for daily work

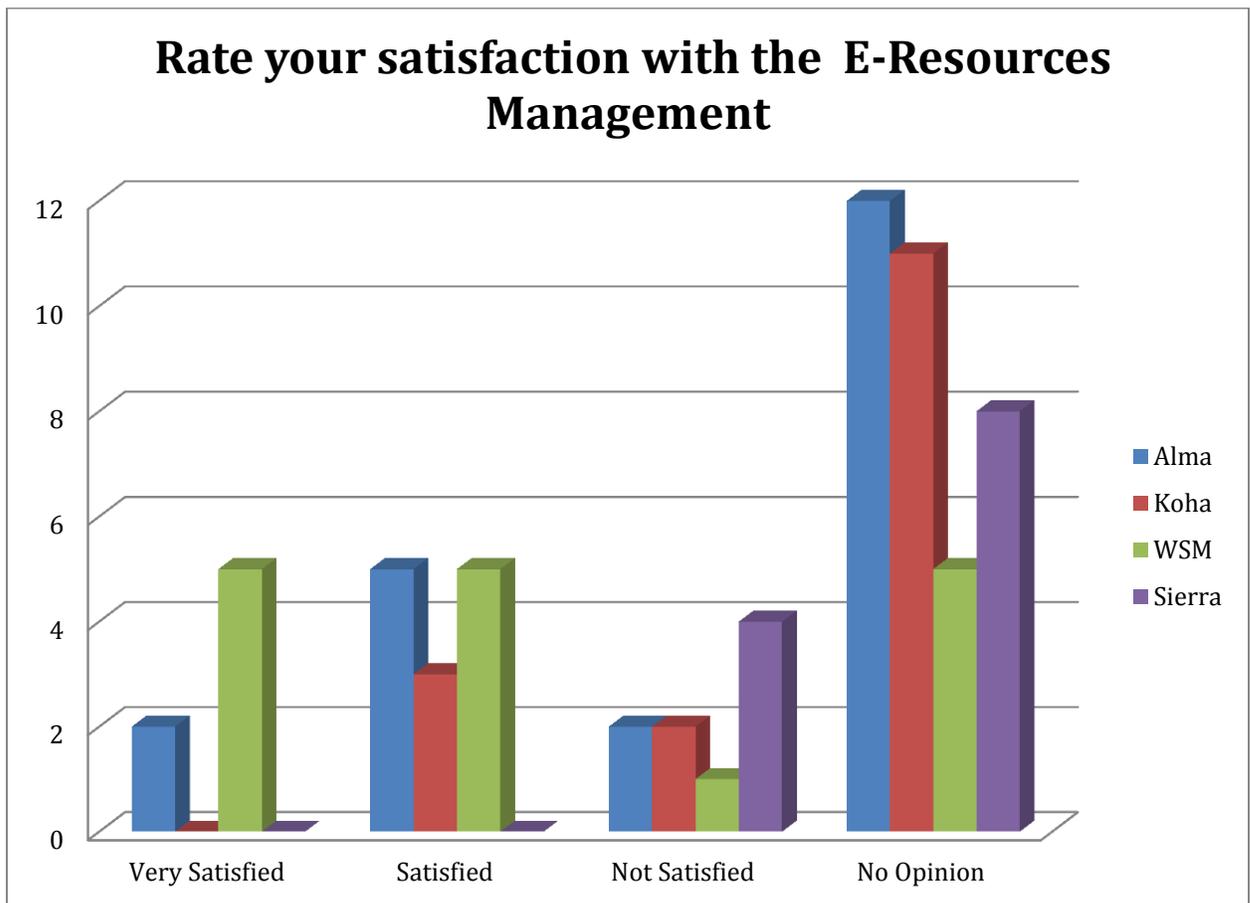
- Concerned that there isn't enough separation between libraries. For example, batch editing items could affect other libraries' items with a very simple mistake.

OCLC WSM

- Keep our way of cataloging (Connexion) - no downloading of records, have own subject headings such as children headings, automatic authority control
- Easier to search than Connexion, record presentation clearer than Connexion, sets holdings in WorldCat,

III Sierra

- Liked its global update functions. Catalog cannot load multiple records; loading multiple records at HELIN Central seems to be complex and slow.
- It runs slowly. It's a bit clunky at times.



9. Those who rated the e-resources Management capability were satisfied with the products, with WSM having 5 respondents rating it as very satisfied. III Sierra, which was rated as not satisfied. All products had some who rated it as not satisfied.

**E-Resources Management comments from the survey:**

### ExLibris Alma

- Integration into technical services workflow
- It is not a separate module--e-resources acquisition, (whether of single titles or whole collections) and activation work together and draw from the knowledge base. If the link resolver works well, it is a perfect system.
- Did not get a good demo of how they would be managed

### Koha

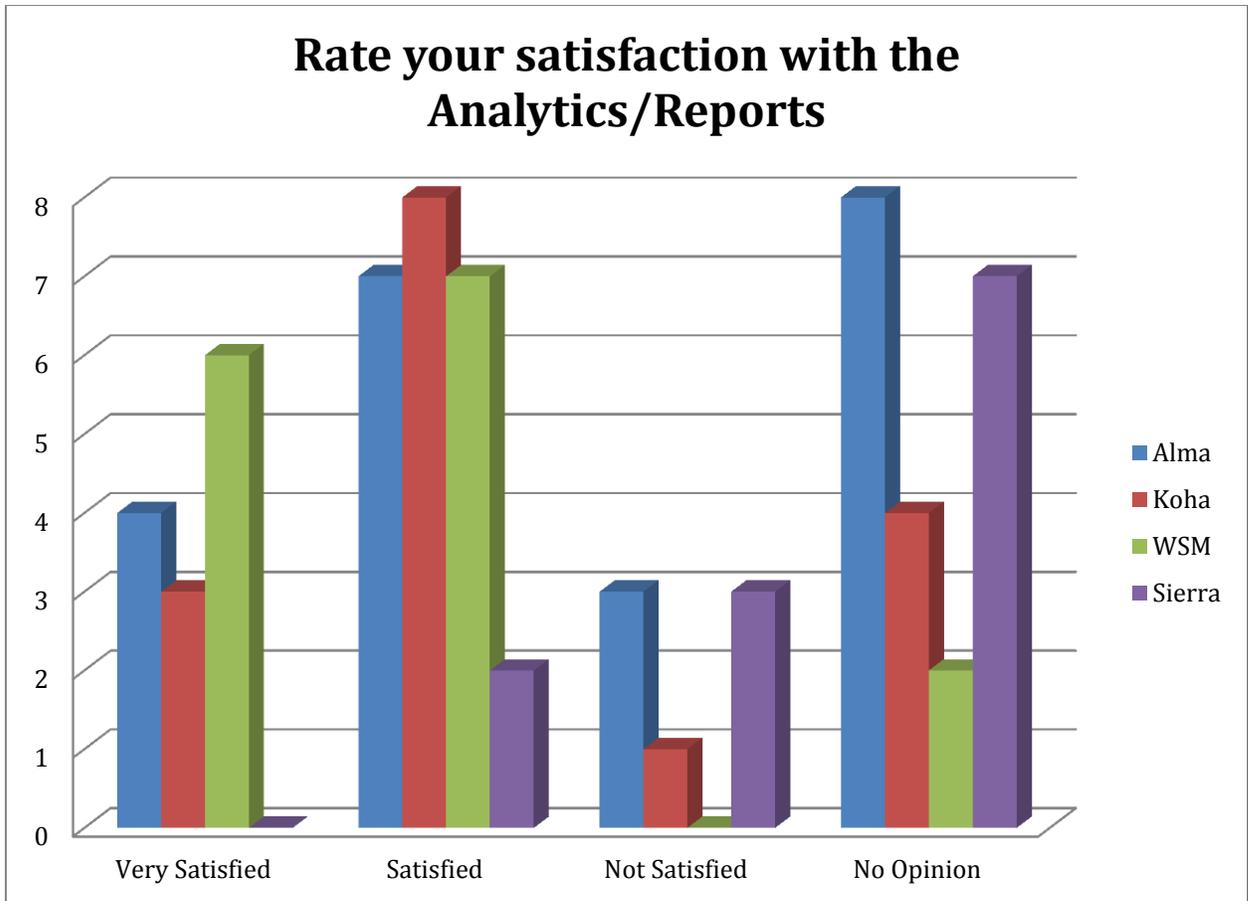
- I didn't see any demonstration of e-resource management
- There is no ERM. (Although they mentioned a third party system called Coral).

### OCLC WSM

- Can store license agreements in the license manager
- Capability to add our repositories, other special collections
- OCLC neutrality should allow for integration of all subscription content providers.
- Definitely seems nicer than Sierra, but we did not go in-depth enough. The interface is much more modern (drop down menus,. easy to navigate)
- MARC record batches for no additional charge and no long record loading time/procedure based on package selection. Print collection holdings interfiled with electronic. Based on normalized knowledgebase (unlike EDS which is based on publishers' offerings).
- Presentation didn't cover the knowledge base and how we would input our subscribed resources or how the link resolver to full text would be set up.

### III Sierra

- Now there is no knowledge base? Or one is coming?
- If the knowledge base is coming from EBSCO, there is no title normalization in their KB, so just running it against a bibliographic database won't do the trick. Also, if the bibs are coming from Sky River they will be late because most (all?) of the original cataloging of e-resources is done in OCLC.
- Its current state is not functional and is providing patrons with bad data.



10 All respondents that rated were satisfied with the analytics reports for each product. The exception was III Sierra with 3 respondents rating it as not satisfied. The other interesting rating is for Ex Libris Alma, which had many rating it as very satisfied or satisfied, but 3 rating it as not satisfied.

#### Analytics/Reports comments from the survey:

##### ExLibris Alma

- They offer more reports than Sierra. I like the ability to use reports that others have shared.
- The wide range of options and the ability to browse a set of community templates
- It would be great if we could centralize and easily run all of our necessary reports, without having to create lists and consult Millennium Management Systems.
- The generation automatically of E-Reserve reports also predictive and prescriptive aspect of the reports.
- The automated reports (that update when you tell them to)
- Subscribe to reports would cut down on having to send emails to everyone.
- The ability to draw related data together from different kinds of records/functional areas.
- Accessing analytics information via the API is a little confusing

- Probably a learning curve involved in using this ultimately
- Very complex system--too many types of reports to select from--more data than some libraries would need. 11/3/2015 8:34 AM
- Looks complicated!

#### Koha

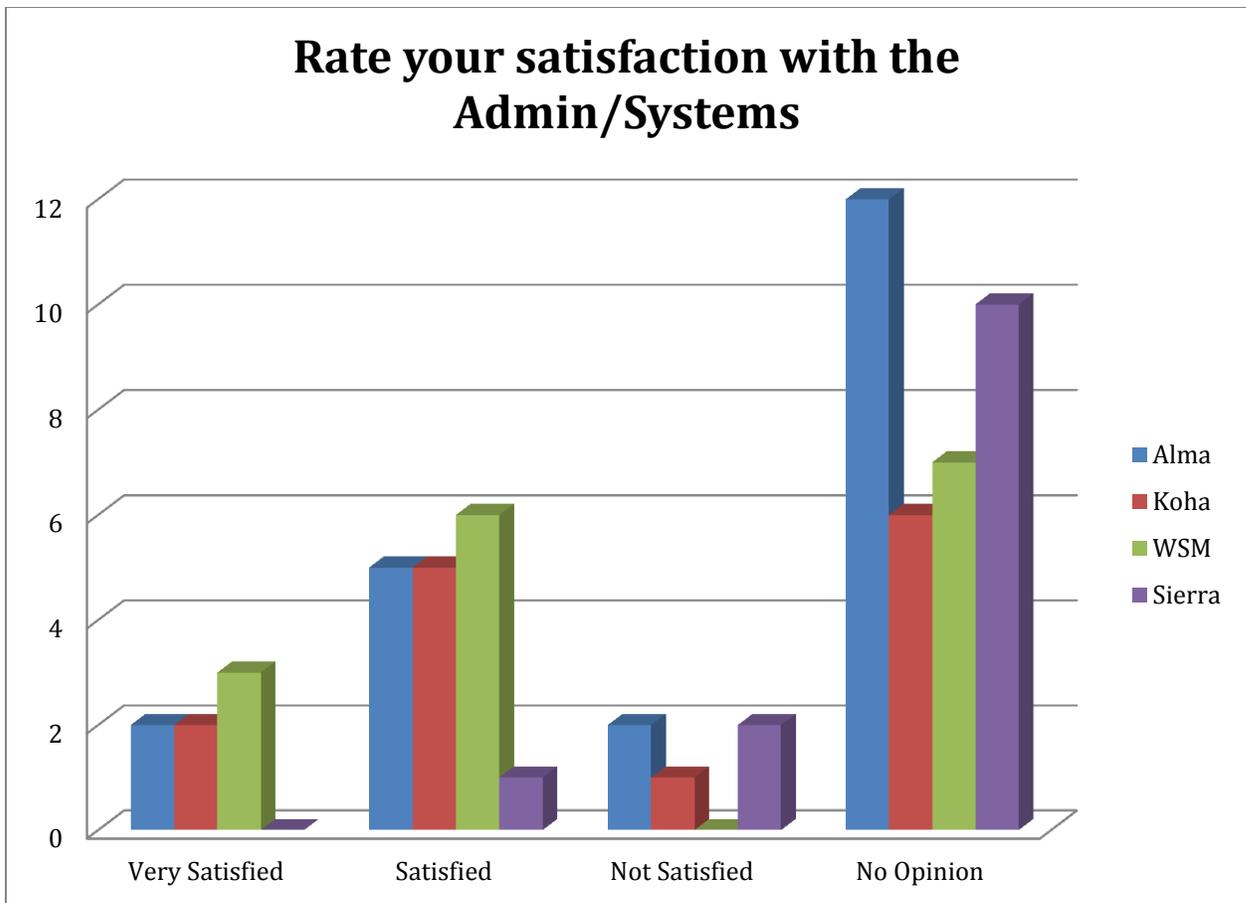
- Don't have to redo a report, you can use the model for one that's already been done. They have canned reports and ByWater will work to make a customized report and if you know SQL can make your own
- Transaction data is captured along with holdings and other data.
- Great flexibility. Easy to understand and use.
- Lots of report functionality available if you know how to get to it.
- May require SQL knowledge; few staff have that

#### OCLC WSM

- No need to learn SQL-- ready list of reports - easy to build reports -- overlap analysis already there
- It could be very powerful, Since WSM allows granular identification of patrons (major, student-level, etc.), reports analyzing collection use at a granular level could be produced.
- It looked really easy to use. Drag-and drop is nice. Not enough time to go in-depth.
- Easy to use. Reports functional data with bibliographic data. 11/12/2015 7:49 PM
- Liked the ability to create the custom reports and the ease to do so vs. the create list function in Sierra.
- The standard reports seemed not only user friendly but something that we would actually use. I also like the ability to schedule the reports to run as I tend to run the same ones at the same times each month.
- Didn't care for the harvesting of usage statistics. COUNTER and SUSHI are overrated and not applicable to hybrid databases with mixed media content.

#### III Sierra

- Create list works pretty well, but I have to export lists in order to do any analysis.
- Not enough flexibility or customization.
- Currently their Web Management Reports are only partially functional. As our fund reports can only be generated on a Mac using Safari. On a PC these reports are not available in any browser that is supported by the university.



11. Very few actually rated admin/systems functions. Most who rated found WMS Alma and Koha at least to be satisfied.

#### Administration/Systems comments from the survey:

##### ExLibris Alma

- Levels of permission access, like the update schedule and the notices that appear to help you learn the new functionality.

##### Koha

- Easy interface for loan rules
- We can set priorities for relevance ranking.
- We didn't see enough about the admin. side.

##### OCLC WSM

- Each library has control on setting - no need for backups, updates, etc
- Manage Budgets component, Manage Vendors component, License Manager, & Subscription items--renewals.
- Overall, the different functions seem truly integrated and seamless. For example, a patron can search for library materials and easily toggle into looking up his/her patron record.
- I like how the permissions are predetermined

- Presentation didn't cover the knowledge base and how we would input our subscribed e-resources or how the link resolver to full text would be set up.

### III Sierra

- Complicated, no idea which functions are truly available, documentation hard to find for updates made?
- Permissions, determiner tables are a mess.

## 7. Appendices

### 7a. Responses to RFI

#### Interoperation / integration with other systems

##### General integration:

**Is the ILS fully integrated and operational, or are there any areas (Circulation, ILL, Acquisitions, Cataloging, Serials, ERM, Reserves, etc.) that are still being developed?**

**Innovative:** The Sierra system is fully integrated and operational.

**Ex Libris:** Yes, Alma is fully integrated and operational.

##### OCLC:

- Operational WMS services include:
- Print and Electronic Acquisitions with serials control
- Circulation and Delivery
- Discovery interface, including mobile interface
- Course Reserves
- Link Resolver
- Cataloging
- Knowledge base
- Interlibrary Loan
- Standard reports
- Custom reports tool
- License Management

#### How does the ILS interact with 3<sup>rd</sup> party systems (i.e. ILLiad, etc.)

- **What protocols are used for ILL integration?**

**Innovative:** Innovative offers an integrated Interlibrary Loan (ILL) option with Sierra, which supports the ability to transmit requests by means of the ISO 10160/10161 protocols, among other methods. Sierra's ILL is ideal for integrating secure requesting into the public catalog, and also for handling internal circulation of materials borrowed through ILL that must then be

returned to the lending library. Searches, requests, deliveries, checkouts, and returns are frictionless. ILL tracks items at every point of the process, providing integration, security, and rapid notification. This seamless integration ensures ease of use and consistency throughout the loan process.

Sierra's ILL provides the ability to transmit ILL request by means of ISO protocols to a specialized third-party system, such as OCLC, ILLiad, Odyssey, as well as a much larger network of lending libraries. ILL also lets staff print an ILL form and/or email a request for the item to another library, using a Library-defined list of ILL suppliers.

**Ex Libris:** Yes. Alma supports two basic modes of Resource Sharing:

1. Via external systems as a direct or mediated service.
  - In this mode, the external system manages the request for its full cycle, at both lender and borrower sides of the lifecycle. Alma will manage the internal library processes that support the ILL workflow. This includes the following:
    - Moving physical items from lender to borrower side;
    - Digitizing material at lender side;
    - Receiving material at the borrower side and placing it on the hold shelf for the patron to collect and loaning out to the patron; and
    - Checking the item back in from the patron, and shipping the item back to the original lending institution.
2. Alma manages all aspects of the resource sharing request-related transactions between the resource sharing partners, and the internal library process that support the resource sharing lifecycle.
  - In this mode, Alma manages both the resource sharing request-related transactions between the resource sharing partners, and the internal library process that supports the resource sharing lifecycle. See RFI for more details.

## **OCLC**

WMS fully integrates WorldShare ILL to manage outbound and inbound requests. Requests are informed with data from the knowledge base, and license manager and end-user requesting is facilitated by WorldCat Discovery, the end-user environment of the service.

WorldCat Discovery currently interoperates with the following ILL systems for placing patron requests:

- WorldShare ILL
- ILLiad
- Relais

- VDX
- Navigator
- Clio
- Any system able to accept an Open URL 1.0

WorldShare ILL also is presented in the WMS staff interface as the ILL module. Staff use it for borrowing and lending. It will be integrated with the library's catalog, so holdings availability information can be presented to staff. The same configuration interface used for WMS Circulation and Acquisition also will be used to configure ILL options.

### **Does the ILS support full EDI interface with major library vendors for ordering and invoicing?**

**Innovative:** Yes. Sierra currently supports Electronic Data Interchange (EDI) using several formats including EDIFACT, X.12, proprietary formats and APIs. Innovative has developed practical solutions to implementing EDI, and even before related standards have been developed Innovative has implemented EDI solutions to meet customer's needs. As EDIFACT standards are more widely implemented by vendors, Innovative reviews and implements these standards as appropriate.

**Ex Libris:** Yes. For workflows such as ordering and invoicing, Alma relies on standard protocols to facilitate automated interoperability with other systems—significantly streamlining workflows and reducing the time to make new resources available to the campus community.

Alma supports electronic data interchange (EDI) using the UN/EDIFACT standard for electronic communications of order and invoice information. This information includes vendor EDI attributes, S/FTP connection information, individual library EDI information, and EAN information per vendor account. These details allow for maximum flexibility when there are multiple libraries within an institution, or when a library has multiple accounts with a vendor (e.g. for multiple formats, material types, approval plans, etc.).

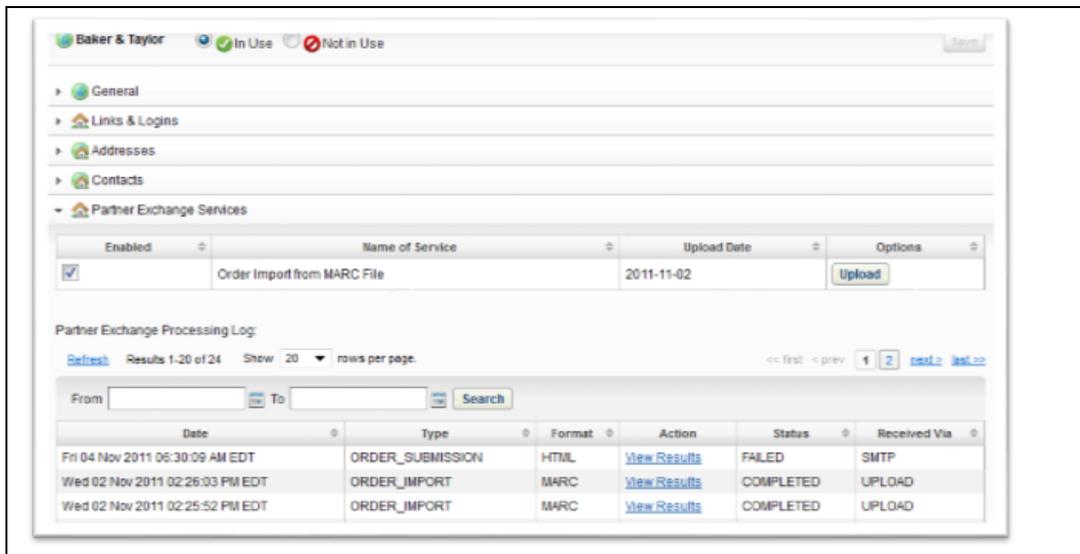
Alma also streamlines electronic ordering through improved management of embedded order data records. Once a vendor EOD profile has been created, the process is fully automated. Rule validation and the auto-generation of purchase orders takes place without the need for staff intervention. As EDI orders are sent and EDI invoices are received, the EDI files are linked to the vendor's record and available from the attachments tab. Alma provides tools including analytics to track purchase order status and budget information.

## OCLC:

Yes. WorldShare Acquisitions supports electronic data interchange (EDI) with participating vendors, including MARC order import, MARC shelf-ready import, electronic invoices in both EDIFACT and MARC format, and MARC EDIFACT order submission.

EDI is supported in Acquisitions for loading invoices and placing orders. Currently, EDIFACT invoice records from vendors and the ability to send POs via EDI are integrated into Acquisitions and simply included for all libraries. EDI claiming is planned for a future release.

WMS supports matching MARC records and creating orders based on data imported from several book vendors, including (but not limited to) YBP, B&T, Ingram, Coutts, Midwest, Emery-Pratt, and Ambassador. This is supported for each vendor from the Partner Exchange Services tab in the appropriate vendor record. Because the vendor records are shared globally, they are available for all libraries that use the vendor. Any vendor who can put our EOD records with the data in the OCLC-defined 9XX fields will work for loading. The libraries are saved the effort of configuring and testing these loads since it is done once for all libraries using WMS.



The Partner Exchange Services section of a vendor record

## General Systems

**Is the ILS cloud-based, hosted or local?**

**Innovative:** Sierra is a flexible platform and can be hosted in our state of the art facilities or, if preferred, can be deployed on local turnkey or site provided hardware. Sierra connects seamlessly to our OLS, or Open Library Stack, Innovative's Cloud infrastructure. While much of our software is launched from the cloud in our OLS, Innovative is able to offer a unique approach to cloud enablement, allowing the library to determine, based on their own conditions and policies, where and how their data is maintained.

### **If cloud-based or hosted, where is the data center located?**

**Innovative:** For HELIN, the system is hosted in the Syracuse, NY data center.

**Ex Libris: Cloud based.** The data center is Equinix, one of the world's premier hosting companies, at their data center in the Chicago suburbs; all of the servers, switches, storage etc., are owned and maintained by Ex Libris cloud personnel. As a multi-tenant solution, the infrastructure is shared among multiple customers.

**OCLC:** WMS is cloud-based, hosted on servers at the OCLC headquarters data center in Dublin, Ohio. In addition to this main data, OCLC maintains a fully redundant center in Westerville, Ohio as well as in Toronto, Canada; Birmingham, England, Europe, and Australia.

### **How often are ILS updates or iteration releases occurring?**

- **Are they scheduled events or automatic roll-out?**
- **What is the typical downtime for upgrades?**

**Innovative:** Innovative deploys a comprehensive process for innovation, evaluation and prioritization of product direction and actual development long, mid and short term.

For the short-term process Innovative use software product from Atlassian to articulate user stories and epics. These integrate with an agile engineering process that optimize productivity, which combined with grouping of stories maximize output and impact on a specific capability area within our software portfolio. Innovative on request share this process, priority and output transparently with its library partners. This results in quarterly product releases, which is openly shared with library partners and other parties in the library software market. We work actively on constant upgrades to the latest release with our library partners.

**Ex Libris:** In true software-as-a-service solutions, the concepts of product versions and platform upgrades lose their traditional meaning. All of Alma's software updates are done centrally and for all Alma customers at once, without

the need for local institution involvement, so that all customers are always using the latest version (just as a user will always be on latest Gmail version).

Because Alma is fully web-based, a user needs only a browser with internet connectivity; there is no need for client components. The Agile development methodology allows us to deploy software enhancements rapidly, answering our customers' needs very quickly. Being deployed centrally allows Ex Libris to deploy immediately to our entire install base critical bug fixes, security patches and critical third party patches. Since Alma runs in the Ex Libris cloud, all of the solution's platform-related tasks are handled by Ex Libris cloud services personnel.

New releases are deployed on the first Sunday of every month. A week prior to the monthly release date – i.e., the last Sunday of the previous month – we deploy the new release in all the sandbox environments, allowing customers to test and familiarize themselves with the features.

Monthly Release Notes are published with every new release, as well as 'How-to' videos and interactive guides to assist users in getting familiar with new features.

**OCLC:** General enhancements are installed on a bi-monthly or quarterly basis.

#### **Are they scheduled events or an automatic roll-out?**

**Innovative:** Updates are carried out by the Innovative hosting team after first coordinating with the library to arrange the best time for the library.

**Ex Libris:** All of Alma's software updates are done centrally and for all Alma customers at once, without the need for local institution involvement, so that all customers are always using the latest version (just as a user will always be on latest Gmail version).

**OCLC:** Because WMS is a cloud-based solution, all upgrades occur automatically with no work required by local staff. Upgrades are automatically available for all subscribing WMS libraries. Pre-release notes are distributed at our password-access online Community Center and RSS feeds . In addition, critical issues are broadcast out to libraries via listserv and email.

#### **What is the typical down-time for upgrades?**

**Innovative:** Sierra, by design, does not require any scheduled downtime or "quiet time" for ordinary operations, for example on a week-to-week or month-to-month basis. The only ordinary recurring event in system management is the update (at a time of the libraries choosing) from one major release of the application to another,

and that process is itself designed from the ground up to perform all time-consuming preparatory steps in the background, in advance, without any impact on library operation, and require only a very minimal “commit” step to apply the final visible changes.

**Ex Libris:** In the event of planned downtime, we provide seven days’ advance notification. We define "Scheduled Downtime" as any downtime (i) of which Customer is notified at least seven (7) days in advance, or (ii) during a standard maintenance window, as published by Ex Libris from time to time. In either of the foregoing situations, Ex Libris uses commercially reasonable efforts to ensure that the Scheduled Downtime falls between the hours of Saturday 8:00 PM and Sunday 6:00 AM, U.S. Central time.

The Ex Libris System Status site allows all multi-tenant customers immediate access to view the current status of their service, and to sign up for email alerts when there are interruptions to the service. On the site, customers have access to:

- Live and historical data on system status
- Scheduled Maintenance notifications
- An option to sign up for email alerts regarding interruptions to the service.

**OCLC:** Scheduled downtime hours for normal system maintenance and upgrades for the staff interface occur at times that generally do not disrupt service, mainly Sundays between 2:00 a.m. - 6:00 a.m. Eastern Time when system use typically is the lightest.

Between installs, critical issues are fixed with patch installs. These installs do not require downtime of the system, and go through the same rigorous testing as quarterly ones.

WorldCat Discovery, the public interface, does not require any downtime for maintenance and upgrades.

Jobs scheduled to run during scheduled down time (i.e., maintenance) are placed on “hold” and released when the service is again available. Jobs that fail to run due to unscheduled downtime (i.e., outages) are flagged in the schedule for manual release when the service is once again available.

## **Access Services**

### **Circulation and Fulfillment:**

#### **What kind of flexibility or customization can be done with the borrowing/lending rules?**

**Innovative:** Sierra has an extremely flexible system for recording the Library’s circulation policies. These policies are recorded in a series of five main tables in

Sierra: the loan rule table, rule determiner table, patron block threshold table, Library calendar, and table of locations served by each workstation. Each of these tables may be accessed from a single drop down menu, and an authorized Library staff member can change or add to these tables at any time. Changes take place in real time.

**Ex Libris:** Fulfillment terms of use, such as check-out length, renewals, etc., are set using Alma’s fulfillment Terms of Use. The Terms of Use are automatically assigned to patrons and staff when getting fulfillment services based on Alma configured rules which take into account the patron/staff’s attributes, and the item for which the service is required. The below example demonstrates a 6 Week Loan Terms of Use that is assigned to users of type Faculty or Staff for items of the Main Library.

**OCLC:** The Service Configuration module within WMS is used to define the parameters for circulation such as loan policies, bill structures, payment methods, user categories, etc. The Loan Policy indicates the due date of the item, including fixed end of term dates, defines various bills associated with renewal, recall, overdue, etc.

The screenshot displays the 'Loan Policy Screen' with two main sections: 'Loan' and 'Recall'.

**Loan Section:**

- Circulates?** This loan policy always allows circulation (dropdown)
- Loan Period:** 4 Weeks (input field and dropdown)
- Overdue Grace Period:** 0 Minutes (input field and dropdown)
- Renew Period:** Days (input field and dropdown) After: The renew transaction (dropdown)
- Automatic Renewal:** Yes (radio) No (radio)
- Fixed Due Dates:** A table with columns 'Name' and 'Date and Time'. The table contains one row with 'Not Specified' in the 'Date and Time' column.
- Loan Fixed Bill:** (dropdown)
- Renew Fixed Bill:** (dropdown)
- Overdue Fixed Bill:** (dropdown)
- Overdue Periodic Bill:** 25cent per Day (dropdown)
- Overdue Notification Policy:** Standard overdue notice (dropdown)
- Pre-closing due date adjustment policy:** System default (dropdown)

**Recall Section:**

- Recall Period:** 1 Days (input field and dropdown)
- Recall Grace Period:** 2 Days (input field and dropdown)
- Minimum Loan Period?** (input field and dropdown)
- Recall Fixed Bill:** (dropdown)
- Recall Periodic Bill:** Recalled Item Fines (dropdown)
- Recall Notification Policy:** Item Recall (dropdown)

Loan Policy Screen

**In a shared ILS, how are loan rules uniquely called (i.e. what parameters drive the loan rules)?**

**Innovative:** See Above.

**Ex Libris:** Location is a primary component of Alma’s loan rules. Terms of use are assigned to a fulfillment unit, which typically represents a location or collection within the library. Multiple fulfillment units located across several libraries or physical locations can share a terms of use. The combination of fulfillment units and terms of use allows libraries to set up unique and flexible loan rules across a single institution or a shared installation. By that same logic, in a consortium configured as multiple single installations of Alma, each Alma institution uses only local loan rules, but these rules still allow for a great deal of flexibility at the local level.

**OCLC:** The Loan Limit policy establishes a maximum number of items of various material formats and values that, when exceeded, trigger a block.

**Loan Limit Policy**

Select Loan Limit Policy: Student Loan Limits [Go]

[Add new Loan Limit Policy](#)

* Loan Limit Policy Name	Student Loan Limits	
Verified Loan Count	10	<input type="checkbox"/> No Limit
Verified Loan Value Limit		<input checked="" type="checkbox"/> No Limit
Verified Renew Time Limit	1	<input type="checkbox"/> No Limit
Unverified Loan Count Limit	1	<input type="checkbox"/> No Limit
Unverified Loan Value Limit	25.00	<input type="checkbox"/> No Limit
Unverified Renew Time Limit	0	<input type="checkbox"/> No Limit

[Delete Loan Limit Policy] [Save as new Loan Limit] [Save] [Cancel]

Loan Limit Policy Screen

Loan policies and loan limit policies are brought together in the Loan Policy Map to determine default loan policies for all items, patron types, and locations within the system.

**Loan Policy Map**

Patron Policy	Material Format	Holding Location	Shelving Location	Loan Policy	Long Overdue and Lost Policy
-Unnamed-	All	Main Library	MAIN-Reference	NonCirc	General long overdue poli
-Unnamed-	All	Chemistry Library	All	NonCirc	General long overdue poli
-Unnamed-	All	Music library	NCRT-Reference	NonCirc	General long overdue poli
Faculty	All	All	All	Term-0fne	Faculty long overdue poli
Staff	All	All	All	Term-0fne	General long overdue poli
Grad	DVD video	All	All	4days-50cents	General long overdue poli
Grad	All	Main Library	MAIN-2HourReserves	2Hours-50cents	General long overdue poli
Grad	All	All	All	Term-25cents	General long overdue poli
Undergrad	DVD video	All	All	4days-50cents	General long overdue poli
Undergrad	All	Math Library	All	2hours-50cents	General long overdue poli
Undergrad	All	Main Library	MAIN-2HourReserves	2hours-50cents	General long overdue poli
Undergrad	All	All	All	4weeks-25cents	General long overdue poli
Alumni	All	All	All	4weeks-25cents	General long overdue poli
Community	All	All	All	4weeks-25cents	General long overdue poli
Inactive	All	All	All	NonCirc	General long overdue poli
Undergrad	Other	All	All	2hours-50cents	General long overdue poli

Save Cancel

Loan Policy Map Screen

Authorized staff can set up a calendar, with the ability to add, delete, and modify it. Information about your calendar, including closed dates and hours of operation, are set in the OCLC Institution Registry and consumed by WMS from that information. Loan periods and policies, including fixed due dates, honor the calendar, and do not assign due dates that fall outside the library's open dates or hours.

Because this information is provided in the Institution Registry, it applies to a specific institution (OCLC cataloging symbol). Each branch within an institution can then have their unique calendar created, which is used by the system for transactions at that branch.

**Time Zone**

Time Zone:

To determine time zone, you must have an address with geolocation.

---

**Normal Hours**

Day	Hours
Monday	09:00 AM - 08:00 PM
Tuesday	10:00 AM - 05:00 PM
Wednesday	09:00 AM - 08:00 PM
Thursday	10:00 AM - 05:00 PM
Friday	10:00 AM - 05:00 PM
Saturday	12:00 PM - 04:00 PM
Sunday	Closed

Click a day to modify its hours or click a button below to set hours for multiple days

---

**Special Hours**

	Description	Dates	Hours
<input type="checkbox"/>	Christmas Holiday	12/24/2011 to 12/26/2011	Closed

---

**Hours URL Page**

Online Link to Open Hours:

Calendar and loan-setting features

**With what level of granularity can individual libraries control the lending of their material (fines vs. no fines, renewals/no renewals, etc.)**

**Innovative:** As described above, Sierra's loan rules are incredibly flexible, and individual libraries are able to control how their materials circulate. Innovative will work alongside the library during implementation to configure how each library's materials will circulate within and amongst other libraries in the consortium.

**Ex Libris:** As stated above, individual libraries in a consortium have several options for configuring and controlling the lending of their own material. Separate institutions in a consortium, whether on a shared Alma installation or operating using single Alma institutions, can maintain entirely different loan rules and fine policies using Alma's flexible terms of use.

**OCLC:** In contrast to most consortial systems, group members of WMS each get their own cloud-based, multi-tenant instance of the management software. Individual HELIN libraries will manage their own budgets, their own technical services, and their own patron files. The WorldShare Platform on which WMS is built then allows group members to enable group functionality, giving the appearance of shared patron files and collections. However, circulation policies are governed by each library, including whether or not any individual library wants to participate in resource sharing amongst the group.

This style of consortial sharing is extended to electronic collections. Libraries are empowered to share e-resource groupings and collections, or even share templates for licensed materials with each other. This introduces possibilities for great efficiencies and sharing without requiring that every library share every service and collection.

Furthermore, WMS allows libraries to make decisions about what and how much they share with each other without requiring all the hardware and technical infrastructure that might be required. There is no additional hardware, disk space, or separate physical footprint required to enable WMS group functionality.

### **How is inventory controlled?**

**Innovative:** The Circa Wireless Inventory product gives staff wireless access to information about what is on library shelves. When performing inventory tasks, Circa wirelessly checks the Sierra database, identifying items that have a non-available status, letting staff quickly update item status - from missing to available or checked-out to on-the-shelf - without having to leave the stacks. Circa then allows the user to wirelessly update the inventory date in Sierra. Additionally, a Shelflist feature enables the user to wirelessly compare items in the stacks against a list of items that are expected by the system to be in the stacks.

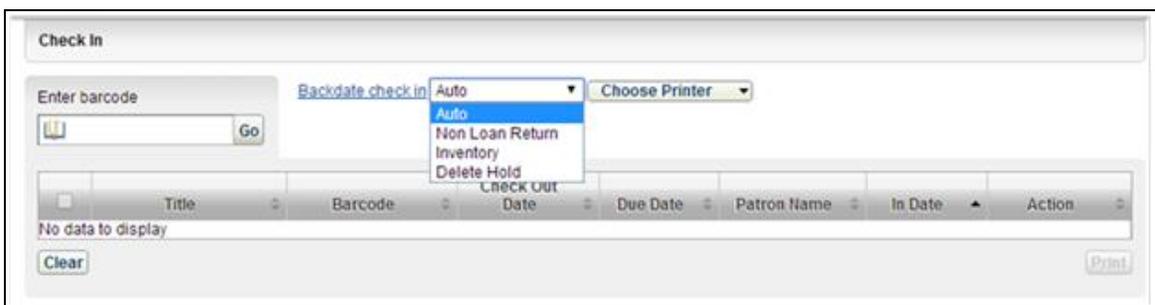
**Ex Libris:** Alma provides shelving reports for inventory or stock-taking in the library. These reports give the library the ability to compare a library-generated report against a master set of items to determine items that are missing or out of place on the shelves.

**OCLC:** Collection information can be identified via several reporting tools:

- A “My Library” Report – This report is available to all WMS libraries. It displays the library’s collection by subject area divided either into years or format.
- Standard Reports – Standard reports allow the library to apply parameters (filters) on the results which can query collection data in multiple ways. The reports are real time or can be scheduled.

- WorldShare Report Designer – The Report Designer provides a custom reporting tool that can be used to create inventory reports.

WMS also provides a useful Inventory mode, which allows inventory reporting based on circulation events. It increments the Inventory Dates and updates the Date/Time Last Inventoried when staff use this feature to check in items.



Circulation counts display in Check In

Moreover, because WMS is completely browser-based, staff members can use WMS on any PC or laptop with a browser and Internet connection. This also allows functions such as inventory to be performed through a laptop, tablet, or smart phone with a 3G or 4G connection. Each institution can perform an inventory of its own collection using the Inventory option in Check in.

### **How are physical items shared (requested/filled) with other local libraries, both using and not using the same ILS software?**

**Innovative:** Innovative offers an integrated Interlibrary Loan (ILL) option with Sierra, which supports the ability to transmit requests by means of the ISO 10160/10161 protocols, among other methods. Sierra's ILL is ideal for integrating secure requesting into the public catalog, and also for handling internal circulation of materials borrowed through ILL that must then be returned to the lending library. Searches, requests, deliveries, checkouts, and returns are frictionless. ILL tracks items at every point of the process, providing integration, security, and rapid notification. This seamless integration ensures ease of use and consistency throughout the loan process.

Innovative also offers the INN-Reach consortial borrowing tool. This system directly links multiple library systems into a real-time union catalog, using sophisticated software to merge individual library holdings into one master record. Local Innovative systems automatically transmit database changes to the INN-Reach catalog so that all bibliographic records and holdings are updated in real-time.

**Ex Libris:** Within the consortium, individual libraries can use Alma’s native resource sharing workflows, which are powered by the ISO-ILL standard, to fulfill requests for items from other member institutions and their patrons. Alma also interfaces with external resource sharing platforms using the NCIP standard. Libraries today are using Alma to conduct resource sharing using platforms including ILLiad, Relais, Navigator, and INNReach.

**OCLC:** For those libraries also on WMS they can opt to share materials directly as circulation transactions. They can see each other’s patrons, and the patrons may place holds directly on the other libraries’ materials based on the policies of the library. The owning library will have the hold appear on their hold pull list. Once the item is pulled and checked in, it will be placed in transit to the borrowing library and a routing slip is produced. Once the patron finishes using the item at the borrowing library and returns it, at check in it is put into transit.

All of this is accomplished with no additional software required.

**In a consortium, patrons often share multiple institutions/locations within the same ILS. How does your ILS manage that?**

**Innovative:** Innovative works with numerous consortia that share a platform, and as such considerable support for both “local” and “consortial” policies is built into the circulation policy settings. Each library will be able to configure their own circulation policies and patron management will be limited to the home library of each patron. This is accomplished primarily by assigning up to 256 unique patron types, each with its own potential permissions and authorizations, throughout the consortia.

**Ex Libris:** Members of a Fulfillment network work together by allowing their patrons to interact directly with the other institutions. Additionally, these members may be willing to accept and process items from other institutions, and ship them back. Two primary use cases are currently supported:

- Walk-in Registration
- Direct requesting

**OCLC:** WorldShare group implementation allows groups of two or more libraries to grant borrowing privileges to patrons of all libraries in the group but act primarily as independent libraries. The implementation allows a member library within the group to:

- View Availability for items owned by all member libraries
- Allow borrowing privileges for patrons of all libraries in the group

- Allow patrons to pick-up items at any library in the group
- Share a single hold queue
- Accept payment from patrons for all charges levied by any library in the group
- Maintain separate acquisitions and license management modules
- Maintain its own collection

In this scenario, each patron is affiliated with a single institution in the group; this is the patron's home library. Each library in the group is able to search for, retrieve, and interact with patrons from any library in the group. Policies honor the patron's home library in the calculation of borrowing privileges, overdue bills, hold parameters, etc.

The screenshot shows the WorldShare Circulation interface. On the left is a sidebar with navigation options: Assist Patrons, Check In, Discover Items, Reports, and My Apps. The main area displays search results for 'all with smith, groupScope'. A search box contains 'smith' and a 'Search' button. Below the search box is a table with 13 rows of results. The table columns are Barcode, Name, Home Institution, Home Branch, Street Address, City, and Postal Code. The results show various patrons with the name 'Smith' (Mariah, John, Gavin, Gabriel) associated with different institutions like Constellations, Explorers, Shipwrecks, and Battles, and home branches like Orion, Jacques Cartier, Titanic, and Battle of the Bulge. All street addresses are 6565 Kilgour Place, and all cities are Dublin. The postal code is 43017 for all. Navigation controls for the table include 'Refresh', 'Results 1-10 of 13', and pagination links: '<< First < Previous 1 2 Next > Last >>'. A 'Create New Patron' button is visible at the bottom of the table area.

Barcode	Name	Home Institution	Home Branch	Street Address	City	Postal Code
1888800434	Smith, Mariah	Constellations	Orion	6565 Kilgour Place	Dublin	43017
400828318	Smith, John	Explorers	Jacques Cartier	d	Jamestown	43110
1888800279	Smith, Gavin	Shipwrecks	Titanic	6565 Kilgour Place	Dublin	43017
1888801001	Smith, Gabriel	Shipwrecks	Titanic	6565 Kilgour Place	Dublin	43017
1888800434	Smith, Mariah	Shipwrecks	Titanic	6565 Kilgour Place	Dublin	43017
1888800279	Smith, Gavin	Battles	Battle of the Bulge	6565 Kilgour Place	Dublin	43017
1888801001	Smith, Gabriel	Battles	Battle of the Bulge	6565 Kilgour Place	Dublin	43017
1888800434	Smith, Mariah	Battles	Battle of the Bulge	6565 Kilgour Place	Dublin	43017
1888801001	Smith, Gabriel	Explorers	Christopher Columbus	6565 Kilgour Place	Dublin	43017
1888800279	Smith, Gavin	Constellations	Orion	6565 Kilgour Place	Dublin	43017

Patron search showing home institution and home branch for each patron

In other words, there is no need for “consortial global patron records,” as a patron uses their one account for all activities. However, if the patron does have different privileges at separate institutions, they would need a patron record for each institution

### Course Reserves

- **How does the system manage course reserves?**
- **Does the system receive information about course reserves materials from external sources via an API?**
- **How does the system control access so only students registered for a particular course can see the items?**
- **Does the system easily produce lists of reserves by course/professor/subject?**
- **Does the system integrate with the user and bibliographic databases so that items are discoverable using the same search interface?**

**Innovative:** Sierra's Course Reserves streamline the administration of all traditional and electronic reserve functions. Course reserves records and processing functions are completely integrated within the Circulation app and, if acquired, with the e-reserves handled by Media Management.

- Authorized staff using Circulation can create and update course records and associate items in the system database with one or more of them. Thereby, these items are placed on reserve. For Library's with Media Management, electronic course reserve articles can be made viewable directly within Encore.
- Library users who wish to see what items are on reserve for their courses can search the catalog by course name, course number or professor's name. Physical items on reserve are checked out through the normal circulation.
- Active items display on the Reserve List in the public catalog and are circulated using the special "reserve room" location and loan rules. Inactive reserve items behave in the public catalog as if they have been removed from reserve status. They will not appear in the public display of a Reserve List, even though they will continue to be associated with the Reserve List. These inactive items will display with their original locations and call numbers and will be searchable through the standard public catalog searches. They can later be re-activated to facilitate reserve maintenance for courses that reserve the same items on an annual or semi-annual basis.
- Total circulation counts/statistics can optionally include the total number of circulations that occurred while the item was on reserve.

*See RFI for more info*

**Ex Libris:** Course Reserve Collections can be managed across more than one library within the institution. The Courses and Reading Lists Workflow in Alma works as follows:

- Reading Lists – contain citations compiled by the course instructor and submitted to the library. The list may include resources which are in the institutional repository, or which are not in the repository.
- Courses – contain details concerning the course for which the Reading List has been submitted (e.g., name of instructor, start and end dates of the course, etc.). Courses may contain more than one Reading List which may be processed by separate libraries.
- Course Departments – Each course must be associated with a Course Department. A Course Department is itself associated with an organizational unit (institution or library/libraries), which determines the resources available for the course. Course Departments may (and usually do) contain more than one Course. See full RFI for more info.

Alma has a set of APIs related to course reserves that can be used to retrieve courses and reading lists from external sources such as Course Management Systems. For more information, please see the documentation on the Ex Libris Developer Network: <https://developers.exlibrisgroup.com/alma/apis/courses>

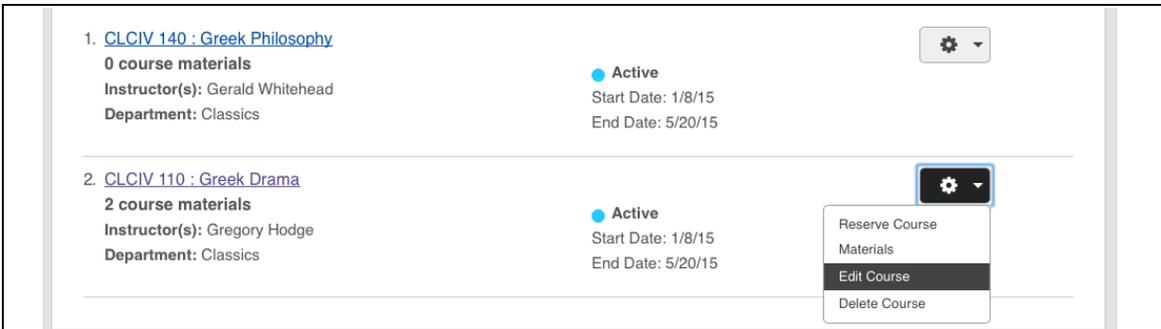
In Alma, there are options to choose what Academic Term(s) the course takes place, the option to make the course active or inactive, and the ability to set a start and end date for the course.

Courses and reading lists are the two components of course reserves in Alma. Multiple lists may be associated with each course. It is easy for a library staff user to sort courses or lists by professor or subject or to see the course associated with a particular list. The library can also provide identifiers such as course numbers that can be used as keywords on the patron-facing side for patrons to find particular courses or citations in the Primo.

The tight integration between Alma and Primo means that course reserve items, like any other material managed in Alma, are published to Primo for easy discovery by patrons.

**OCLC:** Information does not come via an API. There are two types of materials that are added to courses: regular permanent materials and items not part of the permanent collection. For the latter type, the library can create temp items/records.

Regular Permanent Materials in the Catalog - Once the course is created, a staff member with a Course Manager role can edit the data by selecting Edit Course in the action menu and update data as required.



Course Reserves My List 0

**Course Reserves** Course Manager View

Edit Course Details

Course Name: \*

Greek Drama

Prefix: CLCIV Number: 110 Section(s): Department: Classics

Description:

Reading and discussion of representative tragedies and comedies from Ancient Greece. Special attention will be given to the Oresteia cycle of Aeschylus and the Theban plays of Sophocles.

Instructor(s):

First Name: Gregory Last Name: Hodge

Start Date: 2015-01-08 End Date: 2015-01-08

Notes:

Tell us what you think!

## Editing a course

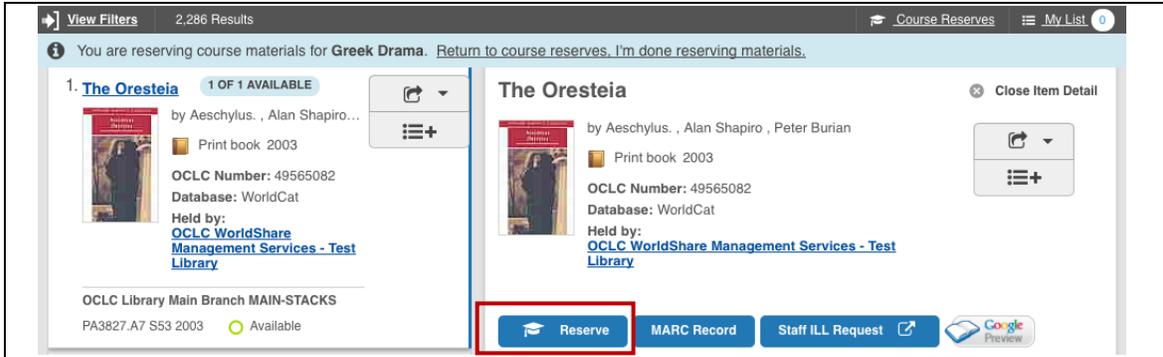
Once changes are made, save the changes and then go to Reserve Course Materials to add or delete titles.

Items can be reserved only if the institution holds them. A staff member with either a course manager or course maintainer role can add titles to the course by selecting Reserve Course Materials in the action menu.

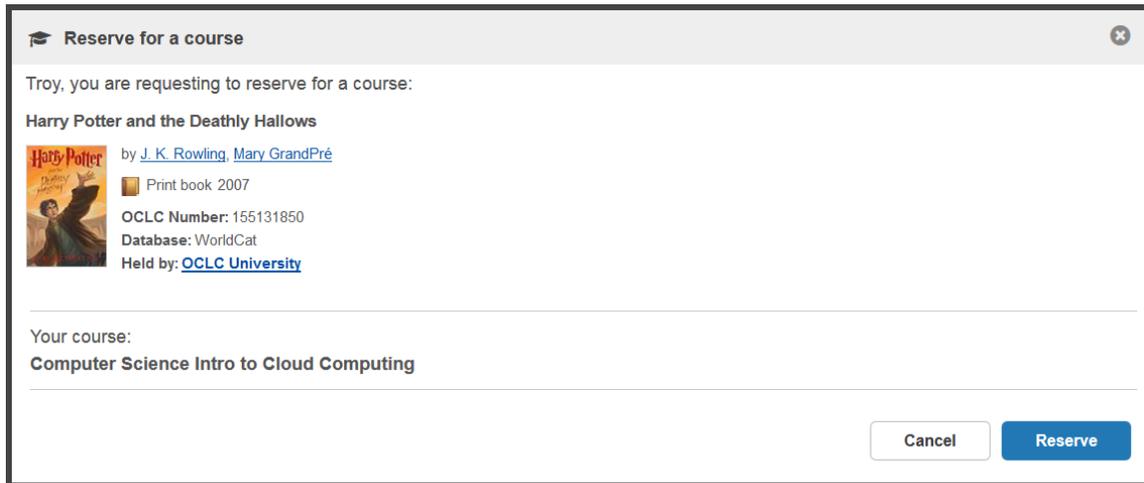
1. <a href="#">CLCIV 140 : Greek Philosophy</a> 0 course materials Instructor(s): Gerald Whitehead Department: Classics	● Active Start Date: 1/8/15 End Date: 5/20/15	
2. <a href="#">CLCIV 110 : Greek Drama</a> 2 course materials Instructor(s): Gregory Hodge Department: Classics	● Active Start Date: 1/8/15 End Date: 5/20/15	<ul style="list-style-type: none"> <li>Reserve Course Materials</li> <li>Edit Course</li> <li>Delete Course</li> </ul>

## Adding titles

Staff can search for a title to add to the course, using the Reserve button to select the appropriate title.



## Reserve button



## The Reserve confirmation screen

Materials Not in the Catalog – To handle items not owned by the library, a barcode for the item is scanned in WMS Circulation and the user is prompted to create a temporary item.

This [controlling access so only students registered for a course can see the items] is not currently supported in Course Reserves. Any student may view the reading list for any course.

Course reserves can be searched by course name, instructor name, department, or course prefix, giving the user online lists as stated here.

Reports are in the design phase for course reserves, which will produce course reserve lists.

The screenshot shows a library search interface. At the top, there is a search bar with the term 'sophocles' and a search button. Below the search bar, the results are displayed in a grid format. The first result is for 'Sophocles', which includes a bust image and a brief biography. To the right of the biography, there are links for 'Works by' and 'Works about'. Below the biography, there is a 'Sort by' dropdown menu set to 'Library and Relevance' and a 'Library' filter section with checkboxes for 'Libraries Worldwide' and 'OCLC WorldShare Management Services - Test Library'. On the right side of the results, there is a list of works, with the first one being 'Sophocles' by P. J. Finglass, an eBook from 2011, held by the OCLC WorldShare Management Services - Test Library.

## Course Reserves link on the Discovery landing page

The reserve system integrates with the user and bibliographic databases so that terms are discoverable using the same search interface. All materials within Course Reserves are stored in WorldCat, which is used throughout WMS functionality. Therefore, titles on reserve may be searched using the same robust search indexes and strategies as all other titles in the system. Patrons and staff will see a Course Reserves link on the Discovery landing page. Selecting the link displays the Course Reserves search box. All users can search and display courses and related items on reserve.

Patrons and staff will see a Course Reserves link on the Discovery landing page. Selecting the link displays the Course Reserves search box. All users can search and display courses and related items on reserve.

## How is copyright clearance managed within the course reserves system?

**Innovative:** The Copyright and Access Manager component of Sierra Media offers a number of features to control access to electronic reserves, including a customizable copyright statement that displays with every attached article or digital object. The Library can optionally restrict access to a Library-defined group of patrons with up to two levels of verification by requiring valid patron and course passwords for Reserves authentication. Charges can be applied to patron records for viewing and/or printing the electronic reserve items to

recover copyright charges and /or printing charges. The Library may also create a publisher permission file within the system.

The Copyright and Access Manager produces system-generated statistical reports on use of resources, as well as publisher and copyright tracking, along with detailed statistical reports on use of electronic reserves, including publisher, number of pages printed, patron charges, dates accessed and articles accessed.

Going forward the integrated global workstream interface will incorporate additional functionality for copyright and licensing agreement, procedures and compliance tracking.

**Ex Libris:** Alma currently gives libraries the ability to indicate whether or not a particular course reserves citation has cleared copyright. Future development plans include enhanced functionality in the area of copyright clearance, including more detailed tracking of the clearance process and local requirements. A full audit trail of copyright activities will also be available.

**OCLC:** Currently, WMS does not support a copyright management function. Only WorldShare ILL includes a Copyright Compliance Payment Report, which helps libraries track Copyright Compliance payments by using the ILL data.

### **ILL (Resource Sharing)**

**How does the ILS interact with 3<sup>rd</sup> party ILL systems and what protocols are used?**

**Innovative:** Innovative offers an integrated Interlibrary Loan (ILL) option with Sierra, which supports the ability to transmit requests by means of the ISO 10160/10161 protocols, among other methods.

**Ex Libris:** Alma interfaces with third-party ILL platforms using the ISO-ILL and NCIP protocols. For more information on this integration, please see the Ex Libris Developer Network:  
[https://developers.exlibrisgroup.com/alma/integrations/resource\\_sharing](https://developers.exlibrisgroup.com/alma/integrations/resource_sharing)

**OCLC:** WMS fully integrates WorldShare ILL to manage outbound and inbound requests. Requests are informed with data from the knowledge base, and license manager and end-user requesting is facilitated by WorldCat Discovery, the end-user environment of the service.

WorldCat Discovery currently interoperates with the following ILL systems for placing patron requests:

- WorldShare ILL
- ILLiad
- Relais
- VDX
- Navigator
- Clio
- Any system able to accept an Open URL 1.0

WorldShare ILL also is presented in the WMS staff interface as the ILL module. Staff use it for borrowing and lending. It will be integrated with the library's catalog, so holdings availability information can be presented to staff. The same configuration interface used for WMS Circulation and Acquisition also will be used to configure ILL options.

**Does the ILS have a Z39.83 or Z39.50 protocol from the user interface to acquire items not found within the search confines?**

**Innovative:** Both of these standards are supported.

**Ex Libris:** Alma supplies a number of integration options for integrating with external fulfillment systems, including:

- NCIP – The NCIP protocol may be utilized by external systems to synchronize with Alma with regard to fulfillment actions that take place at the external systems, such as the receiving of requested items and their placement on the hold shelf.
- OpenURL – Alma may use OpenURLs to pass requested resource information on to another fulfillment system for further processing at that system. Additionally, Alma may receive OpenURL data from another system in order to continue to manage a request that was placed outside of Alma, inside the system.
- Z39.50 – Alma's inventory may be exposed to external fulfillment systems using the Z39.50 protocol including exposing of inventory and availability related information.
- ISO ILL – The ISO ILL protocols (10160/10161) may be used for integrating with any system that is compliant with the protocols for implementing a full borrowing to lending, and vice versa, resource sharing workflow.

**OCLC:** For licensed collections not held in the central index, WorldCat Discovery uses a Z39.50 connection to retrieve search results when supported by the provider. If the library needs a collection which supports Z39.50 that is not yet configured for WorldCat Discovery, our customer support staff will configure these collections for the library for a one-time fee.

The WMS NCIP Service API is a Web service that handles common library user-facing functions based on the industry standard NCIP functionality Z39.83. This protocol however, is not used for finding items; rather, it is for acting on known items within a system.

**Does the system allow notifications to alert requesters to the various stages of an ILL transaction (arrival, renewal, confirmation/refusal, delay, recall or overdue)?**

**Ex Libris:** Yes; as part of a library's processes, Alma produces a wide variety of notifications for the library's users. The notifications may be sent to a user by email, or printed. Alternatively, some of the notifications may be sent as SMS messages to the user's mobile phone.

**OCLC:** Yes, some of these steps are available to the requestor. They will receive a pick up notice when the item arrives, can renew online based on library policies, can have these items recalled, and will be alerted when they are becoming overdue based on how the library configures its overdue notices.

**Once the request has gone through the supplier string, explain how your system carries that request to an outside ILL system, e.g. ILLiad or OCLC WorldShare. Is this an automated process or does the user or library staff need to manually process this transfer? If it does not go to an outside system, how is the request managed?**

**Innovative:** Innovative offers an integrated Interlibrary Loan (ILL) option with Sierra, which supports the ability to transmit requests by means of the ISO 10160/10161 protocols, among other methods. Sierra's ILL is ideal for integrating secure requesting into the public catalog, and also for handling internal circulation of materials borrowed through ILL that must then be returned to the lending library. Searches, requests, deliveries, checkouts, and returns are frictionless. ILL tracks items at every point of the process, providing integration, security, and rapid notification. This seamless integration ensures ease of use and consistency throughout the loan process.

**Ex Libris:** The process of transferring an internal resource sharing request to a broker platform can be configured to take place automatically using Alma's resource sharing APIs. A broker platform can be configured as the supplier of last resort and appears at the bottom of an ordered resource sharing rota, allowing Alma to pass the request through internal channels first, transferring it

to the outside system only when it is not fulfilled by the consortium or resource sharing network.

**OCLC:** ILLiad and WorldShare ILL are simply built into the system; it is not a matter of sending it out to them.

If the library configures the system to offer an ILL option, the underlying request management system in WorldShare ILL automatically differentiates between monographic items and article- or chapter-level requests as well as between physical and electronic items.

The system can find potential lending libraries for physical items and build a lending string. Then based on library rules, it can send out requests to the first lending library or stop the request for review by a staff member.

For electronic items, the system will automatically check the WorldCat knowledge base on any request to see if the library holds it electronically by the library and alert the ILL staff including the URL to the item, which can be sent to the patron. If it is not held locally, it will check for other member libraries that do, then then check the license terms for ILL privileges. When the lending library receives the request, the URL to the item and the license terms are included in the request. This is true for both WorldShare ILL and VDX. When the borrowing library receives the electronic item, they can place it directly into Article Exchange for delivery to the patron.

## **Acquisitions**

### ***Purchasing Workflows***

#### **How does the system support the following purchasing workflows?**

- **Print approval**

**Innovative:** Workflows for Quotes and Approval plans involve loading vendor supplied data into Sierra using Sierra's Approval Plan Interface. Sierra imports the vendor approval plan invoice data and creates a bibliographic record and an order record for each item in the approval plan. Staff can then review the approval plan items and either accept or reject the order for each. When a user selects "Import Invoices" from the functions menu, Sierra displays a list of invoices awaiting approval, including Approval plan invoices. An Accept/Reject tab lists line items in the invoices, allowing staff to review the approval plan items and accept or reject each invoice line item from a shipment. When you reject a charge, Sierra will either retain the record in the database for future reference or delete it based on the library-selected option for handling rejected items.

Sierra also supports the loading and local creation of data for selection or approval lists and allows designated Selectors (patrons and staff) to choose items for the Library to acquire. Selected items can then be reviewed by Acquisitions staff who can create an order for either the entire selection list or any subset of the selection list by simply selecting the desired items, entering an order date, and queuing the

order. Selection data provided by vendors can also be loaded into Sierra for selectors to review.

**OCLC:** Order types are controlled by the system and include approval plan sub-type. An approval plan order can be created and then as items arrive from the approval plan they are “ordered” against that purchase order. This makes them immediately ready for receiving and invoicing. All orders are held on the system until a staff member with proper authorization releases them. This means that orders can be built over several days by a number of librarians and then approved by a supervisor the following week.

- **Print firm order**

**Innovative:** To create an order record, a user simply choose ‘Place Orders’ from the function menu and then chooses a workform to use. Workforms are user-definable and can be set up to manage firm orders, subscription orders, e-resource orders, order from frequently used suppliers or any other form type a user might wish to create to reduce data entry effort. The user can attach the order to an existing bibliographic or resource record, search an external Z39.50 database to locate and import a bibliographic record or enter bibliographic/resource information in a new record and attach the order. Sierra automatically populates the bibliographic information in the record and the user completes the workform with order-specific information. While entering data in order records you can also:

- enter ISBNs
- use Multiselection Groups to enter location, fund, and copy information
- add Value Added Service charges

When order data has been entered, the “Queue P.O.” box is checked to indicate that the item is ready to include in the next purchase order generated. Sierra allows you to print purchase orders or send them electronically. A code in the vendor record determines whether purchase orders for that vendor are queued for printing or for transmission electronically. Regardless of the method you use, you can limit orders by location and vendor in order to send a specific subset of purchase orders.

**OCLC:** WMS Acquisitions is completely format agnostic but also completely format aware. When a monograph is being ordered, the system defaults to a Firm order. When creating orders for physical materials, staff members can search all of WorldCat to locate the bibliographic record for the item and attach the order to it. An On Order item can be created at the time the order is placed OR the item is

created at the time of receiving. Receiving and invoicing can be done in a single step or as separate actions.

- **Electronic firm order (package or single title)**

**Innovative:** Firm orders for e-resources, whether for a package or a single title, are handled in exactly the same way as for print orders. The order for the e-resource is attached to either a bibliographic record for the item (e.g. e-book title) or to a resource record in Sierra ERM (e.g. a package containing multiple e-resource titles). Once the order record is created, order processing is identical to print orders. When e-resources are “received” the access information is entered in the resource record to enable direct e-resource retrieval through the OPAC.

**OCLC:** The WorldCat knowledge base is fully integrated to the acquisitions workflow, meaning staff can use either License Manager or Acquisitions to order and then activate collections. With the WorldCat knowledge base integrated in WMS, libraries can manage the acquisition of electronic resources in a single location to be used in all library services from acquisitions to discovery and access as well as resource sharing.

In the case of an e-product the system defaults to subscription and the staff member simply clicks the drop down to change it to a firm order.

E-products have a separate receiving workflow where the staff starts the access and adds the item to the invoice.

- **Print continuation**

**Innovative:** Standing orders in Sierra may be treated as a “serial” (i.e. one order for many pieces, with many payments) or as a “monograph” (separate bibliographic records for each piece, related to each other and to the payment record). Treating standing orders as serials works best when relatively few items are received, and relatively few payments are made on the order in any one-year (i.e. 10 or less). To handle standing orders in this way, the operator first enters an order record into Sierra for the standing order. Sierra then assigns this order a purchase order number. Then the operator attaches a checkin record.

When an individual item is received for this order, it is “received” by checking it in on the checkin card before it is paid for under the order number. To treat a standing order as a monograph, the operator creates the bibliographic and order records, assigning the order a purchase order number. The Library then simply pays for individual items under that order number. As the Library receives each item, the operator enters a bibliographic record into Sierra for the individual title. In each of those bibliographic records, the operator enters a series statement, which describes the standing order.

**OCLC:** Continuations are managed as subscription orders. A renewal process allows the library to renew multiple titles from a vendor in a single step. During this process, an expected percent price increase can be applied, and the order may be mapped to a new fund if needed. The history of renewals can be viewed for any subscription title including the prices paid each renewal period.

- **Electronic subscription (package or single-title)**

**Innovative:** Sierra's comprehensive ERM application stores all necessary information about each e-subscription either as a package or individual title. The Sierra electronic resource record and its related order records contain all the necessary data in one place to support the e-resource ordering and subscription tracking process. The resource record contains both fixed and variable fields that allow you to record data such as subscription periods, cost, payment, renewal and cancellation information. The library can also determine its own range of customized fields to record additional data as necessary. All of the data is accessible from one interface, and is indexed and searchable in the system to enable you to create custom reports based on the data stored in those fields. Order workflows for e-resources are essentially identical to ordering print subscriptions except that the order is linked to the associated e-resource record which could be a single title or a package for hundreds of titles. E-resource subscription orders are created in the same manner as print subscription orders, with transmission via EDIFACT, e-mail or print. Sierra automatically generates renewal alerts prior to subscription expiration to allow review and reordering.

**OCLC:** WMS Acquisitions provides the functionality for subscribing to new collections of e-resources, along with functionality for managing the renewal process for these resources.

License Manager stores information about start and end dates for subscriptions as well as alerts to notify the library that it is time to renegotiate a new license. If a license is cancelled, the appropriate information is stored in the license.

The screenshot displays the OCLC WorldShare Acquisitions interface. At the top, there are navigation tabs for Metadata, Acquisitions, Licenses, Circulation, Interlibrary Loan, Analytics, and Admin. The 'Acquisitions' tab is active. On the left, there is a sidebar with options like 'Discover Items', 'Discover Collections', and 'My Library Holdings Only'. The main area shows a search for 'academic search' with 8 results. The results are displayed in a table with columns: Collection, Shared by, In My Holdings, and Action.

Collection	Shared by	In My Holdings	Action
<a href="#">Academic Search Alumni Edition</a> Provider: EBSCOhost Customizable		Not Held by my library ( 0 / 15252 ) Titles <a href="#">Select Collection</a>	<a href="#">Add To Order</a>
<a href="#">Academic Search Complete</a> Provider: EBSCOhost Customizable	OCLC WorldShare Management Services - Test Library	Not Held by my library ( 0 / 15233 ) Titles <a href="#">Select Collection</a>	<a href="#">Add To Order</a>
<a href="#">Academic Search Complete</a> Provider: EBSCOhost Customizable		Held by my library ( 15233 / 15233 ) Titles <a href="#">Deselect Collection</a>	<a href="#">Add To Order</a>
<a href="#">Academic Search Elite</a> Provider: EBSCOhost Customizable		Not Held by my library ( 0 / 15255 ) Titles <a href="#">Select Collection</a>	<a href="#">Add To Order</a>
<a href="#">Academic Search Premier</a> Provider: EBSCOhost Customizable		Held by my library ( 2 / 15292 ) Titles <a href="#">Deselect Collection</a>	<a href="#">Add To Order</a>

Acquisitions search WorldCat knowledge base to order electronic database

- **Patron-driven Acquisitions**

**Innovative:** For physical items, many libraries support purchase-on-demand programs by loading bibliographic records for material that is considered eligible for on-demand purchase into the catalog. While the material may not have any item records attached – or just a single “dummy” item record denoting it is available on-demand, patrons can still place a hold on the record via the public catalog.

Patron Purchase Requests can be submitted directly via Encore or as part of an ILL request sequence. Sierra currently supports workflows for Purchase on Demand or Patron Driven Acquisitions for hard copy items as well as Demand Driven Acquisitions for e-books.

**Ex Libris:**

Alma is a unified platform which handles resources of all types, regardless of format. This means that much of the functionality for e-resource management uses the same workflows as for physical resource management, allowing for consistent training, reporting, and a platform for workflow enhancements that applies to resources of any type. For acquisition of electronic resources, the workflow is similar to print, but can apply to individual titles (journals or e-books), or to packages of vendor offerings.

Alma streamlines and simplifies library workflows with its built-in workflow engine, which uses a library-defined set of rules to manage many activities automatically, and to alert staff to exceptional conditions that require operator

handling. Such exceptions are handled in Alma through a Task list that is automatically generated based on customizable workflow rules. One example of this can be seen in Acquisitions, which begins with the selection of material as the first stage.

Alma supports patron-driven acquisition for electronic resources. Alma streamlines this process by loading potential candidates to discovery, managing automatic approval plans, managing billing from the vendors and automatically adding purchased books to the institution's catalog and inventory. Unpurchased candidate records are also automatically cleaned up from the catalog and discovery environment. PDA acquisitions are tracked separately from other types of purchases, enabling sophisticated analytics and reporting on these transactions.

**OCLC:** Automation for e-book purchase-on-demand programs is built into WMS and WorldCat Discovery. A library configures its PDA collection with the provider; currently, seven different providers send this data directly to OCLC for setting holdings on the e-book titles in the WorldCat knowledge base. This automatically sets the holdings in WorldCat on the bibliographic records, making them appear to be part of the library's collection. When the purchase is triggered, the vendor sends this information to OCLC in the next data feed so that the e-book is moved from the PDA knowledge base collection to the licensed knowledge base collection. In addition, WorldShare ILL includes direct links to Amazon and Barnes and Noble with real-time price information in the interface, allowing the ILL librarian to make a purchase decision while reviewing a borrowing request. They can convert it to a purchase request in WorldShare ILL for tracking.

### **Does the Acquisitions workflow support a full EDI interface with major library vendors for ordering and invoicing?**

**Innovative:** Yes. Sierra currently supports Electronic Data Interchange (EDI) using several formats including EDIFACT, X.12, proprietary formats and APIs. Innovative has developed practical solutions to implementing EDI, and even before related standards have been developed Innovative has implemented EDI solutions to meet customer's needs. As EDIFACT standards are more widely implemented by vendors, Innovative reviews and implements these standards as appropriate.

**Ex Libris:** Yes; Alma does offer EDI integration for ordering and invoicing. Setting up this communication is part of the implementation process.

**OCLC:** Yes. WorldShare Acquisitions supports electronic data interchange (EDI) with participating vendors, including MARC order import, MARC shelf-ready import, electronic invoices in both EDIFACT and MARC format, and MARC EDIFACT order

submission. Currently claims are submitted via either email or print with EDIFACT claiming planned for a future release.

**How does the system support workflows for patron-driven acquisition of electronic books, including:**

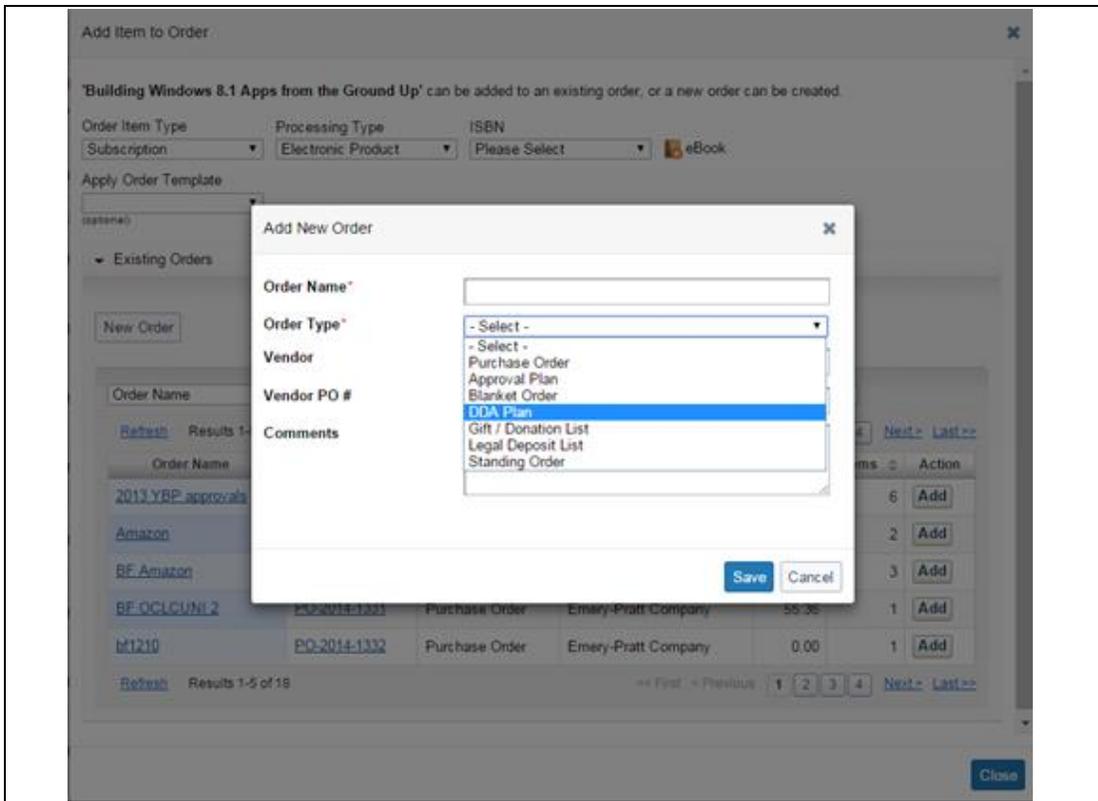
- **Loading and deleting candidate records for patron discovery**
- **Loading EOD MARC records to create purchase orders for purchased items**
- **Loading invoices for purchased items**
- **Creating local inventory for purchased items**

**Innovative:** Sierra and Encore Duet support a variety of automated acquisitions workflows for PDA eBook programs. Independent of the acquisitions workflow chosen, content is made available to end-users via Encore Duet immediately upon being enabled within Sierra. See RFI for more detail

**Ex Libris:** Alma streamlines the process for patron-driven acquisition, including e- books, by loading potential candidates to discovery, managing automatic approval plans, managing billing from the vendors and automatically adding purchased books to the institution's catalogue and inventory. See RFI

**OCLC:** WMS offers advanced support for DDA/PDA workflows. Through existing agreements, OCLC works with suppliers to automatically manage your DDA/PDA collections in the WorldCat knowledge base. Once the library configures its DDA collection with the provider, the titles are sent to OCLC and holdings are set in a DDA collection in the knowledge base. Once the data from the supplier updates your holdings in the WorldCat knowledge base, holdings are set automatically overnight on the cataloguing record for the title(s) in WorldCat. When the purchase is triggered on a title, OCLC moves the holdings from the DDA/PDA to the purchased title collections on your behalf, based on feeds received from your supplier. As titles are removed from your profile with the supplier, the data feed will include the deleted titles. These are removed from the DDA/PDA collection in the knowledge base, which removes your holdings from the cataloguing record in WorldCat.

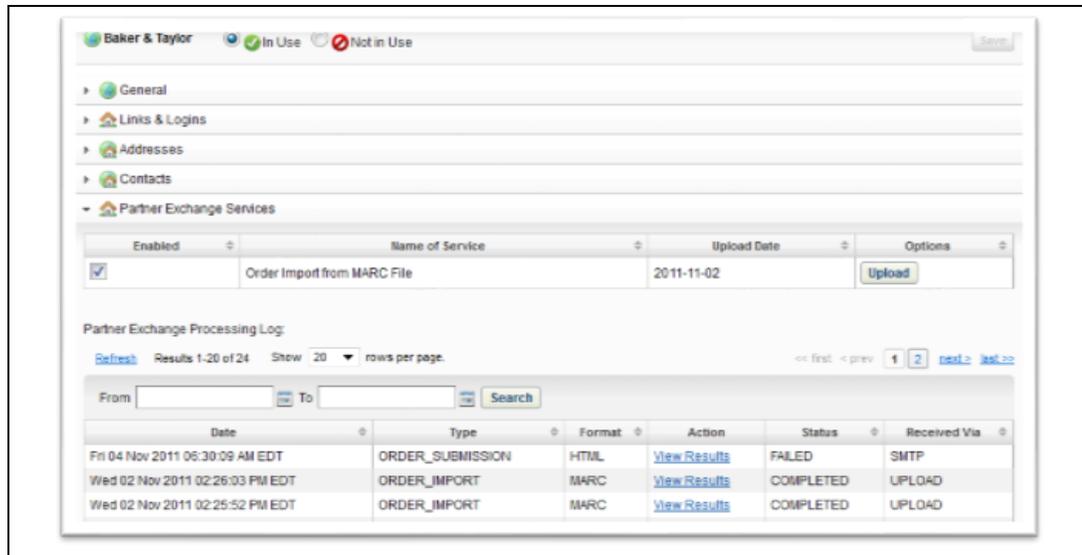
The Acquisitions module also allows you to create DDA (PDA) plans to be used much like the functionality of an approval plan. You simply add the e-book title to the plan created to support the DDA agreement. If it is a short-term loan, you can adjust the price and quantity to indicate the number of short-term loans being purchased of the e-book.



Creating a DDA plan

- **Loading EOD MARC records to create purchase orders for purchased items.**

WMS supports matching MARC records and creating orders based on data imported from several book vendors, including (but not limited to) YBP, B&T, Ingram, Coutts, Midwest, Emery-Pratt, and Ambassador. This is supported for each vendor from the Partner Exchange Services tab in the appropriate vendor record. Because the vendor records are shared globally, they are available for all libraries that use the vendor.



The Partner Exchange Services section of a vendor record

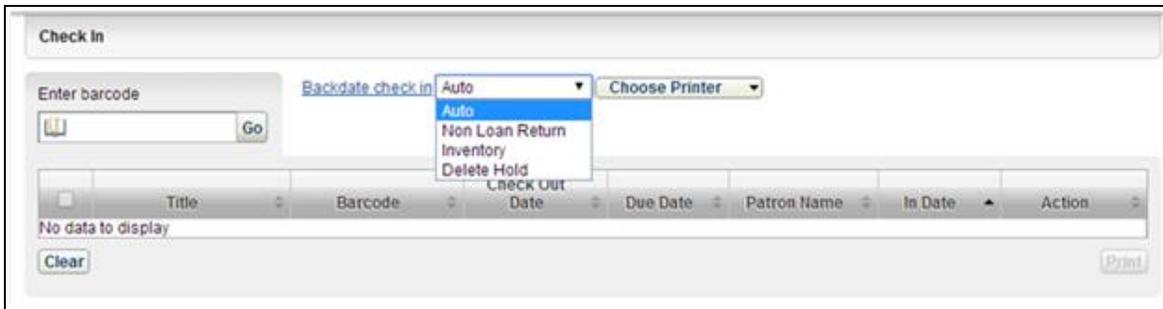
Any vendor who can put our EOD records with the data in the OCLC-defined 9XX fields will work for loading. The libraries are saved the effort of configuring and testing these loads since it is done once for all libraries using WMS.

- Loading invoices for purchased items  
Both MARC and EDIFACT invoices can be loaded via the Partner Exchange feature in the vendor record.
- **Creating local inventory for purchased items**

Collection information can be identified via several reporting tools:

- A “My Library” Report – This report is available to all WMS libraries. It displays the library’s collection by subject are divided either into years or format.
- Standard Reports – Standard reports allow the library to apply parameters (filters) on the results which can query collection data in multiple ways. The reports are real time or can be scheduled.
- WorldShare Report Designer – The Report Designer provides a custom reporting tool that can be used to create inventory reports.

WMS also provides a useful Inventory mode, which allows inventory reporting based on circulation events. It increments the Inventory Dates and updates the Date/Time Last Inventoried when staff use this feature to check in items.



Circulation counts display in Check In

WMS offers advanced support for DDA/PDA workflows. Through existing agreements, OCLC works with suppliers to automatically manage your DDA/PDA collections in the WorldCat knowledge base. Once the library configures its DDA collection with the provider, the titles are sent to OCLC and holdings are set in a DDA collection in the knowledge base. Once the data from the supplier updates your holdings in the WorldCat knowledge base, holdings are set automatically overnight on the cataloguing record for the title(s) in WorldCat. When the purchase is triggered on a title, OCLC moves the holdings from the DDA/PDA to the purchased title collections on your behalf, based on feeds received from your supplier. As titles are removed from your profile with the supplier, the data feed will include the deleted titles. These are removed from the DDA/PDA collection in the knowledge base, which removes your holdings from the cataloguing record in WorldCat.

The Acquisitions module also allows you to create DDA (PDA) plans to be used much like the functionality of an approval plan. You simply add the e-book title to the plan created to support the DDA agreement. If it is a short-term loan, you can adjust the price and quantity to indicate the number of short-term loans being purchased of the e-book.

### **Does the system support fiscal year close processing?**

**Innovative:** Yes. Fiscal closing is fully automated with Sierra fund accounting. With each fiscal “year” being library defined by Library Unit, campuses will be able to conduct a fiscal close processes as needed, defining the start end of their own fiscal “year”, which may be any time duration, and not simply 12 months. See RFI for more detail.

### **Ex Libris:**

Yes. Alma’s fiscal period close operations provide a variety of options that allow each library to create a new financial structure and roll over current orders in accordance with the library’s financial and reporting requirements. As part of the fiscal period close, the Purchasing/Ledger manager runs a system job that copies the ledger of the current fiscal period with all the summary details and allocated funds to the new fiscal period, if required. Changes to the ledger or allocations can be made during this process. If the next fiscal period does not exist, Alma creates a new one. Fiscal periods are defined by each institution; Alma can

accommodate any yearly definition of a fiscal period. An institution may have one or multiple ledgers, depending on local financial requirements.

At the end of the current fiscal period, the Purchasing/Ledger Manager rolls over the current open orders to the new fiscal period, and can specify if the encumbrances should be increased or decreased automatically by a specified percentage. The new year's encumbrances can be based on the previous fiscal period's encumbrances, or optionally on the previous fiscal period's expenditures, which allows the library to base the encumbered amounts on the actual payments in the prior year. Once the orders have been rolled over to the new period, the previous fiscal year is closed and the new fiscal year becomes active.

**OCLC:** Yes fiscal year closing is fully supported. The basic process is:

- Create new budget period (e.g. July 1- June 30)
- Choose to copy existing fund structure (or create new)
- Choose to copy allocation
- Modify structure if needed and map old funds to new
- Modify allocations if needed
- Enable the new budget, and officially close the old.

Financial, order, and invoice data is retained indefinitely. To view this information, select a past budget cycle from the pull-down list in Manage Budgets.



Selecting budget cycle in Manage Budgets screen

This will allow a staff member to get an online look at prior year's expenditures by fund. Both the staff interface and reports can download fiscal data in a tab-delimited format, so users can manipulate data in a wide variety of ways.

## Description and Metadata

**How is RDA supported in the system and what tools are available to add RDA required fields and coding with minimal staff work? What tools are available for validation of elements, fields, subfields, values of metadata and support of controlled vocabularies?**

**Innovative:** Sierra is designed to load, display, and validate RDA data elements. In addition, Innovative recognizes that it is likely to be many years before all of a library's MARC records are RDA-compliant. As such, we have carefully integrated this support with previous standards, ensuring the two can successfully coexist within a given database. More importantly, some functionality, such as search limiting, is being designed to make use of RDA encoding when available, and traditional encoding when not available. As RDA records are more fully represented in individual databases, we will be making more use of the specific strengths of RDA fields. See RFI for more details.

**Ex Libris:** The MARC 21 schema in Alma supports the updated fields for bibliographic and authority records that support the RDA descriptive standard. These fields are fully editable and searchable, and may take advantage of the assisted text entry for a controlled vocabulary. See RFI for details.

**OCLC: RDA Tools** - OCLC has participated in the development of RDA through numerous standards working groups, tasks forces, and advisory bodies. OCLC has made the appropriate field-level changes to support RDA-related data and participated in early RDA testing through its contract cataloging operations unit. OCLC's Office of Research has executed a number of initiatives around the FRBR and Linked Data models that support the RDA model.

OCLC has incorporated links to the RDA Toolkit from within the Connexion client and Connexion browser interfaces, which are part of WMS.

The WorldShare model affords libraries tremendous efficiency. Instead of each library updating records locally, WorldCat, the central database for every WMS library, provides access to records updated by other libraries, thus reducing the number of records an individual WMS library would need to update.

Validation – WMS supports validation for records as described below:

- **Bibliographic** - Records in WorldCat are maintained cooperatively by catalogers and other information professionals, adhere to international standards, and are vetted by several OCLC and industry quality control programs. Libraries that contribute information to WorldCat are bound by the WorldCat Principles of Cooperation and follow particular guidelines regarding content. Connexion integrates full record validation with detailed error messaging to assist with entering new data into WorldCat.
- **Holdings & Item Records** - The system integrates validation with detailed error messaging.

- Authority Records - LC Authority records can be entered or updated by NACO participants. Connexion and Record Manager integrate full record validation with detailed error messaging to assist with entering new data into the LC Authority File.

### **How does the system support Bibframe now? How will this be developed going forward?**

**Innovative:** Innovative is participating in the discussions around the Bibliographic Framework Initiative (BIBFRAME) as laid out on <http://bibframe.org/> to inform future evolution of the Sierra database. The technology in Sierra's database, a PostgreSQL database, is already poised to function in a linked data environment.

As the library community continues the discussion around BIBFRAME, and the needs of the community become clearer, Innovative will make development to comply with and make best use of this emerging standard.

#### **Ex Libris:**

Ex Libris believes that customers will benefit from an evolutionary path towards use of Linked Data (LD) and BIBFRAME. This path translates to the incremental addition of features to products such as Alma and Primo. In the past year, Ex Libris has added Linked Data access (URIs) to BIB records in Alma and discovery records (PNX) in Primo.

Stemming out of a vision of the place and volume that BIBFRAME will take as a major bibliographic description data model, and utilizing Alma's agnostic design for cataloging methods, Alma has a clear roadmap for implementing BIBFRAME related functionalities that will support better integration with BIBFRAME records, including:

- Alma will support exporting catalog records in BIBFRAME format, allowing Alma records to be part of BIBFRAME based record workflows outside of Alma. A BIBFRAME option will be added to the existing Title level export job
- Alma will support the importing catalog records in BIBFRAME format, allowing BIBFRAME formatted records to be easily and seamlessly made part of the Alma catalog, regardless of the cataloging format in which it is managed. Alma will use the MD Import framework with a source format of BIBFRAME.

**OCLC:** HELIN data is available for linked data via OCLC's linked data initiatives with the Library of Congress and the BIBFRAME community to evaluate pilot data and finalize the BIBFRAME standard; with Schema.org to improve the vocabulary and establish extensions for publishing library data on the Web.

OCLC is committed to working with several linked data initiatives as we build out our infrastructure support. We are collaborating with libraries to understand their workflow requirements as they begin to work with linked data. We are working with the Library of Congress and the BIBFRAME community to evaluate pilot data and finalize the BIBFRAME standard. And we continue to work with Schema.org to improve the vocabulary and establish extensions for publishing library data on the Web. As a result, OCLC is well positioned to design future products and services to help members register their collections in WorldCat and expose library data in the format best suited for the need.

### **Authority Control:**

#### **How is authority record data, particularly see and see also references, incorporated into the public display/discovery layer?**

**Innovative:** Authorized access points in authority records are indexed and the search results include the following cross references:

- When users search for a term found in the 1XX field of an authority record, the system returns search results and includes an "equivalent heading" redirect to the term found in the 7XX field of the same authority record.
- When users search for a term found in the 4XX field of an authority record, the system returns a "see" redirect to the term found in the 1XX field of the authority record and an "equivalent heading" redirect to the 7XX field of the same authority record.
- When users search for a term found in the 5XX field of an authority record, the system returns a "see also" redirect to the term found in the 1XX field of the authority record and an "equivalent heading" redirect to the 7XX field of the same authority record.
- When users search for a term found in the 7XX field of an authority record, the system returns search results with an "equivalent heading" redirect to the 1XX field of the same authority record.

**Ex Libris:** Alma manages SEE and SEE ALSO references through the appropriate fields in authority records. When authorizing a bibliographic heading, SEE headings will automatically be replaced by the authorized form of the heading. When publishing records to the discovery interface, Alma will automatically enhance them with SEE references so that the discovery interface can index the non-preferred term and retrieve records displaying the preferred term.

**OCLC:** Cross references are not displayed in WorldCat Discovery.

## Licenses Management and Amendments

### Does the system manage licenses and amendments, including attaching digital versions?

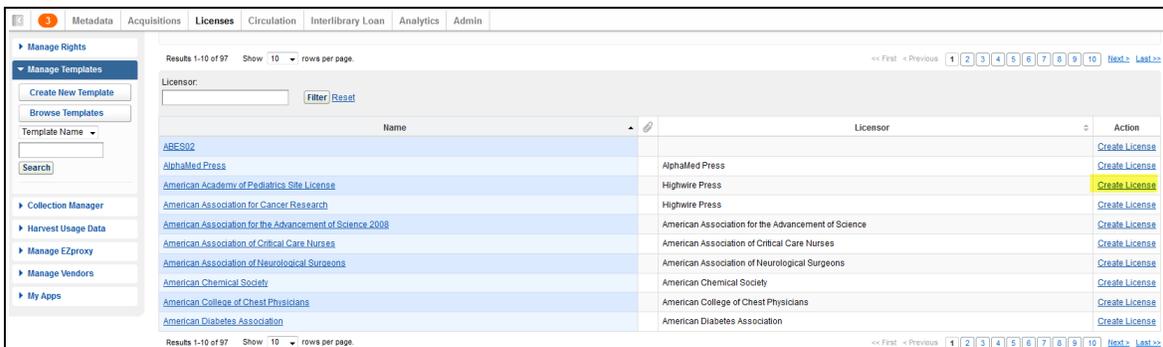
**Innovative:** - ERM Module – couldn't find in doc

**Ex Libris:** Yes; Alma features a dedicated license management module which conforms to the DLF-ERMI standard. Libraries can customize the staff-facing user interface forms so that only relevant license terms display to staff.

Alma enables staff to quickly and easily create a license record that captures detailed information about the terms of a license or contract. It also enables the creation of an addendum or amendment for a license which serves to identify additional titles covered by the existing license (e.g., when a library adds new titles and overall license terms do not change), or to modify the terms associated with a particular resource or group of resources.

The License Details in Alma is comprised of several tabs: A summary tab, which gives information such as the name, status, and start and end dates of the license; a License Terms tab, which gives information regarding the Terms of Use, Restrictions, Perpetual Rights, Obligations, and Termination Obligations of a license; an Inventory tab, which lists the active and historical packages associated with the license; an Amendments tab, a Notes tab, and an Attachments tab.

**OCLC:** Yes. WorldShare License Manager integrates storing, sharing, and managing information about licensed materials. WMS offers a number of templates to assist in adding a license. From the list of templates, the library can choose to Create License, which moves the template into the library's secure environment. From here, library staff can make any adjustments to reflect your library's license with that vendor. Alternatively, the library can create a new license from a blank template.

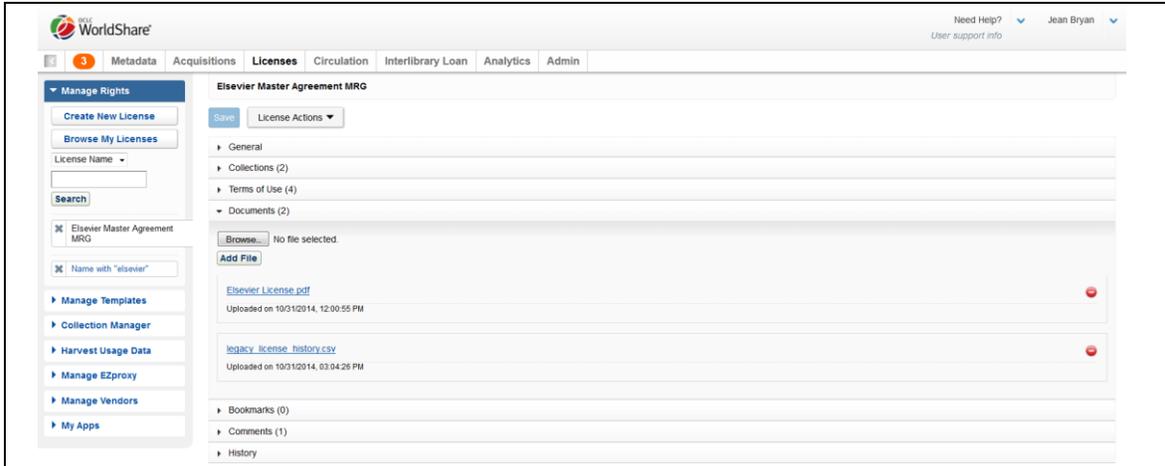


The screenshot displays the Alma Licenses Management interface. The top navigation bar includes tabs for Metadata, Acquisitions, Licenses (selected), Circulation, Interlibrary Loan, Analytics, and Admin. The main content area shows a list of license templates with columns for Name, Licensor, and Action. The Action column contains a 'Create License' link for each row. The list includes templates from various publishers and organizations such as AlphaMed Press, American Academy of Pediatrics, American Association for Cancer Research, American Association for the Advancement of Science, American Association of Critical Care Nurses, American Association of Neurological Surgeons, American Chemical Society, American College of Chest Physicians, and American Diabetes Association. A search bar and pagination controls are visible at the bottom of the list.

Name	Licensor	Action
ABES02		Create License
AlphaMed Press	AlphaMed Press	Create License
American Academy of Pediatrics Site License	Highwire Press	Create License
American Association for Cancer Research	Highwire Press	Create License
American Association for the Advancement of Science 2008	American Association for the Advancement of Science	Create License
American Association of Critical Care Nurses	American Association of Critical Care Nurses	Create License
American Association of Neurological Surgeons	American Association of Neurological Surgeons	Create License
American Chemical Society	American Chemical Society	Create License
American College of Chest Physicians	American College of Chest Physicians	Create License
American Diabetes Association	American Diabetes Association	Create License

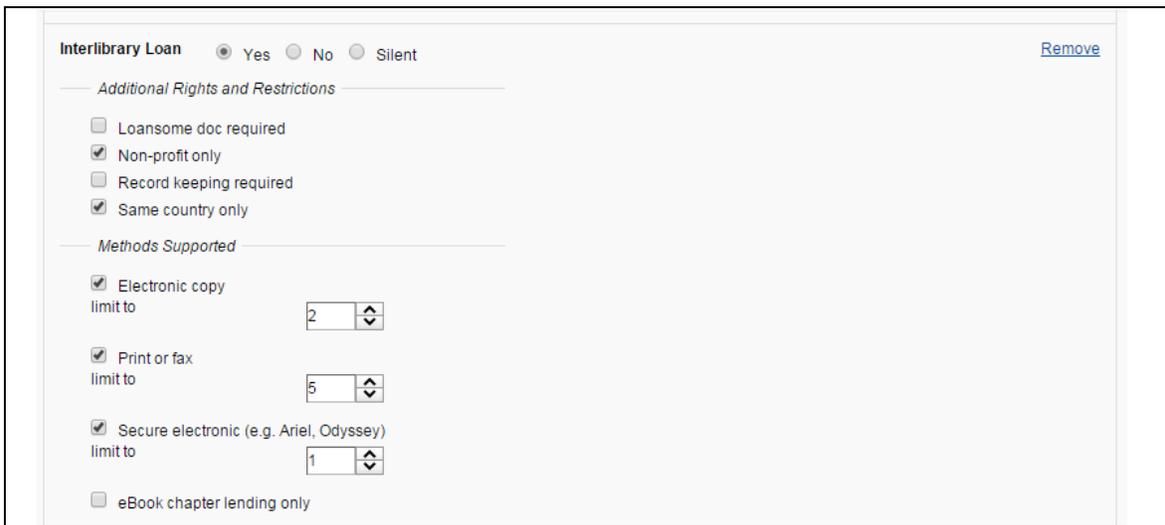
### Selecting License templates

Once a template has been created, the library can store a scanned copy of the license in this secure environment. Within the license, multiple files in a variety of formats (PDF, Excel, MS Word, or CSV) can be saved. Multiple URL links may also be stored in the License record.



License option to store copies of licensing information.

To further help libraries with ongoing management, the License Manager exposes encoded license data to other services. The screen shot below shows the encoded terms for interlibrary loan of this particular e-collection. These terms are then consumed by ILLiad and WorldShare ILL. OCLC regularly considers terms to add to License Manager. The existing terms are based on the ERMI (Electronic Resource Management Initiative) standard, but also provide an option for custom terms.



Example of terms in License Manager

Alerts can be utilized to inform key staff of changes that are needed or changes that have occurred to a license.

OCLC WorldShare

3 Metadata Acquisitions Licenses Circulation Interlibrary Loan Analytics Admin

### Alerts

Results 1 - 3 of 3

When	Description
12/04/14 2:26:39 PM	A new license called 'Elsevier trial' has been created
11/05/14 8:12:01 AM	A new license called 'Alexander Street Press Mast...' has been created
10/12/14 9:25:48 AM	'EBSCO Master Agreement for ...' signature updated

Results 1 - 3 of 3

Compose Alert Delete All Read

## Vendors

**Does the system provide separate security for each member's funds, budgets, and expenditure reports?**

**Innovative and Ex Libris:** See full RFIs for details.

**OCLC:** Yes. WMS is built, implemented, and supported with both the individual library and the consortium in mind. WMS group members each get their own instance of the management software. Individual libraries manage their own budgets. Unlike some systems that prescribe policy conformity and workflow centralization, WMS preserves and respects the autonomy, privacy and policy differences among members of the consortium, while at the same time leveraging the opportunities that come with shared data, infrastructure, and community.

Furthermore, WMS allows libraries to make decisions about what and how much they share with each other without requiring all the hardware and technical infrastructure that might be required. There is no additional hardware, disk space, or separate physical footprint required to enable WMS group functionality.

## API's

**What APIs are being actively developed? Do the APIs allow for read/write? Or just read-only?**

**Innovative:** Yes. Sierra is an open service solution that includes access to RESTful APIs for both read-only data and read- write transactions, as well as read-only data access using direct SQL queries of the PostgreSQL database. Sierra also stays up-to-date with current library industry standards such as SIP2, NCIP, EDIFACT, and other protocols commonly used by libraries. All the APIs described below are included as part of the proposal for the library, and our philosophy going forward is that any new APIs will be included for libraries at no additional cost as part of the product that provides the functionality the APIs expose (e.g. Sierra APIs are included as part of Sierra; Mobile Worklists APIs will be included as part of Mobile Worklists; etc). See RFI for more Detail.

**Ex Libris:** Yes. APIs are continuously added to Alma based on the needs of our client community. New APIs are made available to all Alma customers with no additional fees.

**OCLC:** OCLC offers approximately 25 APIs covering all aspects of the WMS and related services. Libraries subscribing to WMS have access to all APIs at no additional cost. When it comes to developing and making APIs available, OCLC puts into practice what alternative service providers only talk about.

The WorldShare Platform APIs are open to qualifying users of the various services. Anyone can request a key for use in the Platform sandbox without restriction. APIs are all fully documented to the public. Use of OCLC APIs does not require additional licensing fees or costly training.

A complete listing of APIs can be found at: <http://oclc.org/developer/develop/web-services.en.html>.

Most APIs allow both read and write. Some like the Circulation pull list API are read only since this is its function to feed other applications, not to have items added to it by other applications.

## **Discovery**

### **How many unique items are included in the central index? How frequently is the central index updated?**

**Innovative:** Powered by data from EBSCO's global knowledgebase, coverage includes over 1.9 million unique titles and over 7,591 databases and packages. Updates to the KnowledgeBase are made in real-time as received by the source content provider via Innovative APIs. Changes made to the KnowledgeBase are automatically reflected in the Discovery application.

#### **Ex Libris:**

The Primo Central Index contains approximately 1 billion unique resources. Ex Libris hosts and maintains the central index (Primo Central), updating central index resources for clients once per week. For publishers who do not provide

us with weekly updates, they are performed as frequently as the updates are provided.

**OCLC:** Using WorldCat Discovery ensures comprehensive resource coverage and content access for your users. The central index provides access to more than 2,300 collections, representing 285 of the world's top publishers, such as ProQuest, EBSCO, Gale and Elsevier. Full text for more than 8+ million open-access content items from HathiTrust, OAlster and Google Books are available, along with 16 million e-books from Overdrive, eBrary, MyiLibrary and others to provide the broadest e-book coverage available to libraries.

**Can the library customize its holdings within the central index? Can the library choose what content to expose to the users?**

**Innovative:** Authorized library staff can submit requests for changes or additions to the knowledgebase which will be evaluated within 48 hours and completed as appropriate. Additionally, the consortia office or individual institutions can add "custom coverage" to reflect custom packages or unique holdings that are not reflected in the global knowledgebase, which can then be made viewable across the consortia as needed. For managed titles, (those available through the knowledge base), the updates will be made and displayed automatically. For custom titles (those not available through the knowledge base and managed by the library) the administrator for the library or the consortia can maintain the information directly. The library is in control over what content is ultimately exposed to the end users.

**OCLC: Yes, the library selects the databases it subscribes to within the central index via Service Configuration. They will create groups of databases typically in subject areas. One group will be designated as the default group that is searched when a user first enters the interface. However the user may always select one of the library pre-defined groups from the Advance Search OR build their own custom group from all the databases the library has activated.**

**Are end users able to search content that is included in your central index but not licensed by the library? Can the library opt not to expose content it does not license to its users?**

**Innovative:** Yes. The library can configure the system so that either scenario is available.

**OCLC:** The library can control if content it does not license would be included in the search. For clarity they may not select a database they do not license to include, however databases such as OCLC's Article First would very likely search content not

licensed so they simply do not include this database if they do not want users discovering items they do not license. However if they do include materials not licensed they then have the ability to have an ILL option appear on these items.

## **Functionality**

**Does your discovery tool include its own knowledge base and link resolver? What third party knowledge base tools and link resolvers does the discovery tool work with?**

**Innovative:** Yes. Encore Duet—a product resulting from the close partnership of Innovative Interfaces and EBSCO— includes its own link resolver free of charge: *LinkSource*. Encore Duet also includes the A-to-Z Central Knowledgebase, powered by 1.9 million unique titles and over 7,591 databases and packages, from EBSCO free of charge as a part of Encore Duet.

**Ex Libris:** Yes. Primo is provided with Primo Central as its central index. Offering researchers a vast collection of authoritative content, the Primo Central Index is exceptional in its focus on material specifically for the scholarly community.... In addition, link resolution functionality is an integral part of Ex Libris Alma and there is no need to use an additional third party link resolver when subscribing to Alma.

**OCLC:** Yes, both a knowledge base and OpenURL link resolver are included at no additional cost.

Third-Party Tools - WorldCat Discovery interacts successfully with any OpenURL 1.0-compliant resolvers. However the user's experience will be degraded since Discovery is not able to query to remote knowledge base to assure accessibility to the specific citation.

**Does the Discovery solution allow for modifications (tweaks) to the algorithm used for relevancy ranking?**

**Innovative:** Two options for relevance ranking in RightResult affect ranking for popular titles with many copies and single word monographic titles:

1. Enhanced relevance for popular titles affects the ranking of titles at the top of the results set based upon the number of attached copies. This helps libraries promote best sellers and popular original titles cited in recent criticism or other media.
2. Enhanced relevance for known titles affects the ranking of monographic titles that appear at the top of the results based upon how the search string matches the 245a field. This is very similar to the way serial titles are handled, and is useful for automatically promoting single-word and other known titles.

**Ex Libris:** Using the extensive Primo back office application, authorized staff can customize the relevancy ranking without any Ex Libris intervention. Primo's relevancy ranking configuration ("boosting") allows the library to boost some items ahead of others, on a per-field basis, increasing the likelihood that a search for a specific title or author will be close to the top of the result set. Ranking is based on the metadata and full text, and Primo provides the ability to manipulate the relevancy ranking algorithm by defining field-level boosting factors, as follows:

- Setting the importance of specific fields for boosting purposes;
- Boosting documents in publishing by use of normalization rules;
- Boosting by synonyms;
- Boosting local collections vs. Primo Central remote content.

**OCLC:** A library may choose to sort results either by strict relevancy or by location and relevancy, where they can configure the effect of their holdings on the ranking of search results.

A library can have three tiers of holdings plus a fourth WorldCat tier as part of their relevancy ranking. The first three tiers are configurable by the library, using holdings, and the fourth tier is always the global view of resources in all WorldCat libraries.

The algorithm itself cannot be tweaked by the library.

### **How can search results be filtered? Format? Date? Publisher? Journal? Database? Peer Reviewed?**

**Innovative:** Encore Duet search results can be filtered by facets and sorted by relevance and date. Search results can also be refined by database, availability, format, subject, language, place, collection, publisher, journal, content provider.

**Ex Libris:** Results can be filtered by using a facet or enhancing the search criteria. Facets are configured by each library and can include availability, peer-review indication, publisher, date, format type, collection name, journal name and more. In addition, for local collections libraries can create custom facets based on metadata found in the records.

**OCLC:** From the result set, a user can refine a search with the aid of facets. MARC data is used to derive these. These vary according to the database(s) being search but may include: sort order, location, full text/peer reviewed, format, database, author, publication year, language, and topic. Facets are applied across all data sources, depending on the data necessary to create the facet being in the data source.

**Can users select multiple facets in different categories? Are facets easy to add and remove from a search without redoing a search? Are facet categories, labels and ordering customizable?**

**Innovative:** Yes. Encore Duet offers an array of facets by which results can be refined. Library administrators can customize the facets and limiters that are offered in their installation.

Users can select the facets during their initial search if they are conducting an advanced search. They also have the option to use the limiters to refine their results after they have received the results list, without having to conduct a new search.

**Ex Libris:** Yes, users can choose to include or exclude multiple facet values.

**OCLC:** Yes, from the result set, users can merely check a box next to the facet(s) they wish to apply without redoing a search. Support for allowing libraries to customize facets is under consideration for future development.

**What options are available for output? Email? Download? Export to Bibliographic Manager?**

**Innovative:** Search results can be saved to a list, emailed, or exported to citation management software.

**Ex Libris:** Primo enables users to print and email individual records and lists of records, as well as export citations from the results list or their personal e-shelf to citation management systems such as RefWorks, EndNote Web, Mendeley, Citavie, and Zotero. Primo also allows for an “Export to RIS” option. RIS is a format supported by many reference management systems. This option allows users to export a record in RIS format to a file that can be saved on the local disk or opened with a reference manager program such as EndNote local.

**OCLC:** Individual records can be printed and saved from the brief results screen and added to a temporary (session dependent) or permanent list. To download and export a set of citations for records, users may create a list of results and then choose the format to download the citations using tools such as EndNote and RefWorks. Support for Zotero is built into WorldCat Discovery.

**Does your solution offer a citation function? What citation formats does it support? APA? MLA? Etc.**

**Innovative:** Encore supports exporting of catalog or article citation data in brief or full format directly to Citation Management software such as EndNote, RefWorks, and Zotero, or plain text export via email. In addition, the Encore cart list view has been optimized for printing or screen-saving.

**Ex Libris:** The citation style would be handled by the citation management tools mentioned above.

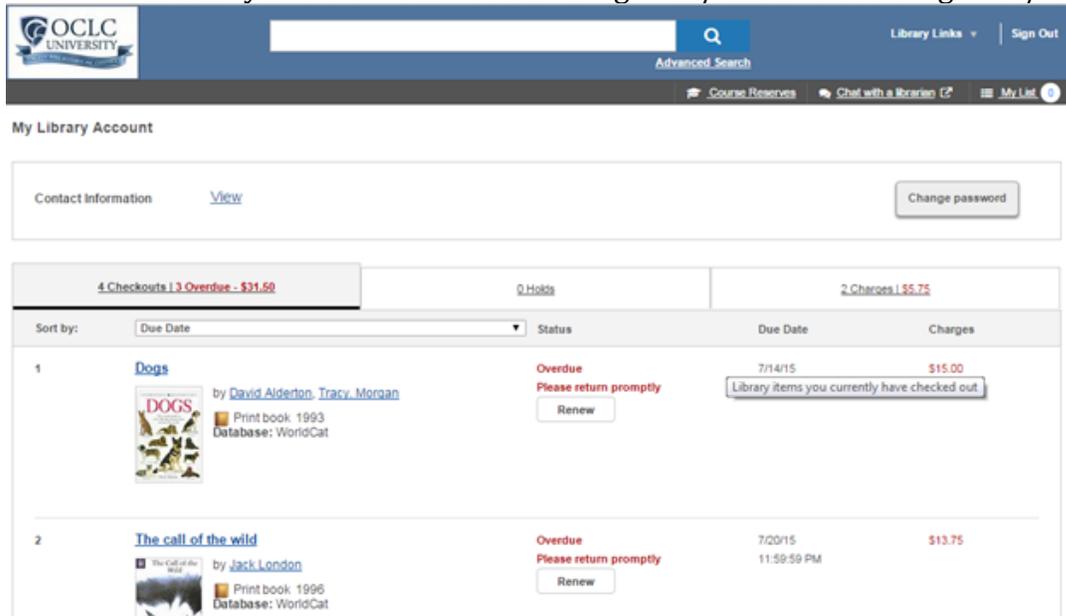
**OCLC:** Currently, results can be emailed or output to Refworks and Endnote. Citation formats for APA, MLA, Chicago, are supported now and more will be gradually implemented starting in 2016.

**Can users see all of their account information within the Discovery solution – loans, reuests, fines, saved searches, etc.?**

**Innovative:** Yes. Patrons can setup personal “My Accounts” from which a full range of self-directed functions and personalisation tools that make it effortless to keep track of circulation activities and favourite search strategies, check notifications, maintain personal data and much more.

**Ex Libris:** Yes. Information on loans, requests, fines and fees and personal information can be found in the user account.

**OCLC:** Yes. End users can log into WorldCat Discovery to place holds, check the status of items on hold, and edit holds. The patron can view checked out items and renew if necessary and view both outstanding fines/fees and accruing fines/fees.



**Account Screen Showing Alerts**

**Saved searches are planned future development.**

**What advanced search features are available?**

**Innovative:** Encore Duet provides an intuitive advanced search form that anyone can use. The advanced search allows the user to target very specific materials from the outset. Users can specify search terms, the fields in which the

terms should be found, and use Boolean logic to connect multiple search statements together. In addition the user can specify pre-search limits, which allows the user to target very specific subsets of large collections. Once a result set is retrieved, the user can use both facets and sorting options to further manipulate the result set if needed.

**Ex Libris:** Advanced search options include the ability to combine multiple search fields as well as using a predefined set of special criteria fields as shown in the screenshot below – see RFI

**OCLC: The Advanced Search screen allows users to search specific field indexes such as author, title, subject, journal titles. Indexes available vary according to the databases selected for searching. The user may combine an unlimited number of indexes and search terms with drop-down Boolean operators.**

The screenshot displays the 'Advanced Search' interface. On the left, there are three search rows, each with a dropdown menu for the search field (Keyword, Title, Author), a Boolean operator dropdown (AND), and a text input field. Below these is an 'Add row' button and a 'Search' button. A 'Limit your search' section includes a checkbox for 'Only return peer-reviewed articles', a 'Format' dropdown (All Formats), a 'Year' range selector (e.g., 2010), and a 'Location' dropdown (Libraries Worldwide). On the right, a 'Databases' section shows '14 Selected' with a 'Save Changes' button and a 'Reset' button. Below this is a list of 'Searching Databases' with checkboxes and help icons: ABINFORM Complete, Academic OneFile, American National Biography Online, Biography and Genealogy Master Index, BioOne, Business Insights: Essentials, Contemporary Women's Issues, Expanded Academic ASAP, Gale Virtual Reference Library, General OneFile, Oxford Reference Online, Oxford Scholarship Online, ProQuest Newsstand, and WorldCat.org. At the bottom right, a 'Law' group is shown with '2 Databases' and a 'Select All in Group' button.

**Advanced Search screen**

**Subject-specific databases may be grouped together for searching (e.g., Law). These groups of databases may be selected from the Advanced Search screen prior to searching. They may also be set as the default data to be searched from a specifically configured search box that may be placed on a subject-specific Web page. Boolean and proximity operators are supported.**

## Usability

**Describe how your product incorporates established best practices in usability. What usability testing do you conduct on an ongoing basis?**

**Innovative:** Innovative has aggressively expanded its accessibility testing and assessment – which had previously been handled directly by Innovative as part of its internal product design and quality assurance process – to incorporate independent industry leading accessibility specialists in order to provide auditable, independent, external assessment of its product’s accessibility in detail, and specialized guidance to Innovative in this important area. Any areas identified for improvements are scheduled for regular Service Pack releases (routine system maintenance) and set with HIGH priority. We anticipate between two and four releases per year for each application.

**Ex Libris:** To deliver the best user experience, the Ex Libris Primo team utilizes several methods as displayed in the slide below: see RFI

More information can be found below and also in the recently published “Delivering the Experience that Users Expect: Core Principles for Designing Library Discovery Services” white paper on the topic:  
<http://meetexlibris.com/designing-library-discovery-services/>.

As the end user interface, allowing for the discovery and delivery of the full breadth of resources the library has to offer, Primo was designed from day one around the end user. Primo was developed in collaboration with customers (a small number of early adopters and a broader charter group) from the field, who helped us to evaluate every change in the user interface. We have continued to hone and improve the usability during the years in which Primo has been in production and in use at some of the most distinguished and heavily used research libraries around the globe.

**OCLC:** Usability Features - WorldCat Discovery includes many features that provide a user-friendly experience that match usability industry heuristics:

- **Visibility of system status** - Immediately upon executing a search, WorldCat Discovery displays a “Searching databases” message. Upon completion, the interface displays the total number of results and lists the results. Each item on the results list displays a wealth of information with hyperlinks, including title, author, format, database source, other editions and formats, where the item is held, and if it is viewable online. Users also are prompted for authentication to access items where required. The interface also will display a message for any system unavailability.
- **Easily Understood Terminology** - All functionality is phrased in non-technical terms, allowing users to easily understand them. As an additional measure toward this end, hovering the mouse over most interface features (e.g., sharing and permalink options, saving results to a list, library links, etc.) reveal the function’s purpose. Access to desired items is presented logically, from a natural-language single search box (also with Boolean capability and a link to an

Advanced Search screen available), to a results list with faceted browsing of search results, to clearly presented availability information, and single-click access to full-text online content.

Also, WorldCat Discovery is offered in several other languages besides English, including Chinese, Japanese, Korean, Spanish, French, Portuguese, Dutch, German, Czech, Italian, and Thai. The interface can display characters from Unicode scripts, including the Latin script, which includes, French, English, Spanish, and German. In fact, if the user's browser is set to a language other than English, works in that language are automatically elevated in the search results. These factors are applied to all searches.

- User control and freedom - The interface allows users to leave "unwanted states" merely by using the browser's back button or if a new window opened, merely closing that window.
- Consistency and standards - The display uses consistent wording throughout for common functionality.
- Error prevention - The only error a user may normally encounter is if they perform a search with zero results. The system will prompt them to please construct a different search.
- Recognition rather than recall - The single search box remains prominently at the top of every page during searches, with the user's latest search terms still present, so they do not need to be recalled and retyped. Functionality is clearly labeled and/or includes drop-down menus revealing options.
- Flexibility and efficiency of use - The interface provide several features for making searching and accessing items quick and easy. As users type search text, the interface provides search suggestions, which users can select, to speed up searching. Libraries have the option to embed search limiters into the simple search box to present the user with tabbed options; for example, Books, Articles, DVDs. Subject-specific databases may be grouped together for searching. These groups of database may be selected from the Advanced Search screen prior to searching.

Full-text online resources are identified with a "View Online" link, which takes the user to that item. For an e-book, the user is taken to the native interface where that e-book resides. When users view items, WorldCat Discovery performs its work "behind the scenes," linking to live data in a library's catalog to retrieve real-time availability information. This data is both displayed to the user and used to determine appropriate delivery options to present to the user.

- Aesthetic and minimalist design - Only options relevant to a user's current place in the interface are displayed to the user. This is based on extensive usability testing.
- Help users recognize, diagnose, and recover from errors - Messages presented to the user are clear and succinct.

Usability Testing - OCLC uses several methods to evaluate and improve usability, including usability testing, interpreting usage statistics, and gathering input from our users. We use the three areas of input to identify and prioritize enhancements. OCLC is dedicated to meeting the ever-changing needs of our users by observing and evaluating users' search and resource needs.

OCLC has a usability lab on-site at our headquarters where staff can observe patrons and library staff interacting with OCLC products and services. Staff members analyze results from these studies to evaluate the need for system enhancements.

OCLC works with users to understand their workflow, understand their needs, and create the shortest path for users to get items by:

- Creating a user interface based on testing and analysis
- Constant statistical analysis of usage data
- Ongoing usability testing
- Contextual interviews
- Implement more features on brief results
- Providing interfaces that go where your users are

The usability lab also includes eye-tracking software to evaluate how users interact with our interfaces.

OCLC has fully leveraged the feedback from its live libraries. A significant percentage of the new features added to WMS were based on direct feedback from the WMS community.

These were features that added to the quarterly release cycle that were not previously planned and were added in addition to already planned features. In most releases, the number of items included based on recent community input equal or outnumber the items planned as part of standard release cycle. These features included WMS Course Reserves, multiple ISBN options in the ordering workflow, improved metadata displays, and several usability improvements.

### **Does your product meet ADA, WCAG, and Section 508 accessibility requirements?**

**Innovative:** Innovative is fully committed to ensuring that its products are accessible to all users and utilizes the best interface design and execution to ensure that users with disabilities do not face barriers to access. The design and

execution of Innovative's products are guided by the standards and recommendations of the World Wide Web Consortium's standards on Web Content Accessibility (WCAG) and Section 508 of the United States Federal Rehabilitation Act, among others. Key to this commitment to our library partners and our users is Innovative's commitment to respond quickly to complaints regarding the accessibility of its products, which is expressed in Innovative's standard agreement language as follows:

*With respect to the accessibility requirements of Section 508 of the Rehabilitation Act of 1973, as amended, its implementing regulations set forth at Title 36, Code of Federal Regulations, part 1194, and California Government Code Section 11135 incorporating Section 508, Innovative affirms that the products to be provided under this contract follow industry practice regarding compliance, including detailed voluntary self-assessment of compliance with applicable CFR part 1194 elements. Innovative agrees to promptly respond to any complaint regarding accessibility of the products which are brought to its attention, and for the majority of such complaints expects to resolve the complaint promptly and without cost, but cannot warrant that all such complaints will be resolved without additional cost.*

Innovative currently supports over 9,500 libraries worldwide with its broad suite of accessible products and has continuously fulfilled its commitment to respond to accessibility issues promptly, responding to any such inquiries quickly and without cost to any library.

**Ex Libris:** All Ex Libris products and services comply with the requirements of the Disability Discrimination Act 1995 including Part III, as well as those of the American Disabilities Act (ADA) 1990. The end-user interface of Primo was designed and developed to comply with the Web Content Accessibility Guidelines (WCAG) 2.0: level AA and with Section 508 (with minor exceptions). Ex Libris carries out continual automatic and manual accessibility testing.

**OCLC:** OCLC has a global user base and complies with most of Section 508c of the Rehabilitation Act of 1978 (United States). In addition, OCLC has embarked on a program to comply with WCAG. This multi-standard strategy ensures the highest level of overall accessibility to users of the OCLC's services around the world. As part of OCLC's development process, we write code with accessibility tags and attributes, assigning initial values to accessibility attributes. Semantic web goes into structure of the code. For quality assurance, we check code for 508 compliance, flagging any instances of non-compliance for re-design.

Please see the attached pdf that summarizes WMS compliance with Section 508c.