Discovery Layer Overlay- Proposal “B” for a South Dakota Libraries’

Networked System

January 2015

Background

The South Dakota Library Network (SDLN) served South Dakota libraries well for nearly three decades. That is an amazing length of time for a consortium to be in operation. When SDLN was first conceived and launched in 1986 as a shared integrated library system (ILS), it was in the forefront of technology and innovation. It was structured in the pre-Internet era when shared resources and linked connectivity were in their infancy. The consortium required considerable overhead including servers, staff, software and space. The shared ILS allowed participating libraries the ability to request interlibrary loan (ILL) and easily borrow materials from each other. Over the years, SDLN expanded its services to assist its member libraries. Among these extra services were email and web development, training and shared databases.

During the last decade as ILS systems evolved, most school libraries and small to medium public libraries found the SDLN ILS unaffordable and far too complex for their needs. The larger public libraries wanted systems that were more responsive to their local citizen customer base. The extra services (email, web services, authentication, etc.) once provided by SDLN have been acquired elsewhere or are no longer necessary. An Integrated Library System (ILS) no longer requires dedicated staff and server space, reducing the overhead required to maintain ILS and to search multiple catalogs simultaneously.

During that same time period, the South Dakota State Library (SDSL) brought on staff with technical expertise equipped to train and consult with libraries on different ILS systems and resources. In addition, the State Library expanded its suite of subject-specific subscription databases available to all South Dakota libraries including our K-14 schools.

One thing that has stayed consistent is the need for interlibrary loan. Last year statewide there were approximately 52,000 ILL transactions among our libraries. Fifty-six (56) South Dakota libraries, including the South Dakota State Library (SDSL), currently share an ILS through the South Dakota Library Network (SDLN). This shared catalog allows all South Dakota libraries the ability to easily search the bibliographic collections to borrow content (ILL). In addition, 124 libraries currently have access to the ILL functionality through SDLN, allowing borrowing of materials from SDLN full member libraries. In the past year over 27,000 ILL’s were conducted through the SDLN library network including approximately 2,600 ILL transitions provided or facilitated by the State Library for non-members. (Not remote or full SDLN members)
Current and Future Needs of South Dakota libraries and citizens

SDLN is currently undergoing a transition, with the plan to include only six full member Board of Regents libraries. The other current full member libraries, including the South Dakota State Library, sixteen public libraries and eleven schools must implement their own ILS. The loss of the shared ILS via SDLN will make impossible the libraries’ ability to search multiple library catalogs simultaneously. Because of the loss of the shared catalog, locating and requesting materials to borrow (ILL) will become more difficult. Thus the need for a new shared networking system operational at the beginning of FY 2016.

In today’s world having one statewide ILS (integrated library system) is no longer necessary or even desirable to meet the increasing demands of various clienteles---academic, public, school and special libraries. In the 21st century, libraries can choose from a wide variety of options, models and pricing structures. The Internet is a highway on which communication software (such as an overlay) can readily link library collections (local ILS systems) and allow them to “view” one another’s holdings thus greatly facilitating information access and interlibrary loan transactions between and among our state’s local libraries.

The South Dakota State Library’s Role as statewide facilitator

As a current SDLN member library, the State Library is currently in the process of implementing a new ILS as well. The State Library will be able to acquire a system that will manage its collection within their current budget and using the SDLN reserve funds which will be returned, half most likely this year and the remaining half prior to June 30, 2016. When final approvals are met, the State Library will purchase Book System’s Atriuum software in early 2015 and begin the migration of data from the SDLN system. The State Library anticipates a migration of their data will be complete and their new system fully operational by July 1, 2015. At that time they will become a remote SDLN member for the last year of SDLN’s existence. It is the library communities’ hope and expectation that all library records will remain on the SDLN servers until July 1, 2016 thus maintaining a searchable “network” for the state’s ILL needs until that time. However, SDLN’s last email stated, “After your SDLN membership expires, you will no longer have access to your data through the Aleph client. Your data will be purged within one month.” If this is the case, then the SDLN network as we have known it will start to diminish throughout 2015 as migrations are taking place.

The State’s Role and Responsibilities

SDSL is charged with providing a “network system” by which all other libraries in the state can communicate. (SDCL 14-1-49) This “network system” or discovery layer will facilitate interlibrary loan (ILL) and database information discovery, enabling searching of multiple differing integrated library systems (ILS), the State Library-provides full-text subscription databases, and other digital content which can all be searched simultaneously. This “one-stop shopping” is a technology bonus which is not currently possible within the present SDLN system. The network system (discovery layer) will be a hosted software solution, requiring no additional equipment, staff or space to maintain.
Key Concern: The dissolution of SDLN on June 30, 2016 and loss of the shared ILS means there will no longer be a large group catalog to search for ILL requests. A network system (discovery layer) will allow libraries to have their own ILS system while searching other ILS systems simultaneously. In addition, the discovery layer will show results from the State Library provided full-text databases, a significant improvement over the current SDLN ILS results. Articles located within the full-text databases would be available immediately and not need to be borrowed. This network system (overlay/discovery layer) can also be managed easily by the existing State Library staff with no additional FTE staff, facilities or equipment. This is a significant shift from the older SDLN model heavily reliant on computer staff, specified facilities and significant on-going investment in computer hardware and equipment.

The State Statute 14-1-49 reads: “State participation in interstate networks and systems. The State Library Office shall provide for state participation in regional, national, or international library networks and systems designed to increase the quality of library services for the citizens of the state” by providing a statewide network that allows resource sharing [ILL] among all South Dakota libraries.

In addition, this solution supports the SDSL Strategic Plan Goal 1: All South Dakotans will have access to library services Objective 1: Strengthen statewide resource sharing [ILL] by identifying and implementing solutions for libraries to share collections with one another.

Bonus Benefits

Implementing a discovery layer allows the following benefits not available with the current SDLN system:

- Libraries maintain local control and selection of their own ILS system
- Easy participation in cost effective ILL with other libraries
- Overall cost savings to all South Dakota libraries through no annual membership fees (i.e. SDLN membership)
- Online catalog option for small libraries who currently have no ILS or an ILS that isn’t online
- Libraries are able to initiate their own ILL requests quickly and easily without SDSL staff facilitation
- However, SDSL staff will be able to monitor ILL requests and intervene to prevent abuse or suggest better options
- Anticipated decrease within the next five years in ILLs for schools and for many public libraries due to the federated search capabilities required in the overlay software RFP
- As is the history of library technology, future upgrades and improvements will only involve swapping out easier, less costly software with no additional investment needed in additional staff, facilities or equipment.
- Many more SD libraries can participate equally in a “shared” catalog and with resource sharing.
- Searching continuity and expanded access to resources contributes to the Department of Education’s aspiration that “all students are college, career and life ready,” and “have opportunities to engage in 21st century learning.”
More Resources Viewed and Shared

The proposed discovery layer purchase will allow more libraries to participate in a shared catalog than currently participate in SDLN. Even though currently the largest of our state’s libraries have their holdings within the current system, in this new configuration, there will be more resources available in the catalog than the current SDLN catalog. The network system (discovery layer) purchase will allow small libraries the opportunity to lend items from their collections and fulfill the ILL code “…the system of interlibrary loan still rests on the belief that all libraries should be willing to lend if they are willing to borrow.” [http://www.ala.org/rusa/resources/guidelines/interlibraryloancode] It is anticipated that this model will facilitate a more evenly distributed ILL requests/loans process throughout the state. The State Library will also be in a better position to spot abuses of interlibrary loan, monitor costs and instruct local libraries on the most effective and efficient ILL protocols and procedures. This is currently not possible.

Budget Request

To set up a network system (discovery layer) among 100 of our largest and most active public and school libraries in South Dakota, approximately $325,000 is needed for the first year and $300,000 for the subsequent years.

Summary

Providing a network system through a discovery layer overlay is a contemporary solution for South Dakota needs as we move from the SDLN centralized “one size fits all” model to a more affordable and flexible option. The technology being proposed is an efficient, cost effective 21st century solution. It is a proven technology over the past 15 years. However, new “second generation” technological functionality is currently emerging. This technology will facilitate greater local library services and maximize the collective shared resources within our state. Though this proposal appears at first glance to be a substantive additional commitment from the state, it is, in reality a simple and reasonable solution given the demonstrated results, Common Core alignment and substantial savings the state as well as local libraries will soon appreciate.

From Erica Clay, INFOhio Librarian

http://www.infohio.org

“We consider our discovery tool, ISearch, a College and Career Readiness tool and I serve on INFOhio’s ISearch team. We know it’s a tool our students are going to use in their college libraries and when they’re in their careers, they’ll use discovery in their public library.

ISearch, which is what we call INFOhio’s discovery layer, is a tool that really starts with the standards.
Ohio’s New Learning Standards mirror the Common Core State Standards and our standards say that in order for our students “to be ready for college, workforce training, and life in technological society, they need to be able to...analyze and create a high volume and extensive range of print and non-print texts in media forms old and new.

When the reliable information and texts are siloed, teachers and students have to look in multiple places, and any of us who have worked with kids know that it’s hard enough to get them to look in one place. ...

That means that we’re bringing those print collections that have been curated by the (librarians)—the K12 school’s information professional—back to the forefront and placing those materials on equal footing with our vetted, reliable electronic content...”

**Timeframe for Discovery Product Project for the South Dakota State Library**

The solution presented is based on figures provided to the State Library from Autographics in the summer of 2014. To date, they are the only vendor that has demonstrated the ability to accomplish the requirements set forth in the request for information. However, an RFP is in the process and will be released in January 2015 with the anticipated expectation that other vendors will submit proposals as their products are ready. The timeframe is very subjective and optimistic. It will wholly depend on responses to our RFP and funding availability.

**Project Goal**

Add a discovery layer to facilitate interlibrary loan (ILL) and information discovery by enabling searching of multiple differing integrated library systems (ILS), the State Library-provided full-text subscription databases and other content simultaneously. Accomplish this prior to the dissolution of the SDLN catalog and networked system in June 30, 2016.

**Project Background**

Fifty-six (56) South Dakota libraries, including the South Dakota State Library (SDSL), share an ILS through the South Dakota Library Network (SDLN). This shared catalog allows all South Dakota libraries the ability to easily search the bibliographic collections to borrow content (ILL). In addition, 124 libraries have access to the ILL functionality through SDLN, allowing borrowing of materials from SDLN full member libraries. Over 27,000 ILL’s are conducted through the SDLN library network annually.

SDLN is currently undergoing a transition, with the plan to include only six full member Board of Regents libraries. The other current full member libraries, including the South Dakota State Library, sixteen public libraries and eleven schools must implement their own ILS. The loss of the shared ILS via SDLN will make impossible the libraries’ ability to search multiple library catalogs simultaneously. Because of the loss of the shared catalog, locating and requesting material to borrow (ILL) will become more difficult.

Beyond the current 56 SDLN full members, the dissolution of SDLN as we have known it will impact 84 schools and 35 public libraries that access the ILL module through the current system. SDLN is scheduled
to expire June 30, 2016. Long range, the simplest and most cost effective and certainly the most efficient course of action is through the use of current technology such as an overlay “discovery layer” software to link all libraries which wish to be linked and search one another’s catalogs (simultaneously) for specific titles and other resources.

**Proposed Solution/Possible Scenarios**

A discovery layer implemented by the SDSL and hosted by the vendor will allow:

1. Searching multiple catalogs on different ILS systems
2. Searching the statewide subscription databases
3. Connect to *ILLiad* (the SDSL’s ILL processing resource) for interlibrary loan

The discovery layer will allow:

1. Library users to efficiently locate books and full-text content from multiple libraries in one search
2. Librarians to have easier access to locate and borrow materials (ILL) to meet library user needs.
3. Libraries the freedom to select their own ILS and participate in ILL at a statewide level.
4. Small libraries the opportunity to lend items from their collections and fulfill the ILL code “…the system of interlibrary loan still rests on the belief that all libraries should be willing to lend if they are willing to borrow.”
5. Smaller libraries without an online ILS can participate (view records) in the group catalog. This will allow their users to access an online catalog without incurring ILS expense for their library.
6. All South Dakota libraries will be able to participate in borrowing and lending materials at no cost for “discovery layer” software

This solution will meet State Statute 14-1-49: “*State participation in interstate networks and systems.* The State Library Office shall provide for state participation in regional, national, or international library networks and systems designed to increase the quality of library services for the citizens of the state” by providing a statewide network that allows resource sharing [ILL] among all South Dakota libraries.

In addition, this solution supports the SDSL Strategic Plan Goal 1: All South Dakotans will have access to library services Objective 1: Strengthen statewide resource sharing [ILL] by identifying and implementing solutions for libraries to share collections with one another.

Benefits provided:

1. Libraries will have the autonomy to select their own ILS and still easily participate in resource sharing (ILL)
2. Libraries will not incur additional costs to participate in resource sharing (ILL) because no membership fees will be required as they would with joining a consortium.
3. All South Dakota libraries will be able to participate vs fewer than the sixty libraries currently participating in the member-only SDLN
4. It will provide an online catalog option for libraries who cannot afford an online ILS but have their collections in a machine readable format

Scenario with Discovery layer network:
1. Library user searches local library catalog. Does not find needed info.
2. Library user changes search location to “all catalogs”— (by viewing on the screen) locates a book in another SD community
3. Library user requests material from an in-state library via ILL
4. Librarian receives material via ILL and notifies library user

Conclusions from this scenario:
1. Library user can locate desired material
2. With many in-state libraries participating, the number of ILL requests is more evenly distributed
3. Staff time can be used for other services

Scenario without Discovery layer network:
1. Library user searches local library catalog. Does not find needed information
2. Library user is unable to search other libraries easily.
3. Library user asks for assistance (if assistance is available).
4. Librarian searches various standalone library catalogs and may or may not locate the material. (An undue burden is likely placed on larger public libraries due to ease of locating materials in their larger library collections.)
5. Librarian doesn’t locate material locally, searches out of state and requests ILL. (Estimated ILL single transaction costs- $30.00 [national average] in labor, postage, fees, etc.)
6. Librarian receives material via ILL and notifies library user (considerations: delay in time and additional costs incurred for both the library and the patron)

Conclusions without a Discovery layer network:
1. Ease of library use declines
2. Library user is unable to find and request materials on his/her own
3. Librarian workload for ILL increases (local costs increase)
4. Large public libraries may see increase in requests since their collections are large and their catalogs are easy to link to
5. Out of state ILL requests will increase due to difficulty locating materials in state increasing local costs and State Library costs (OCLC ILL per loan fee is approximately $3.00 per request.)
6. Increased ILL requests through the State Library facilitation thus increasing SDSL’s overall operational costs and perhaps impacting staffing levels
**Project Schedule Timeline**

<table>
<thead>
<tr>
<th>Date</th>
<th>Description / Action</th>
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<tbody>
<tr>
<td>6/11/14 – 11/14</td>
<td>Working on initial proposal to DOE and BFM</td>
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<tr>
<td>8/14/14 – 10/14/14</td>
<td>ILS Vendor demonstrations and selection of individual online library catalog</td>
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<tr>
<td>11/1/14 – 5/31/15</td>
<td>RFP process / contract/approve bid</td>
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<tr>
<td>6/1/15 – 10/1/15</td>
<td>Gather info needed for Discovery set-up from participating libraries</td>
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<tr>
<td>10/1/15 – 6/31/16</td>
<td>System implementation, testing, training</td>
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<td>Configure Servers: 2 weeks</td>
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<td>Software build: 1 week</td>
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<td>Initial configuration: 3 weeks</td>
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<td>Union Database Build: 6 to 8 weeks</td>
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<td>Z39.50 Configuration: 3 to 4 weeks</td>
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<td>Training: 1 weeks</td>
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<td>Elapsed time for &quot;Model Site&quot; for testing: 3 weeks</td>
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<td>Elapsed Time for Production System Availability: 12 to 16 weeks</td>
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<tr>
<td>7/1/16 – 9/30/16</td>
<td>Go live on new system (SDLN goes away 6/31/16)</td>
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**Project Specifications Included in the State Library’s RFP**

“The South Dakota State Library intends to acquire or license a software system and implementation services for the purpose of providing a hosted Web Scale Discovery solution for the South Dakota citizens. This Web Scale Discovery solution will provide a next-generation approach to information discovery and search, integrating resources that include but not limited to many different integrated library systems, full-text databases, open education resources, eBooks, digitized content and the like.”

Citation: Autographics, Inc.

The system must be in the following configuration:
- Software as a service (SaaS), with library data hosted remotely by vendor
- Will include security for remotely hosted data
- Will include any operating system software, database management software, and necessary utilities

The system must be proposed with software to support the following functions:
- Searching different ILS
- Searching statewide subscription databases
- Connect to ILLiad software for interlibrary loan
**General specifications should include:**

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<thead>
<tr>
<th>Category</th>
<th>Specification</th>
<th>Minimum</th>
<th>Preferred</th>
<th>Desired</th>
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<tbody>
<tr>
<td>4.1.1 Administration</td>
<td>The ability to easily access standards compliant statistics, e.g. COUNTER</td>
<td>X</td>
<td></td>
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<tr>
<td>4.1.2 Administration</td>
<td>Vendor hosting</td>
<td></td>
<td>X</td>
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<tr>
<td>4.2.1 API</td>
<td>The ability to create multiple widgets to search various cross-sections of the database</td>
<td>X</td>
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<tr>
<td>4.2.2 API</td>
<td>The ability to interface with major interlibrary loan systems in place in SD and at participant libraries to enable patron-initiated interlibrary loan with preference for lending by network and delivery hub.</td>
<td>X</td>
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<tr>
<td>4.2.3 API</td>
<td>The ability for individual libraries or groups to develop and connect third party mobile applications to the database – both indexed and federated search content</td>
<td></td>
<td>X</td>
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<tr>
<td>4.3.1 Authentication</td>
<td>The ability to authenticate users via SIP2, NCIP, IP, library card (list and pattern), geolocation, username/password and proxy server</td>
<td>X</td>
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<tr>
<td>4.3.2 Authentication</td>
<td>The ability to login and use resources outside of South Dakota and outside the United States for individuals on travel, studying abroad, etc.</td>
<td>X</td>
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<tr>
<td>4.3.3 Authentication</td>
<td>The ability to authenticate users based on multiple institution and group affiliations</td>
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<td>X</td>
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<tr>
<td>4.4.1 Content</td>
<td>The ability to harvest and index content in open digital repositories, e.g. Black Hills Knowledge Network</td>
<td>X</td>
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<tr>
<td>4.4.2 Content</td>
<td>The ability to harvest and index content in individual and shared library catalogs among participant libraries</td>
<td>X</td>
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<tr>
<td>4.4.3 Content</td>
<td>The ability to harvest and search major public domain books and open access publications.</td>
<td>X</td>
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<tr>
<td>4.4.4 Content</td>
<td>The ability to integrate specific websites and</td>
<td>X</td>
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<td>Category</td>
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<td>web search engines into search results.</td>
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<td>4.4.5 Content</td>
<td>The ability to search (via index or federated search) databases on statewide contract. (Those currently include databases provided by ProQuest, Gale/Cengage, World Book and others)</td>
<td>X</td>
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<tr>
<td>4.4.6 Content</td>
<td>The ability to harvest and index institutional repositories from participant libraries</td>
<td></td>
<td>X</td>
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<tr>
<td>4.5.1 Customer Engagement</td>
<td>Concrete plans to engage SD libraries in the initial development, ongoing development and active support of the platform</td>
<td>X</td>
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<tr>
<td>4.6.1 Interface</td>
<td>Conforms to the User Agent Accessibility Guidelines of W3C Web Content Accessibility Guidelines Version 2.0 <a href="http://www.w3.org/TR/WCAG20/">http://www.w3.org/TR/WCAG20/</a></td>
<td>X</td>
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<td>4.6.2 Interface</td>
<td>Interfaces for each library type: academic, public, high school, middle school, elementary school with the ability to include/exclude/promote/demote content as appropriate</td>
<td></td>
<td>X</td>
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<td>4.6.3 Interface</td>
<td>Responsive design to optimize use on mobile devices, accomplished via HTML or app</td>
<td>X</td>
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<tr>
<td>4.6.4 Interface</td>
<td>The ability to export results via email/download in a variety of formats including txt and bib</td>
<td>X</td>
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<tr>
<td>4.6.5 Interface</td>
<td>The ability to create additional custom interfaces for individual institutions or groups, including branding and content with the ability to include/exclude/promote/demote content as appropriate</td>
<td>X</td>
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<tr>
<td>4.7.1 Marketplace Activity</td>
<td>Concrete plans to actively work with third party vendors to enable indexing of content for faster search and improved user experience</td>
<td>X</td>
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<tr>
<td>4.8.1 Search</td>
<td>Faceted searching</td>
<td></td>
<td>X</td>
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<td>Category</td>
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<td>4.8.2</td>
<td>Search limits including but not limited to date, author, publication, publication type, physical resource availability, full text, public domain, open access, etc.</td>
<td>X</td>
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<td>4.8.3</td>
<td>The ability to choose from among individual databases and groups of pre-selected databases</td>
<td>X</td>
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<tr>
<td>4.8.4</td>
<td>Spelling assistance and suggestions</td>
<td>X</td>
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<tr>
<td>4.8.5</td>
<td>De-duplication of results</td>
<td>X</td>
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<tr>
<td>4.8.6</td>
<td>The ability to sort by relevancy, date, material type, index, title, etc.</td>
<td>X</td>
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<tr>
<td>4.9.1</td>
<td>Default user privacy</td>
<td>X</td>
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<tr>
<td>4.9.2</td>
<td>The ability to save searches and to share searches via email, RSS, etc.</td>
<td>X</td>
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<tr>
<td>4.9.3</td>
<td>The ability to create email search alerts</td>
<td>X</td>
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<tr>
<td>4.9.4</td>
<td>The ability to connect to social networks, e.g. Goodreads (opt-in)</td>
<td>X</td>
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<tr>
<td>4.9.5</td>
<td>The ability to customize the display of search results based on preferred database sources, limits and facets – and the ability to save those preferences to a user’s account</td>
<td>X</td>
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**Suggested Solution:**

Autographics (one vendor’s estimates)

(An official RFP will be released in January 2015 with the hopes that several vendors within the industry will submit bids later that spring. All cost figures stated here are estimates from one vendor, Autographics and may not be reflective of the final costs.)

Autographics provides the ability to search multiple ILS types along with the subscription online resources provided by the SDSL. Though there may be other vendors with suitable solutions, Autographics currently offers the most complete solution for the needs of South Dakota’s libraries. In addition, Autographics has already successfully implemented similar solutions for larger, statewide systems, and the below states speak highly of their relationship with and performance of Autographic products and services. Autographics will create a virtual catalog by using the Z39.50 client to search
various catalogs throughout the state. Z39.50 is a standard that allows different ILS types to communicate with each other. In order for libraries to use the Z39.50 standard, libraries must have a compliant ILS. For libraries that do not have a Z39.50 compliant ILS, Autographics will create a method that will allow simultaneous searching along with the virtual catalog.

Autographics has demonstrated statewide solutions in other states, including the following; (year each state started working with Autographics provided in parenthesis):

- Connecticut State Library (1995)
- New Jersey (1996)
- Massachusetts (2005)
- Pennsylvania (2014)
- Kansas State Library (1996)
- Tennessee State Library (1996)
- Louisiana (pre-2010)
- Mississippi (2005)
- Arkansas – (Fed Search only) (2010)
- Wisconsin (2006)
- British Columbia (1998)

Example:

Kansas State Library’s solution:


“Everything we put out there has a few radical fans, and a few unshakeable detractors. But overall, considering the number of libraries involved, I’d say we are very satisfied with the product and service.”

Jeff Hixon, Director Statewide Services/State Library of Kansas

Proposed costs based on one vendor’s figures

<table>
<thead>
<tr>
<th>I. First Year Implementation, One-Time Price, Includes:</th>
<th>100 library implementation*</th>
<th>All (422) library implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Training, Train-the-Trainer, five (5) days</td>
<td>26,900</td>
<td>37,000</td>
</tr>
<tr>
<td>b) Initial System Configuration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Union Database Creation</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sub-Total One-Time Fees</strong></td>
<td><strong>26,900</strong></td>
<td><strong>37,000</strong></td>
</tr>
<tr>
<td>II. System Components (SaaS), Annual</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Price, Includes:

a) SHAREit™ Resources Sharing System for 422 libraries, includes:
   i. Union Database Sub-System (for all libraries not supporting Z39.50) 24,200 52,200
   ii. Virtual Database Sub-System 29,300 26,380
   iii. Resource Sharing Sub-System 146,500 179,460

b) SEARCHit™ Federated Search System, includes:
   i. twenty-five (25) statewide databases and geo-location authentication module 36,000 36,000

<table>
<thead>
<tr>
<th>Sub-Total SaaS Fees</th>
<th>236,000</th>
<th>294,040</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support, Maintenance and System Updates, Annual Fee</td>
<td>39,600</td>
<td>52,600</td>
</tr>
<tr>
<td>System Hosting, Annual Fee</td>
<td>22,400</td>
<td>26,400</td>
</tr>
<tr>
<td><strong>Total First Year Fee</strong></td>
<td><strong>324,900</strong></td>
<td><strong>410,040</strong></td>
</tr>
<tr>
<td><strong>Total Annual Fee for subsequent years</strong></td>
<td><strong>298,000</strong>*</td>
<td><strong>373,040</strong></td>
</tr>
</tbody>
</table>

To set up a network among 100 of our largest and most active public and school libraries in South Dakota, there would need to be an initial outlay of approximately $325,000 for the first year and approximately $300,000* annually for subsequent years.

SD State Statute 14-1-49: “State participation in interstate networks and systems. The State Library Office shall provide for state participation in regional, national, or international library networks and systems designed to increase the quality of library services for the citizens of the state” by providing a statewide network that allows resource sharing [ILL] among all South Dakota libraries.

In addition, this solution supports the SDSL Strategic Plan Goal 1: All South Dakotans will have access to library services. Objective 1: Strengthen statewide resource sharing [ILL] by identifying and implementing solutions for libraries to share collections with one another.

**Anticipated Impact:**
- More libraries can participate (100) including school libraries
- Inter Library loan may be reduced over the next decade
- Cost savings on the state level as well as the local library level
- No new SDSL staff personnel needed to manage the network
- Steady or diminishing courier costs statewide
- Less reliance on out-of-state resources
- Real-time point-of-need instruction (SDSL staff to local librarians)
- Encourages additional libraries to migrate their records by purchasing their own system or upgrading local systems
• No extra/new equipment needed
• Greater use/discovery of SDSL’s 39 databases (electronic resources) due to embedded “federated searching” functionality

**Final Thoughts**

Providing a network system with a discovery layer overlay is the contemporary solution South Dakota needs as libraries move from the SDLN centralized “one size fits all” model to more affordable and flexible options. The technology we are proposing is an efficient, cost effective 21st century solution. It will facilitate greater local library services and maximize the collective shared resources within our state. Though this appears at first glance to be a substantive additional commitment from the state, it is, in reality a simple and reasonable solution given the demonstrated results the state will soon appreciate.

The State Library is currently preparing an RFP and will put this out for bids by January 2015. A second proposal based on the current Nebraska model for ILL will be outlined and described in a parallel document (see Nebraska model).
Glossary:

**CatExpress /ILL:** An OCLC product which groups libraries for reduced group pricing. Cataloging and ILL rules are simplified.

**Discovery layer:** software product that connects different online library catalogs and other online services together to allow users to search many resources at once creating through 21st century technology an integrated network system. It is also called an “overlay.”

**Interlibrary loan (ILL):** borrowing and lending books and materials between libraries. ILL explanation: [http://www.ala.org/rusa/resources/guidelines/interlibraryloancode](http://www.ala.org/rusa/resources/guidelines/interlibraryloancode)

**Integrated library system:** essentially computer based card catalog; also known as an ILS; software that allows libraries to manage their local collections.

**Hosted:** service resides on vendor servers

**Discovery:** The process librarians and patrons engage in when searching multiple online catalogs simultaneous to locate a particular book or other resource in a specific format, publisher, etc.

**Net Lender:** A library that lends more books and resources via ILL than they request (borrow)

**Resource sharing:** another term for ILL or interlibrary loan

**South Dakota Library Network (SDLN):** a library member organization created for the purpose of sharing a catalog to facilitate interlibrary loan. Participating libraries pay annual fee to belong. Located in Spearfish on the Black Hills State University campus. Began in 1986 and will cease current operations June 30, 2016.

**South Dakota State Library (SDSL):** a division of a state agency (Department of Education) that provides a variety of services to all libraries in the state at no charge; located in Pierre in the MacKay Building.

**Federated Search:** Federated searching is the technology whereby multiple databases and/or ILS systems are searched simultaneously to receive like-tagged records. Federated searching could, because of its magnitude and inclusivity (especially in the schools) greatly reduce or eliminate traditional ILL functions of moving physical items (books, videos, etc.) from one location to another. The purpose of federated searching is to facilitate increased use of our existing electronic resources as well as the searching of multiple library catalogs simultaneously and seamlessly with minimal professional assistance.
**OCLC:** Non-profit bibliographic utility. In fiscal 2013, WorldCat grew by 29.6 million records. Libraries used WorldCat to catalog and set holdings for 582.4 million items and arrange 8.9 million interlibrary loan transactions worldwide. Located in Ohio, USA, this is an international organization.

**OCLC WorldCat (international union catalog):** OCLC’s WorldCat is a database of bibliographic information built continuously by libraries around the world and OCLC since 1971. Each record in the WorldCat database contains a bibliographic description of a single item or work and a list of institutions that hold the item. The institutions share these records, using them to create local catalogs, arrange interlibrary loans and conduct reference work. Records are in 486 languages with slightly over 60% of all records in non-English.

As of June 30, 2013, nearly 303 million records had been added to WorldCat, spanning six millennia of recorded knowledge, from about 4800 B.C. to the present. This unique store of information encompasses records in eight formats—books, serials, sound recordings, musical scores, maps, visual materials, mixed materials and computer files. Like the knowledge it describes, WorldCat grows steadily. A new record enters WorldCat every second.

To give some perspective on the small number of South Dakota resources currently represented within OCLC’s WorldCat database, consider these facts: Currently 78,985 libraries participate worldwide. South Dakota has 19 institutions (academic and larger publics including the SDSL) participating. They each pay annually a fee to access this enormously complex database when a specific resource is unavailable within the state. If not available in-state, library staff must search regionally, nationally or internationally for a specific book or alternative format resource. For each search an OCLC transaction fee is charged as well. Rigorous standards must be maintained to catalog and contribute the holdings of a library’s local records within the OCLC WorldCat database.

**Minitex:** Minitex is a four-state consortium and offers “resource sharing” contracts with other states and institutions for delivery of out-of-state ILL.