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# HELIN Single Search Task Force Final Report

HELIN Consortium. Single Search Box Task Force

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#### HELIN Single Search Task Force Final Report January 2011

#### What is single search - is it currently feasible?

If by 'single search' we mean the ability for a library user to search across all of the potentially relevant sources of information that might prove useful in their research, whether the user knows of their existence or not, including licensed databases, open access material, print material, data and statistics, images, primary sources, blogs and news sites, etc, then our answer is simple: no, there is no comprehensive way to find all relevant material through a single interface.

We instead interpreted our assignment of investigating the feasibility of single search to imply the desire to search across the various resources and collections of each HELIN library in a more comprehensive way, ideally through a singular interface. Numerous vendors now target this desire with a new class of products often dubbed 'discovery' or 'discovery layer', implying a new user interface that sits, like an outermost layer, over the databases and catalog that live beneath. Some vendors seem to use discovery layer as simply synonymous with a 'next-generation' catalog (i.e. one with faceted search results, integrated user tagging and reviews, etc). We developed a more specific working definition, however. We held discovery layer to mean a highly usable interface that offers a federated search across multiple article and other licensed databases (often touted to be accomplished in a technologically new, faster, and more centralized way) as well as across a catalog, or multiple catalogs. Most vendors offer additional sources underlying or connected to their discovery layers (institutional repositories, open access material, image databases, etc), but the core functionality of each is: faster federated article databases + catalog(s) in a next-generation user interface.

#### Still in early development

One theme of our investigation into the various discovery layer options was the relatively young age of these new tools. Every vendor demonstration focused largely on the philosophy behind their product, and was almost always short on live demonstrations. When the demonstrations did commence, a frequent refrain was that certain features and functions were still in development, or hadn't quite been finished, or were even still in early beta testing. While librarians have grown accustomed, especially of late, to vendor products existing in a state of perpetual redevelopment, with new interfaces for heavily used resources released on an ongoing basis, the case of the discovery layer products is not one of simple ongoing redesign. Most of the products are built on top of or around existing interfaces (OCLC WorldCat Local, EBSCO Discovery Service, III Encore Synergy), but in our demonstrations, it often seemed like the core of the newly added features and functionality of these upgraded tools were not yet available for live review and testing. Simply put, it was not easy for our task force to offer a comprehensive review of how each of these products would work in our specialized consortial environment, because most of them are still being designed and built.

#### Vendor wars

Another theme of our investigations was vendor emphasis on the myriad of databases and third party vendors with which each product is compatible. It became quickly apparent to the task force, if it wasn't already, that the vendors competing with each other to offer libraries all-in-one search tools are often the same vendors competing with each other to offer libraries content. While many vendors offered technological explanations as to why their product did not require the cooperation of the competing vendor to include their content, we noted that each discovery tool would work best if the libraries primarily subscribed to whatever content that vendor provided. One vendor even went so far as to state that the tool worked best if the library simply moved all of their databases to that provider.

This seems to be a fundamental flaw with the notion of an all-in-one search tool, as some content will almost always be 'privileged' over other content; successful searching will depend first on which vendor owns what content, rather than on what content is more relevant for a user's search. It also became clear that each vendor is highly interested in striking deals with as many other third party content providers as possible, but it seems obvious that they will methodically concentrate on larger content providers. This will ultimately leave us with a single search tool that is a misnomer, unable

to connect to a group of smaller specialized resource exceptions that must still be searched separately, and a central search that will not equally present competing vendor content.

# Costs and consortium complications

Cost is a large concern with these new vendor products; none are inexpensive, and some may be prohibitively expensive for some HELIN schools (for a discussion of open source options, see Appendix A). The question of cost is also complicated by HELIN's consortial nature. As a collection of academic and special libraries with a shared catalog, each with our own individual electronic database collections, whatever single search tool we choose must accommodate our diverse user audiences and collections. Indeed, this introduces the question of whether the consortium must agree about any single vendor product at all.

While we all must agree about our catalog vendor, we each separately choose the variety of databases and database vendors that suit our individual institutional needs. Since most of the vendor single search products are designed to offer interfaces that do not alter our underlying catalog interface or any other underlying content, but instead add their product as an additional layer overtop existing interfaces, each school could and should have its own individualized, customizable interface focused on their owned and subscribed content. If some schools wanted to purchase one single search product, other schools another product, other schools no product at all, there is no technological reason that they could not. There are only two concerns for the consortium as a whole in these cases: 1) a simple question of collective discount purchasing, and 2) HELIN Central time and effort in exporting catalog records for some of the potential products. The exception to this rule seems to be III Encore Synergy, which unlike the other vendor products, does alter the shared HELIN Encore catalog interface in some ways. (See below for more details about III Encore Synergy.)

# Who is it for?

Early on, the task force discussion centered on how users hypothetically would and would not benefit from this type of product. As noted, the different HELIN schools have different user audiences (faculty, graduate students, undergraduate students, distance learners, visitors, etc), and we tried to discuss which groups would and would not be generally happy with this type of one-stop-shopping. The members of the task force drew from their own experiences working with users at our respective schools, and we were especially interested in the experiences of libraries that had implemented federated searching, a similar notion of single search. We had lengthy discussions about this topic, but there were two ideas around which we were able to reach some consensus:

1) We feel that this type of tool is less likely to be useful for upper level undergraduate students, graduate students, and faculty. Researchers who already feel confident in finding information from a preferred list of databases and journals would likely be frustrated by a one-size-fits-all solution. In fact, most vendors agreed that their tool was not a replacement for all the functionality of the catalog, or even all of the granular functionality of many databases, but rather an additional option specifically targeting users (primarily students) unsure of where to begin their research. The explicit goal of some vendor products was not necessarily to serve as a continuing gateway to all of a library's resources, but rather as a tool to allow users to discover relevant useful underlying resources, even if from then on the user went directly to those resources.

While single search tools seem primarily geared towards new researchers, we did note an exception: tools that have customizable interfaces that would allow federation of certain librarian- or user-designated databases and/or journals into a custom search box. This type of customization, using vendor customizable boxes, federated search products, or Google custom search boxes, is already in use in several libraries, often embedded in subject guides (see Appendix B). We agreed that a single search tool that offered not only one-stop-shopping for all content, but also leveraged its ability to search across different content to create custom search boxes (Music Research, Business Research, etc) that could be embedded into learning management systems, subject guides, department websites, etc, would be much more valuable for a wider range of users.

2) A second point about users that the task force wants to emphasize is that if the main target audience of a one-stopshopping tool is lower level undergraduate students and distance learners, then the tool must be exceedingly easy to use and very functional. We discussed the dissatisfaction that several libraries felt over their existing federated search products, which were offered a few years ago from several of these same vendors with similar hopes of unified searching. (Interestingly, federated searching seems no longer widely praised, even among those same vendors, but was in fact used as a pejorative derision of a competitor's product on one occasion.)

Whatever tool HELIN or each individual library may choose to investigate further, we would recommend a more thorough analysis of what specific users would and would not benefit from its use for each institution, and how truly functional and easy to use the tool is for novice users by exploring direct user testing locally, school-by-school, ideally before purchase.

## Summary

If the goal of a single search interface is to replace all or a majority of a library's existing user interfaces and tools (the catalogs, subject guides, class guides, journal a-to-z list, specialized databases, etc), and to offer one-stop library research for all users, it is clear that no existing vendor or open source product accomplishes this task. If we are hoping for a single search interface to equally satisfy the full range of user research tasks, from searching for a known print title, to complex graduate and faculty level research, to satisfying the research requirement for a first-year five-page assignment, the answer is likewise: no, there is no single search interface that would equally satisfy all of the diverse user needs of a single institution, let alone all of the diversity of needs across all of the HELIN schools.

If the goal of a single-search interface, however, is to complement a library's existing user interfaces and tools, offering an additional way for certain users to find and access content who might otherwise be confused or frustrated with the library's website and tools, or who would prefer a search style interface to a subject guide directory style interface, then there are a number of options that may be of consideration for each HELIN school. These options should be reviewed with the specific user needs of that school in mind, and the pros and cons of each weighed, all within the limited scope of the tool's application and true target audience.

Rather than one-size-fits-all, the task force agreed that personalization, customization, and multiple points of access are better ideal goals for improved user experience. Single search options could certainly have their place among those multiple points of access, just not as a unifying replacement for them.



# OCLC WorldCat Local

WorldCat Local is an alternate catalog that integrates local holdings (school-specific), consortial holdings (HELIN), and WorldCat holdings in a single next-generation interface.

Built upon Open WorldCat, which now includes some article searching, OCLC now offers the ability to connect other locally licensed databases via the same interface.

**Major Benefits** 

- Fully integrates local school, HELIN consortial, WorldCat, and Google Books holdings in a singular interface
- Potential for better inRhode integration

## Major Reservations

- Purchasing school must also have unlimited FirstSearch license
- Some concern about effectiveness of relevancy ranking algorithm
- Some concern about mapping article information onto book-centric interface

# **Potential Consortial Impact**

Group purchase discount: YES

Individual or shared instance: INDIVIDUAL

HELIN Central ongoing catalog export: NO

Modification of existing interface, or additional layer: **ADDITIONAL LAYER** 



## **EBSCO Discovery Service**

Discovery Service is a next generation interface built upon the existing EBSCO database interface and the EBSCO federated search product, Integrated Search.

Discovery Service offers the ability to integrate exported local catalog holdings into that same federated article search interface.

Major Benefits

- Customizable, embeddable search boxes for other platforms (learning management systems, subject guides, etc)
- Many HELIN schools are already large EBSCO subscribers
- EBSCO offers good experience with consortia, and has a generally good track record of tech support for HELIN schools

Major Reservations

- High Cost
- Vendor wars (especially with ProQuest)
- Very EBSCO-centric (everything works better if you just 'go EBSCO')

# **Potential Consortial Impact**

Group purchase discount: YES

Individual or shared instance: INDIVIDUAL

HELIN Central ongoing catalog export: YES

Modification of existing interface, or additional layer: **ADDITIONAL LAYER** 

#### **Innovative Interfaces Encore Synergy**



Encore Synergy is built upon HELIN's existing next-generation catalog interface, Encore.

Synergy features a separate top-level tab, distinct from the main catalog tab, which federates article results. There is also a teaser box embedded in catalog results which points users towards the article tab.

**Major Benefits** 

- Centralizes the experience of finding article and book content, but does not completely merge results
- Encore interface is already a familiar starting point and interface for most HELIN users
- III purports to be content neutral, not privileging certain vendor data
- Integrates local catalog functions (reserves, local comments, etc)
- Not completely built = potential opportunity for testing and design input

**Major Reservations** 

- Does not integrate inRhode or WorldCat holdings, simply points towards them with icons and result counts
- Interface for consortially shared catalog still in development, and several local institution customization questions remain unanswered (or unanswerable) at the moment
- Could create long term logistical pressure for all HELIN schools to agree on purchase, even if that is not true at the moment
- Since the interface is not fully integrated, the question arises is this really 'single-search'? Are there other, less expensive ways for individual schools to achieve similar results?



#### **Serials Solutions Summon**

Summon is a new next-generation interface that draws upon Serials Solutions' central index of article data, and is also able to integrate exported local catalog holdings.

## **Potential Consortial Impact**

Group purchase discount: YES

Individual or shared instance: INDIVIDUAL

HELIN Central ongoing catalog export: YES

Modification of existing interface, or additional layer: **ADDITIONAL LAYER** 

Major Benefits

- Summon philosophy: hopes to educate users about useful underlying databases and resources for their research, potentially sending them directly there the next time
- All HELIN schools already use Serials Solutions Client Center, from which Summon can draw an understanding of local holdings

Major Reservations

- High Cost
- Vendor wars, since Serials Solutions is now owned by ProQuest
- Serials Solutions tech support track record is not great for some schools

Group purchase discount: YES

Individual or shared instance: SHARED (with some local customization)

HELIN Central ongoing catalog export: NO

Modification of existing interface, or additional layer: **MODIFICATION OF EXISTING INTERFACE** 

# Appendix A: Open Source Options

In addition to vendor products, the task force also discussed the possibility of potential open source discovery tools (VUFind, etc). We quickly discovered that most institutions implementing these types of tools were often integrating them along with vendor products (Villanova currently uses Summon embedded inside of VUFind, for example) rather than relying on them as complete discovery layers.

At the moment, there does not seem to be any open source discovery layer tool that would satisfactorily and natively offer a unified catalog and federated database search with a next-generation interface.

We also agreed that given HELIN Central current staffing and resources (servers, budget, etc), an open source option was simply unrealistic. HELIN has never implemented an open source tool in the past, and the large scale of this project makes it an unlikely and ill-advised candidate for a first attempt.

We would, however, recommend that schools and HELIN as a whole pay attention to the evolution of existing open source tools and watch for new potential candidates. If there are new promising developments, and if it can be coupled with HELIN Central staffing and resource changes, or with potential outsourcing of implementation, HELIN could and should investigate these options.

#### Appendix B: Other Ways to Federate Results

Before reviewing these four vendor products, we also discussed and reviewed other ways of federating scholarly resources. While no other tools offered the kind of comprehensive searching that the new discovery layer products promised, it is worth noting that depending on a school's needs and their specific collection of resources, these other tools may be an economical alternative.

Several schools already use federated search products (EBSCO Integrated Search, Serials Solutions 360 Search, etc), which offer similar functionality as discovery tools, but lack the unified index approach of the new tools as well as catalog integration. It's worth noting that because licensing agreements and vendor wars are preventing the preindexing of content from some vendors by other vendors, discovery services must also often offer a more traditional federated search in addition to their centralized index in order to gain access to that additional content. Therefore, since some of the new discovery tools do not work completely independently from a vendor's federated search product, how well those individual federated search products perform can directly affect the performance of the discovery product as well.

Several schools also take advantage of the fact that multiple databases on the same vendor platform can often be searched simultaneously. If a library offers several fine arts databases on EBSCO, for example, they could direct users to search them all at once by selecting multiple databases. Or, libraries can (and do) offer a customized search box for specific databases on a single platform via a subject guide or learning management system course or other web page, essentially creating a variety of targeted single search boxes, discipline by discipline, or even course by course. The main restrictions of this method, in addition to not including catalog results, is that the search boxes are limited to what databases are licensed on what vendor platform.

Another option for federating search results, drawing mainly from open access and other web material, is the creation of custom Google search boxes, which can then similarly be embedded wherever libraries wish. The main restriction of these boxes is the inability to include most licensed databases.

The task force also investigated the new Topic Pages feature of Credo Reference, which federates results from customizable sources, including the web, the HELIN catalog, Google Books, and licensed databases, into an encyclopedia style page. The main limitation of using these Topic Pages as a federated searching tool is that results are only available for a discrete number of topics, created by the vendor, not any search term as in the discovery layer tools. However, if the goal of single search is to introduce users to specific underlying scholarly content that they might not know to search, and the target audience is novice users typically searching more general and introductory topics, an encyclopedia style entry with federated results from the catalog, key relevant databases, and the web might actually prove more useful than the thousands and thousands of results typical in discovery layer searching.

# Appendix C: Task Force Process & Timeline

In the spring of 2010, the HELIN Board of Directors established a task force to research and report on current single search products. This goal addressed the HELIN Board's goal, as stated in the HELIN Policy and Governance Manual, to *"Make the user's needs (e.g., convenience) central to what is provided to members who in turn deliver services to the user."* 

# The Task Force's charge: Provide single search access to the collections.

Committee members: Bob Aspri – HELIN Central (ex-officio), Elliot Brandow (co-chair) – Wheaton College, Erika Frank (co-chair) – Johnson & Wales University, Amanda Izenstark – University of Rhode Island, Laura Kohl – Bryant University, Susan McMullen – Roger Williams University, Beatrice Pulliam – Providence College, Martha Rice-Sanders (ex-officio) – HELIN Central, Ruth Souto (ex-officio) – HELIN Central, Debra Thomson – Rhode Island College.

- June 3, 2010 1<sup>st</sup> meeting Bryant University
  - Created a collaborative document to establish a "Perceived User Profiles by Institution" in order to better understand the potential usefulness and benefits to, and/or challenges for, our users.
  - Created a rubric to measure specific parameters of each platform with not only our users in mind, but our institutions as they exist in a consortial environment.
  - Elliot Brandow and Erika Frank were elected as Co-Chairs.
- July 1, 2010 2<sup>nd</sup> meeting Roger Williams University
  - Reviewed RWU's current subscription to Serials Solutions 360; applied rubric.
- July 22, 2010 3<sup>rd</sup> meeting Providence College
  - Reviewed EBSCO Integrated Search & EBSCO Discovery Service; applied rubric.
- August 5, 2010 4<sup>th</sup> meeting Rhode Island College
  - Presentation by Credo Reference representative.
  - Reviewed WorldCat Local Quick Start (Wheaton), homegrown EBSCO single search box (JWU); Google Scholar (all); discussed Open Source products (all).
- October 15, 2010 5<sup>th</sup> meeting Bryant University
  - OCLC WorldCat Local & EBSCO Discovery Service vendor presentations.
- November 19, 2010 6<sup>th</sup> meeting Bryant University
  - Discussed OCLC WorldCat Local and EBSCO Discovery Service presentations.
  - Discussed Open Source option practicalities.
  - Reviewed progress and discussed plan for final report.
- December 3, 2010 7<sup>th</sup> meeting Bryant University
  - Innovative Interfaces Encore Synergy and Serials Solutions Summon vendor presentations.
- December 16, 2010 8<sup>th</sup> and final meeting Bryant University
  - Discussed Innovative Interfaces Encore Synergy and Serials Solutions Summon presentations.
  - Reviewed final report draft layout.
- January 13, 2011 HELIN Annual Conference
  - Elliot and Erika present the final report to the HELIN Board of Directors in an open Business Meeting.

#### Appendix D: Vendor Responses to Rubric Questions

As part of our evaluation of the vendor discovery layer products, we developed a rubric in an attempt to standardize our review process. We also shared the rubric with the vendors themselves, giving them an opportunity to directly offer their thoughts on our primary questions and concerns. Following are each of the vendor responses to our rubric questions.

# HELIN Single Search Task Force - Rubric

# Searchability & Results

## • What content does/could the tool search/federate?

WorldCat Local is the discovery and delivery service that offers access to more than 475 million items from a user's own library and the collections of OCLC member libraries around the world through a single search box. One search provides instant access to all library materials—digital objects, electronic materials, databases, eJournals, music, videos, audio, eBooks, maps, journals, theses and books—in addition to materials in group and consortial catalogs and thousands of WorldCat libraries worldwide.

By providing access to libraries' collections through a single search box, users no longer have to consult a variety of separate resources and interfaces. OCLC partners with organizations like Google Books, the HathiTrust, JSTOR and OAlster, to provide every WorldCat Local search with deep and useful results from an extraordinary range of collections. OCLC also works with major publishers and content partners from around the world to allow WorldCat Local libraries to provide access to: major aggregators of eBooks, including NetLibrary, Ebrary, Overdrive and MyiLibrary; large mass digitization collections, including Google Books and HathiTrust; content from publishers such as Springer, Wiley, Elsevier, Taylor & Francis, Oxford University Press and more.

Results sets from a WorldCat Local search are presented with a user's library materials first, then group and consortial results, and finally items throughout the world represented in WorldCat. Nowhere else will users find so much authoritative content in one place.

With WorldCat Local, users are presented with only the most appropriate fulfillment options, quickly connecting them with the items they need. The service integrates with existing circulation, resource sharing, and resolution options for an intuitive user experience. And because WorldCat Local integrates with live circulation data, users know immediately whether (and where) an item is available. One click lets an authorized user view an electronic copy, place a hold or make a resource sharing request.

Library staff will appreciate benefits related to centralized access, too. When all the library's collections are represented in the WorldCat database, less time is required to maintain data in multiple locations and systems. No separate data loads are required for libraries that contribute and maintain their holdings in WorldCat. WorldCat Local builds on the processes already in place at the library.

OCLC's unique position as a worldwide library cooperative allows every member to contribute to and benefit from the combined purchasing and licensing power of the membership as a whole. Working together, OCLC members are able to provide better service for library users everywhere.

WorldCat Local's social networking and workflow tools also allow people to explore information together, sharing opinions and expertise with peers while creating a greater connection to the library. Faculty can organize materials for class requirements with WorldCat Lists, while students can use them to keep track of what they need to borrow for their research. User reviews, recommendations, tags and personal profiles let people customize the discovery experience and interact even further. In addition, evaluative content such as cover art, tables of contents, author and publisher summaries, excerpts and chapters of books, Amazon and other reviews, ratings, recommendations, tags, etc., are provided automatically at no additional charge based on OCLC agreements with syndication partners. Incorporation of the Google Book Search API also provides users with access to all digitized Google books.

WorldCat Local brings people and content together in more ways than ever, helping users and groups incorporate library resources into their everyday learning activities.

#### • Is it clear where the results content is coming from?

On both the brief results and item details displays, WorldCat Local includes an indication of the database from the record originates; e.g., Database [database name].

• Is there an ability to narrow or expand search by content source or format type?

## **Refining a Search**

The WorldCat Local Advanced Search screen allows users to search for terms in specific fields such as author, title, subject, publisher, etc., as well as to limit results according to criteria such as year of publication. Searchable fields and search limiters vary according the database(s) being searched.

From the result set, a user can refine a search with the aid of facets. These vary according to the database(s) being search but may include:

- Database
- Author
- Format
- Publication Year
- Content (e.g., biography, fiction, nonfiction)
- Audience
- Language
- Topic Our topic facet is based on Conspectus. We display broad topics matching within the result set first, with counts. Selecting one of those will narrow the result set to all matching items and then show the narrower subtopics in the resulting set of items. Selecting one of those will narrow the result set again to that matching set of items.

Each time a user refines a search using a facet, the resulting search results adds that value to a "breadcrumb" search path at the top of the screen. Each value (other than the current value) is a link that takes the user back to that search level. A user may backtrack a search result set by clicking on these links.

In some databases, it is possible to search for items from within the same journal as a given retrieved item.

## Expanding a Search

From the result set or from an item details display, a user may expand a search to view related editions and formats of a work. From the full record display the user can do

extended searching by clicking on hot-linked author, series and subject fields.

A user may also go from the full record display to the WorldCat Identities record for the author(s). WorldCat Identities has a summary page for every name in WorldCat (currently some 30 million names) showing lists of the most common works written by the person and those written about them. Because we know when these works were published, we produce a graphical time line showing their publication history. We also list all of the languages in which the person has published, as well as related names found in their records.

• How does the tool interact with natural language queries and boolean searching?

# Natural Language Queries

WorldCat Local does not support natural language queries, searches are against elements within the bibliographic records. We have found most queries are known item, author or subject based so this hasn't proven to be a problem for our users.

# **Boolean Searching**

Boolean operators are supported in the following manner:

- AND WorldCat Local searching uses + in place of AND, which tries to find all of the words typed in the search box. This is the default search behavior; for example:
  - Guns germs steel
  - is the same as...
  - Guns AND germs +steel
- OR Using OR will search for either of the words listed in the search box; for example:
  - Paris OR fashion
- Minus Sign The minus will exclude terms from your search. For example, to search for Paris but exclude fashion, a user would type:
  - Paris -fashion
  - Is the same as...
  - Paris NOT fashion
- Quotation Marks To search an exact phrase and impose desired proximity, the search terms should be enclosed in quotation marks; for example:
  - "The Grapes of Wrath" ensures all words are located directly next to each other in the search results.
- Wildcards Use of the "#" and "?" are supported as wildcards.
- Truncation The "?" and "\*" are used for truncation.

• What kind of facets, limits, or sorting is available and/or shown to the user?

An Advanced Search screen allows users to conduct searches of WorldCat by any one or combination of indexes, including title, author, keyword, subject, ISBN, ISSN, etc. Searches may be limited using factors such as year, audience, content type, format and language. The indexes and limiters of other databases vary. Advanced Search allows users to add or remove databases from their search.

From the result set, a user can refine a search with the aid of facets. These vary according to the database(s) being search but may include:

- Database
- Author
- Format
- Publication Year
- Content (e.g., biography, fiction, nonfiction)
- Audience
- Language
- Topic Our topic facet is based on Conspectus. We display broad topics matching within the result set first, with counts. Selecting one of those will narrow the result set to all matching items and then show the narrower subtopics in the resulting set of items. Selecting one of those will narrow the result set again to that matching set of items.

In some databases, it is possible to search for items from within the same journal as a given retrieved item.

Users can sort results by date (most recent first or oldest first), author (A-Z), title (A-Z), or relevance only. The Library can configure WorldCat Local to initially sort by any of these options.

#### • Is there a browsable index?

WorldCat Local currently does not include a browsable index.

#### • How do you move to full text or ILL?

WorldCat Local can be configured to offer users 'smart' delivery options, displaying appropriate options according to item type and status that allow them to link to electronic full text, place holds on circulating physical items or request items via interlibrary loan.

Looking at the format of the item, its location, and current shelf status, the smart delivery resolver knows whether to offer the option of placing a local hold, a consortial borrowing request, an interlibrary loan request, or whether to offer a link to an OpenURL resolution service. When an item is available both physically and electronically, the delivery resolver offers the user options both for physical or electronic delivery as deemed appropriate by the library.

In addition, we are working on improving access to electronic links by providing link resolution via the OCLC WorldCat knowledge base, OPAC links and open access items, on the brief result list and detailed record.

# • What are the export features?

WorldCat Local includes a "Cite/Export" link, providing users with the option to export the citation directly to EndNote, Refworks, or EasyBib. Exporting citations is available from the detailed record page and can be done on a record by record basis or the user can create a list and export their entire bibliography from the list. Additional export formats include CSV file, HTML file RTF file, or RIS file formats. In addition, WorldCat Local results list, item display, and lists include OpenURL COINS to support citation export to ZOTERO and similar tools.

# • What is used as the authority - keyword, subject, title?

The default search in WorldCat Local is keyword, searching the majority of the MARC fields in the metadata record.

## • Does the tool automatically de-duplicate? Is there an option to show duplicates?

Results from the WorldCat database are de-duplicated and Functional Requirements for Bibliographic records is applied to the result set in order to simplify the result set and provide better usability. Articles added from ArticleFirst, MEDLINE, ERIC and British Library Inside Serials are de-duplicated upon loading. In the user interface display, there is a link displayed for the record in other database. For example, if you are looking at a record from ArticleFirst and the record is also in British Library Inside Serials, a link would be provided to display the article from British Library Inside Serials. The efficiency of de-duplication relies upon the amount and format of the data provided.

We do not de-duplicate the records from other databases due to a difference in data fields provided and stipulations set forth by data providers and the desire to display their supplied information.

## • How is the back-end indexed -- screen-scraping, direct searching, completely indexed?

If the OCLC number has not been indexed in the local system, the institution will need to insert the OCLC number into all records, index the OCLC number, and enable end-user searching of this index. In addition, the library staff will need to perform a reclamation project if their holdings are currently not up-to-date in WorldCat.

OCLC's metasearch feature incorporates metadata for licensed databases via two mechanisms: (1) indexing the metadata directly at OCLC through cooperation of the database provider; or (2) incorporating these resources through federated searching via our own federated search mechanism. Federated targets may be freely intermixed with the data indexed at OCLC or selected subsets for searching and browsing.

• Is it searching metadata, or full-text? What does it do when one database has only metadata, and one has all full text?

WorldCat Local searches metadata, however, OCLC is working to obtain the rights to fulltext and make this available over the next 9-12 months to our users.

# • Have there been user studies on ease of use? Results?

Yes, usability of the WorldCat Local user interface is evaluated and improved through a continuing program of usability testing with library users. To date, OCLC has completed 19 rounds of usability testing with 13 member libraries.

Many aspects of WorldCat Local have been implemented/improved as a result of usability testing. For example, the facets used are based on expectations expressed by users during usability testing.

A summary document we prepared for ALA Annual 2009 can be found at: <a href="http://www.oclc.org/worldcatlocal/about/213941usf\_some\_findings\_about\_worldcat\_local.pdf">http://www.oclc.org/worldcatlocal/about/213941usf\_some\_findings\_about\_worldcat\_local.pdf</a>. While it is a bit dated it discusses our findings to that point. We will be preparing an update to this summary in the near future.

# • Does the tool change an existing tool or limit its standalone function - i.e., the catalog?

No, WorldCat Local does not change or limit an existing tools function. WorldCat Local interoperates with your existing system including your local catalog for real-time item availability, your Open URL resolver to links your user to full text, and your existing interlibrary loan service.

## • How does it display results? How are they ranked?

Libraries can configure the effect of library holdings on the ranking of search results.

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

Search results are initially ranked by relevance and will display a library's holdings first, followed by the holdings of its groups, and then the holdings of WorldCat member libraries worldwide. This initial display of results is standard for all WorldCat Local libraries. The library can configure their WorldCat Local to initially sort by relevance, not taking the holding library into account. Users also sort results by date (most recent first or oldest first), author (A-Z), title (A-Z), or relevance only. The Library can configure WorldCat Local to initially sort by any of the sort options.

In addition if Local Holdings Records are loaded to WorldCat by the library with branch location codes, a user can choose to scope their search to a specific branch. This is a subset of the first level the library has defined as its local holdings.

There are several components to the WorldCat Local relevancy algorithm. The algorithm itself is not "tunable" by libraries:

- The search terms in the author then title fields are weighted first, then the rest of the fields of the record
- Term frequency
- Proximity of the terms to one another
- Recency (more recent items are weighted more heavily)
- How widely held
- Locally held items are surfaced to the top of the results if the library chooses this as the default sort

## • Icons to show format type?

Yes, search results include icons to indicate the item's format, including book, e-book, audio book, e-audio book, DVD video, videocassette, music, CD audio, cassette, audio book, musical score, computer file, journal/magazine/newspaper, internet resource and many others.

# **Consortial Compatibility/Flexibility**

## • Overall, how would the tool work in a consortial environment?

WorldCat Local is based on the holdings of the WorldCat database and allows users to discover library holdings outside of the 4 walls of their academic library and beyond their consortial relationships to provide access to the most relevant items to a user's research. WorldCat Local can interoperate with several local systems and consortial borrowing systems, as well as resource sharing systems, and Open URL Resolvers in order to provide the user with the best fulfilment of items discovered in WorldCat Local. By adding electronic and digital items to the central index, WorldCat Local enables the user to experience a true single search experience that integrates all of the library's delivery workflows.

• What experience has the vendor had working with consortiums, or are there examples of other consortiums using the tool?

Since WorldCat Local's release in April of 2007, we have over 200 libraries that have purchased and have implemented or are in the process of implementing the service. While all of these libraries, with a few exceptions, are part of consortial arrangements, they use WorldCat Local for discovery of their local resources first; then, they include discovery and access to resources for their group and beyond.

# Pricing & Pricing Structure

• What is the cost?

Please see the following response that describes how WorldCat Local is priced.

#### • What is the pricing structure - per connector, FTE, number of schools?

Pricing for WorldCat Local is based upon the population served.

WorldCat Local pricing includes the requirement to maintain an unlimited WorldCat subscription via the FirstSearch service and maintain the means to update holdings in WorldCat. Maintaining current holdings in WorldCat will ensure that the most complete and accurate search results are given. As part of the implementation, library systems will be eligible for a one-time free-of-charge batchload to update their WorldCat holdings (including local holdings records) and receive a returned file with OCLC numbers to index in their individual ILS systems. Any library systems that already have a full OCLC cataloging subscription will be able to maintain their holdings as a part of their existing subscription. For metasearch, holdings on journals are needed to provide holdings to articles in databases from OCLC. Also for metasearch an Open URL resolver is needed if access to from full-text providers is desired.

# Customization & Technical Support

• Is the search tool customizable by grouped subject resources by librarians or by individual users?

The Library can customize the initial search box to allow users to search all material types or narrow to specific types like books, articles, CDs, DVDs, etc. Because WorldCat Local uses faceted browsing of the result set, users can start with all options and then quickly narrow down to a specific format with a single click. In addition, the Library can configure available databases, database groups, and default search databases.

• Is there an embeddable / customizable searchbox for Blackboard/Moodle, Libguides/SubjectsPlus, etc.

Yes, a branded version of the WorldCat search box is supplied as simple HTML and can be manipulated to be used as a widget on other Web sites or blogs.

#### • How easy is it to customize - what necessitates working with technical support?

A local administrator can control branding by changing settings within the configuration manager for placing logos, selecting colors of various parts of the displays, and placing links to local services.

With OCLC's metasearch feature, a local administrator can log into a central, browserbased configuration manager and configure available databases, database groups, and default search databases.

OCLC implementation staff will work with you to establish interoperability; all other configurations are controlled by your staff.

## • Can we incorporate institutional / library branding?

Yes, branding is controlled by the local administrator and includes the ability to place logos, select colors of various parts of the displays, and place links to local services. The style of the page is not controlled by the local administrator and does allow for the addition or removal of data elements in search results and record displays.

• What is the complexity of installation? How much maintenance is needed to keep this project functioning?

Initial implementation steps include OCLC establishing interoperability, determining the library's preferred workflows, and performing a batchload or reclamation if necessary.

During implementation, the institution will need to assign a project manager to supply configuration preferences, circulation policies, and branding options. If the OCLC number has not been indexed in the local system, the institution will need to insert the OCLC number into all records, index the OCLC number, and enable end-user searching of this index. In addition, the library staff will need to perform a reclamation project if their holdings are currently not up-to-date in WorldCat.

Because WorldCat Local is a hosted solution, the implementation timeframe and complexity are greatly reduced. This simplified process means that a formal project methodology is unnecessary. OCLC will provide you with a straightforward project plan, which will address activities, timeframe and responsible parties. This plan is a living document and is developed in conjunction with the customer to take into consideration the library's timetable, resources, and other local considerations.

After implementation is completed, OCLC provides on-going, automated searching of the local system every 5 minutes in to ensure the system is responding appropriately and available to end-users. If an issue is encountered, OCLC will contact the institution's support contact to troubleshoot the issue and provide a remedy.

If a technical challenge is discovered during the implementation process, OCLC staff will work to resolve the issue insofar as the challenge lies with OCLC's software. You will not be billed until major functionality, including item-level availability and fulfillment options are delivered.

# Which user profile will this benefit/not benefit?

This tool is most beneficial for face-to-face user interactions and subject specific customized search tools. Most users will need instruction.

- Distance Learners (JWU, RWU, URI, PC, CCRI?, Salve?)
- Novice Undergraduates (All)
- Advance Undergrads (All)
- Grad Students (JWU, RWU, URI, PC)
- Faculty (All)
- General Public (All)

WorldCat Local will benefit all of these user profiles:

• Distance Learners - Authorization for remote access to WorldCat Local is through a proxy server. An authentication log-on will display to users at times when they need to complete authentication in order to take an action such as initiating an interlibrary loan request or linking to licensed online content. In addition, a link to user accounts can be configured to display within the interface for users who wish to log on at any time. Services that do not require IP authentication will appear the same to an off-site user as they would a user sitting in the library. Services that utilize IP authentication require the library to have a proxy server in order for the off-site user to authenticate.

WorldCat Local training can be conducted via Web-based sessions for remote users. In addition, several WorldCat tutorials are freely accessible at: <a href="http://www.oclc.org/us/en/support/training/worldcatlocal/tutorial/default.htm">http://www.oclc.org/us/en/support/training/worldcatlocal/tutorial/default.htm</a>.

• Novice Undergraduates/General Public - First-time users, especially those with any Web searching experience find WorldCat Local easy to use. To your Web-savvy patrons, WorldCat Local looks like part of your library's online experience and feels like other search and social sites they use regularly.

A single search box identifies materials in library catalogs and licensed content so users do not have to access multiple resources or different interfaces.

The system includes features that make navigation easy and intuitive. The search box remains at the top of every page, so users do not have to navigate back to previous screens to begin a new search. Likewise, key links remain on every page, keeping them within quick access, such as the Help feature, My Favorites, social networking

links, cite/export links, email, etc. In addition, once a set of search results is retrieved and the user views a detailed record there is a "return to search results" link on the record. Finally, the browser's navigation buttons can be used.

A built-in online Help system provides descriptions of major features and functions. In addition, several WorldCat Local tutorials are freely accessible at: <a href="http://www.oclc.org/us/en/support/training/worldcatlocal/tutorial/default.htm">http://www.oclc.org/us/en/support/training/worldcatlocal/tutorial/default.htm</a>.

• Advance Undergrads/Graduate Students - Advanced users can leverage WorldCat Local features for deeper research. For example, they can select different databases from the Advanced Search screen to search by any one or combination of indexes, which are database-specific. From the full record display, they can do extended searching by clicking on hot-linked author, series, and subject fields. Moreover, they also may go from the full record display to the WorldCat Identities record for the author(s). WorldCat Identities has a summary page for every name in WorldCat (currently some 30 million names) showing lists of the most common works written by the person and those written about them. Because we know when these works were published, we produce a graphical time line showing their publication history. We also list all of the languages in which the person has published, as well as related names found in their records.

These users also could take advantage of the WorldCat tutorials at: <a href="http://www.oclc.org/us/en/support/training/worldcatlocal/tutorial/default.htm">http://www.oclc.org/us/en/support/training/worldcatlocal/tutorial/default.htm</a>.

• Faculty - As with advanced undergrads and graduate students, WorldCat Local's advanced features will be useful for faculty performing deep research. For example, faculty members using virtual learning environment/course management applications such as Blackboard, Moodle, or Sakai can have a branded version of the WorldCat Local search box placed as a widget on these sites to allow linking to WorldCat Local.

Likewise, faculty also can take advantage of the WorldCat Local tutorials at: <a href="http://www.oclc.org/us/en/support/training/worldcatlocal/tutorial/default.htm">http://www.oclc.org/us/en/support/training/worldcatlocal/tutorial/default.htm</a>.

# HELIN Single Search Task Force - Rubric PRODUCT: Review Date:

*EBSCO Discovery Service*<sup>™</sup> (EDS) will be presented. This solution is the most comprehensive discovery service available, with a vast index, myriad customization options, and the superior customer service for which EBSCO is known.

EDS leverages the most comprehensive collection of deep indexing with the features and functionality of EBSCO*host*<sup>®</sup> (a familiar search experience in academic libraries) to offer the most powerful, encompassing, customizable discovery solution. We have attempted to include information that may help to give insight into the differences surrounding the discovery product landscape from a content standpoint as well as an interface perspective. We are available to answer any follow-up questions that the HELIN Single Search Task Force may have.

We are excited about *EBSCO Discovery Service* and the possibilities that it will bring to academic students and faculty to search the entire library collection through a single search box. There is a great deal of information to share regarding discovery in general as well as the specific solution from EBSCO.

#### EBSCO Discovery Service

EBSCO Discovery Service (EDS) is the core collection of locally-indexed metadata.

#### EDS offers:

Greater breadth of coverage than other discovery services, as well as dramatically superior depth of coverage through inclusion of subject indexing from controlled vocabularies and the searching of more full text than any other discovery service.

Everything the researcher needs in one place – EDS offers a single interface for discovery of a library's entire collection and the powerful features to heighten the research experience.

Full-text searching – Not only does EDS search the most inclusive set of metadata, but superior relationships and licenses with academic publishers make EDS the most comprehensive service for searching the complete full text of journal articles and other sources.

Fast, simple access to all of the library's full-text content (electronic and print) – EDS offers a truly integrated one-stop search experience for all of a library's Journals, Magazines, Books, Special Collections, OPAC and more.

#### **Access More Content Faster**

By creating a unified index of an institution's information resources, *EBSCO Discovery Service* is able to provide users with an easy, yet powerful means of accessing all of that content through a single search. This is achieved by harvesting metadata from both internal (library) and external (database vendors, publishers, etc.) sources, and creating a pre-indexed service of unprecedented size and speed. Although the resulting collection can be massive in size and scope, the fact that it is indexed locally (on EBSCO servers) allows for exceptionally fast search response times. As no two institutions are the same, EDS offers a vast array of customization options with regard to both the underlying collection of metadata as well as the front-end delivery of search results.

#### **Unparalleled Depth of Indexing and Potential for Expansion**

*EBSCO Discovery Service* enables users to search a wide-ranging collection of metadata and link quickly to the content to which they have rights. EDS provides much deeper indexing than any other discovery solution, including subject headings from the industry's most well respected journal-based subject indexes. Overall, the service includes searchable metadata associated with tens of thousands of journals, magazines, books and other sources, and additional resources/databases from other information partners – bringing together more content partners than any other discovery service.

#### Searchability & Results

• What content does/could the tool search/federate?

The majority of each library's content will be available via the extremely fast "EDS" solution. This includes the library catalog, institutional repositories, e-journal packages & individual e-journal subscriptions, books & e-books, historical digital archives, full-text databases, many subject indexes, etc.

A comprehensive analysis will be done for every interested library, but as a sample, all of the following resources are part of EDS:

ABC CLIO ACM - Association for Computing Machinery ADIS International Limited Alexander Street Press American Association for the Advancement of Science American Economic Association American Institute of Physics American Psychological Association American Society of Civil Engineers American Statistical Association American Theological Library Association Annual Reviews Inc. Baker & Taylor BASE BioOne Blackwell Publishing Books 24x7 **Brill Academic Publishers British Library Business Monitor International** Cambridge University Press **Columbia University Press** Credo Reference Datamonitor Plc ebrarv **EBSCOhost Database Subscriptions** Edinburgh University Press **EDP** Sciences Elsevier journal metadata

Emerald Group Publishing Limited H.W. Wilson Company Harvard Business Publishing IEEE Ingenta **IOS Press JSTOR** John Wiley & Sons Ltd Johns Hopkins University Press Karger AG LexisNexis M.E. Sharpe Inc. Maney Publishing Mergent **MIT Press** Modern Language Association Morningstar, Inc. National Bureau of Economic Research National Communication Association National Library of Economics (ECONIS) National Library of Medicine Nature Publishing Group NetLibrary NewsBank, Inc. Organisation for Economic Cooperation & Development **Oxford University Press** Public Library of Science Readex Sage Publications SkillSoft Springer Science & Business Media B.V. Taylor & Francis Informa Thomson Reuters (Web of Science) Time Inc. **VSP** International Science Publishers Wiley-Blackwell World Book, Inc. World Scientific Publishing Company And many others...

In the rare occasion where a resource is not available via any discovery service, EBSCO offers integrated federation through "EHIS" (EBSCOhost Integrated Search).

EBSCO*host Integrated Search* is a natural extension of *EBSCO Discovery Service*. Even with the unparalleled depth of local indexing provided by EDS, some electronic resources will still need to be searched directly. While this could potentially be a cumbersome, time-sensitive process for users, EHIS provides a simple solution that can be fully integrated with EDS.

Similar to other federated search engines, EHIS allows users to simultaneously search databases as well as all other electronic resources, including those from other database aggregators, OPACs, and publisher packages. However, unlike federated search products, true integration is possible with EHIS as libraries can easily integrate non-EBSCO*host* resources into the powerful EBSCO*host* search platform to make for a fast, familiar, and intuitive user experience.

Since EBSCO*host Integrated Search* can be seamlessly integrated with *EBSCO Discovery Service*, users can simply perform a single search query and be presented with one comprehensive list of results culled from all of their electronic resources. For the end users, the search experience is simple and intuitive, yet exceptionally powerful due to the unsurpassed strength of the EBSCO*host* search engine.

• Is it clear where the results content is coming from?

The source of the information is clearly indicated. Clicking on the search result brings the user to the detailed record, which contains information such as the database from which the result came, source name (e.g., journal name), abstract, subject terms, author affiliation(s), etc.

• Is there an ability to narrow or expand search by content source or format type?

The services offered herein offer the ability to narrow or expand a search by content source and/or format type.

How does the tool interact with natural language queries and boolean searching?

EBSCO*host* supports Natural Language queries via Boolean searching with the option (that the administrator can set as the default) to "auto-AND" queries. This has provided users with the effects of both relevancy and natural language searching. The default sort order is by date. Additionally, users can then re-sort their results by relevance. The expression "Natural Language Searching" is taken to imply that we allow users to enter common terms in a non-Boolean syntax and find appropriate search results. By having the "auto-AND" flag turned on, and in combination with our treatment of common non-descriptive pronouns, articles and verbs, e.g. "what, who, are," or "the," as stop words that do not affect search words, we are able to provide quality search results to Natural Language searching. Users would be able to review these results by date order (most recent first), or relevance, author, or source, depending upon the database(s) being searched.

• What kind of facets, limits, or sorting is available and/or shown to the user?

The systems offer facets narrowing functionality on the result by: source types, subjects, publications, authors, etc.

The system supports the ability to limit searches by various criteria via EBSCO*host*'s limiter options. Limiters let users narrow the focus of their search so that the information retrieved from the databases they search is limited according to the values they select. Users can use more than one limiter, as available.

Some common EBSCOhost limiters include:

Full Text - Users select this option to limit results to articles with full text.

Scholarly (Peer Reviewed) Journals – Users select this option to limit search results to articles from peer-reviewed journals.

*Publication* – Users enter a publication name in this field to limit results to articles only from that title.

*Published Date From* – Users select this option to search for articles within a specified date range.

Local Titles – Users select this option to limit results to articles available at the library.

*Number of Pages* – Users enter a number in this field to limit results to a specific number of pages in length.

*Cover Story* – Users select this option to limit results to articles that were featured as cover stories.

*Publication Type* (database-specific) – Users select this option to limit results to a specific publication type.

*Image Quick View* – Users select this option to limit results to articles that contain *Image Quick View* images.

Limiters do not limit one another. If a user selects both Full-Text and Cover Story limiters, the results that are retrieved include only Full-Text items that are Cover Story items. Note that these services offer the ability for users to select special limiters for each database. Both database-specific limiters and global limiters are available to apply to search terms. When users search more than one database, the common limiters are displayed under the 'Limit your results' heading on the search screen. Other limiters may appear under the 'Special Limiters for:' heading on the search screen. One search may be conducted across several databases, with differing parameters placed on each individual database. This optimizes not only efficiency in searching, but also effectiveness in conducting detailed, proper search queries, in order to retrieve appropriate results.

Library administrators can create an exclusions collection. This title exclusion feature allows administrators to remove titles from the title lists, therefore preventing access for that particular periodical. The administrator may exclude complete collections and individual titles.

Users can also re-sort their results by author, date, relevance, etc.

#### Is there a browsable index?

There is no single browsable index of all subject terms, but "Index Browsing" is available via EBSCO*host.* If the 'Indexes' link is displayed under the 'More' link at the top of the EBSCO*host* screen, then a user can browse a list of indexes for a specific database to view available citation

fields. If a user is searching multiple databases, several Indexes may be available. These Indexes will appear in the drop-down list. Index fields are database specific.

• How do you move to full text or ILL?

*EBSCO Discovery Service* indexes metadata of the library's holdings and works in conjunction with the library's link resolver to move to full text. Please note that users can limit their results to full-text only for seamless access to full-text results.

EDS is compatible with all existing commercial linking servers.

For interlibrary loan, EBSCO*admin*<sup>™</sup>, EBSCO's administrative module, allows administrators to create ILL forms for *EBSCO Discovery Service* profiles. ILL Forms allow users to request an item from their institution by clicking an ILL link in the result list or detailed record of the item.

• What are the export features?

EBSCO*host* allows users to collect results from different searches, store them in a folder using the 'Add to folder' option, and manage the Folder contents to export print, save, and/or email.

#### Export Options:

Via the Export Manager screen, users can save or e-mail citations in a format compatible with bibliographic management software. Users can set the defaults for preferred Export Settings on the Preferences Screen. The selections that are set on Preferences will be applied when exporting.

Within the Export Manager, via the Save option, users have the ability to save citations to a file formatted for:

- Direct Export to RefWorks
- Direct Export to EndNote, ProCite, CITAVI, or Reference Manager
- Direct Export to EndNote Web
- Generic bibliographic management software
- Citations in XML format
- Citations in BibTeX format
- Citations in MARC21 format

Via the E-mail option, users have the ability to e-mail a file with citations in:

- EndNote, ProCite, or Reference Manager format
- Generic bibliographic management software format
- Citations in XML format
- Citations in BibTeX format
- Citations in MARC21 format
- What is used as the authority keyword, subject, title?

Keyword searching is the default. Facets also allow narrowing by subject and/or title.

• Does the tool automatically de-duplicate? Is there an option to show duplicates?

*EBSCO Discovery Service* de-duplicates search results. Search results are de-duped when they are searched, using article title, publication name, volume, issue, page, and author information. The richest article 'wins' during the de-dupe process. In other words, articles with full text will be shown over articles with just an abstract. At this time, there is not an option to show duplicates from the initial search results. However, the user can filter by source/content provider to see one set of results for each source.

• How is the back-end indexed -- screen-scraping, direct searching, completely indexed?

The back-end or the complete collection of content included in the *EBSCO Discovery* Service is completely pre-indexed and hosted on EBSCO servers.

EBSCO*host Integrated Search* (EHIS) also features direct searching, some of which is handled via screens-crape connectors. Screen scraping is a last alternative and only used if content provider has not provided any other means to obtain results. Not all EDS customers opt for EHIS though.

• Is it searching metadata, or full-text? What does it do when one database has only metadata, and one has all full text?

EDS searches metadata (TOC, abstracts, indexing, etc.) and full text.

The EDS relevancy algorithm follows priority weights:

- Match on subject headings from controlled vocabularies
- Match on article titles
- Match on author keywords
- Match on keywords within abstracts
- Match on keywords within full text
- Have there been user studies on ease of use? Results?

Several formal usability studies were conducted at five initial customer sites in early 2010 for the *EBSCO Discovery Service* (Auburn University, University of Georgia, Indiana University, University of Melbourne, and Millersville University). A condensed findings report can be made available upon request.

A dozen studies were also conducted in Fall 2009 in labs at Simmons College, Catalyst of New York, and several online Morae recorded sessions.

EBSCO conducts frequent usability testing very early in the design process to validate designs. Participants included undergraduate students, graduate students and librarians. Results were compiled, and design changes/decisions considered, evaluated, and prioritized.

EBSCO relies deeply on user studies and feedback when designing products. As such, the company used detailed product reviews, focus group feedback, and usability studies to design the solution described herein. The EBSCO Product Management group is responsible for and conducts regular usability testing.

In addition, EBSCO has partnerships with usability experts and labs such as Kent State School of Library and Information Science (SLIS) Usability Lab, ScanPath, Catalyst of New York, and Simmons College. Through these partnerships, EBSCO has doubled its efforts in conducting usability tests and focus groups, including the use of advanced tools such as Tobii eye-tracking system; Kramer input switching and mixing system; and Techsmith Morae video capture and analysis. Usability testing is conducted as health checks to existing software and as a part of the design of each major feature release.

• Does the tool change an existing tool or limit its standalone function - i.e., the catalog?

The tool will not change an existing tool in the library or limit its standalone function. The system is designed to integrate seamlessly.

• How does it display results? How are they ranked?

Results are displayed by relevancy ranking, which may be considered more of a ranking of article value in relation to search terms, uses the following priorities:

- 1. Match on subject headings from controlled vocabularies
- 2. Match on article titles
- 3. Match on author keywords
- 4. Match on keywords within abstracts
- 5. Match keywords within full text

Within the realm of these major areas/priorities, the system takes into account various factors to determine the weighting/ranking of each element, which together combine to formulate the relevance and ultimate order of results display. In addition to other proprietary ranking factors developed and fine-tuned after detailed testing, relevancy influencers include:

**Exact Matches:** Exact matches are favored over partial matches - considering also the field in which those words appear (abstract vs. full text, vs. title, etc.).

**Density:** The number of times the word(s) appears relative to the size of the document (more is better) - considering also the field in which those words appear (abstract vs. full text, vs. title, etc.).

Frequency: The number of times the word(s) appears.

Currency: When all factors are equal, the more recent articles rank higher.

**Length:** Articles of a more substantial length have a heavier weighting (e.g., when all things are equal, a <sup>1</sup>/<sub>4</sub> page article is considered less valuable than a 4 page article).

The library catalog and the library's institutional repositories are favored as well.

Icons to show format type?

The results appear in a single unified result list. Each record on the result list has an accompanying icon to indicate the type of material (book, journal article, etc.). The source is also

be listed. If the user clicks to the full detail of the record, they'll be able to see the origin of the record (e.g., Catalog, CONTENTdm, NewsBank, etc.)

#### Consortial Compatibility / Flexibility

• Overall, how would the tool work in a consortial environment?

*EBSCO Discovery Service* is designed to integrate seamlessly in a consortial environment and the service provides options for customization at both institutional and consortial levels. Granular usage reports are also available at differing levels.

To allow for flexibility in configuring EDS for a variety of users and user types, EBSCO utilizes the concept of user groups and user profiles. Each library customer may have many user groups, and each user group can have many profiles. User groups are a department or division that the site administrator can define within EBSCO*admin*. One or more user groups can be set up for any library customer. By setting up these user groups, the library can customize access to EDS and gather usage statistics in a way that is the most suitable to the library customer. Additional groups can be created, and each can be set up with its own profiles. Libraries may create multiple profiles for different user groups.

A library can only access sources to which it subscribes, however, multiple catalog searching can be enabled so that searchers may access shared catalogs between libraries.

 What experience has the vendor had working with consortiums, or are there examples of other consortiums using the tool?

EBSCO has demonstrated that we can provide excellent service to large consortia and library groups as evidenced by our current working relationships with more than thirty statewide contracts and more than fifty national contracts. Throughout each project, EBSCO worked extensively with each consortium on a one-to-one basis and was able to help them realize their envisioned project and successfully provide the libraries in each consortium with significant online resources. EBSCO will continue to provide the same commitment to excellence for our discovery service customers.

There are a number of reasons that have contributed to EBSCO becoming the leader in providing database access for such a large number of states. First of all, we are dedicated to offering the largest suite of quality databases for all library types, and continuing to grow these collections. As such, customers have experienced a tremendous influx of new content and features, even in the midst of their subscription periods. Furthermore, EBSCO wants to ensure our customers satisfaction with our materials and services, as well as the greater success of their statewide projects. To assist, EBSCO has teams in place to not only technically support our customers, but to provide training (on-site and Web-based), support materials, marketing assistance, and other tools & initiatives for the benefit of our customers and their end-users. We provide this type of support with emphasis on each of the library-types, as we realize that promotion is better received when it is aptly targeted. In the end, it is in the best interest of all parties (customer, vendor, and end-users) to maximize use and usefulness of the database resources purchased by HELIN.

Millersville University Professor and Information Systems Librarian Scott Anderson has agreed to act as a reference for successful implementation of *EBSCO Discovery Service*. His contact info is as follows:

Professor Scott Anderson, Information Systems Librarian Millersville University (Pennsylvania)

Phone: 717-871-2377 Email: <u>Scott.Anderson@millersville.edu</u>

There are many other sites besides Millersville, but we have not yet received their permission to be used as references every time we receive an inquiry. If the Task Force speaks to Millersville and still wants additional references, we can share a list of libraries and then you can select a particular site that we will contact to ask permission to use as a reference for you.

EBSCO has also recently signed EDS contracts with several large university groups, including The Laureate Group, which includes more than fifty universities; The University of Phoenix system, including dozens of campuses; etc.

## Pricing & Pricing Structure

• What is the cost?

SITE	EDS Price
Bryant University	\$28,600
Community College of Rhode	
Island*	\$17,600
Johnson & Wales University*	\$49,500
Providence College	\$28,600
Rhode Island College	\$38,500
Roger Williams University	\$28,600
Salve Regina University	\$22,000
University of Rhode Island	\$49,500
Wheaton College	\$22,000

#### Participation Discount Schedule:

2 - 5 institutions = 20% off

6 - 9 institutions = 30% off

\* Price contingent upon having one shared catalog

EBSCO*host Integrated Search (EHIS)* pricing not included above. EHIS pricing to be determined based on final list of connectors for chosen resources.

What is the pricing structure - per connector, FTE, number of schools?

FTE Range.

Pricing outlined herein includes unlimited access (local & remote) to *EBSCO Discovery Service* for appropriately affiliated users within participating campuses mentioned within this rubric. EBSCO Publishing's pricing is an all-inclusive charge based on unlimited usage and unlimited viewing, printing and downloading of citations and articles. There are no additional costs for training, technical support, user support, or printing/downloading/ emailing of citations and articles. Please note that there are no additional set up or annual maintenance costs.

# **Customization & Technical Support**

 Is the search tool customizable by grouped subject resources by librarians or by individual users?

EBSCO's widget technology allows users to produce custom search boxes (HTML or CSS) that can be dropped into external web pages. Prior to searching, users can select, eliminate specific database. Users of *EBSCO Discovery Service* may search by library-specified subject groups. Database librarians and system engineers can further create and populate subject categories and subcategories, add and remove databases from categories, and add, rename, and delete subject categories as well as reorganize subject categories. This can be accomplished through EBSCO*admin*.

 Is there an embeddable / customizable searchbox for Blackboard/Moodle, Libguides/SubjectsPlus, etc.

*EBSCO Discovery Service* allows administrators to embed a customizable search box into Blackboard, Moodle, Desire 2 Learn, Sakai, WebCT, etc. EDS is compatible with most course management systems.

EBSCO's "Search Box Builder" makes it easy for a library administrator to create an EDS search box. This simple, step-by-step tool generates the HTML code that can be placed into a website - for example the library institution's Intranet or other patron websites.

The Search Box Builder helps to customize a search box by asking the library administrator to identify which databases are to be searched, choose from available limiters, set authentication parameters, and choose the most appropriate search box for the needs of the library. The tool then generates the code which can be cut and paste to add to the library's website.

· How easy is it to customize - what necessitates working with technical support?

*EBSCO Discovery Service* takes customization to a new level. The service will provide the features, functionality and power of EBSCO*host* within a customizable framework. Libraries can customize the discovery/search experience through use of a wide variety of open integration options including:

- Web Services Integration
- Harvestable Content
- Persistent Links, RSS Feeds, and other Bookmarkable Content
- Skinnable Interface Design (colors, logos, etc.)
- A variety of content "widgets" derived from the powerful EBSCO host technology

In particular, the skinnable interface option allows libraries to adjust branding components including colors, logos and search pages to create a unique starting point geared to their users' needs.

EBSCO's Open Integration options allow administrators to customize the EDS interface.

Using the EBSCO*admin* module, administrators have access to many settings that allow customization of EDS features.

a) *Widgets* – EBSCO*admin* allows administrators to add custom functionality to EDS by adding custom widgets. Widgets may be added as either iFrame URLs or Custom HTML code.

Widgets enable sites to add EDS functionality to their website, such as a search box. Sites can also include widgets in the 'Related Information' area of the EDS results list in order to:

- Add instant messaging such as Meebo for Ask-a-Librarian functionality
- Display external dynamic results (e.g. images from Flickr, videos from YouTube, etc.)
- Links to frequently used content sources (e.g. LibGuides)
- Custom messages, other HTML or text uses
- b) *Branding* EBSCO*admin* allows administrators to customize the EDS interface with either traditional or enhanced style branding options.
- c) *Customize Toolbar* Using EBSCO*admin*, EDS allows administrators to customize the top toolbar. Items/links can be added or removed from the custom toolbar.
- d) *Customize Colors* EBSCO's Open Integration allows administrators to customize the EDS interface colors. For example, an administrator may want to use customization to brand the interface with their institution's color scheme.
- e) *Ask-a-Librarian* Sites can provide e-mail assistance to their EDS users right from the interface by enabling the 'Ask-a-Librarian' feature.

EDS is fully supported via our EBSCO*host* Integration Toolkit web service and can be "pluggedin" or accessed from several popular and custom library applications such as Primo.

This allows the library a great deal of control over the look and feel and customization of the EDS experience.

EBSCOadmin customization is an integral part of EBSCO's software and services. EBSCO admin was developed to allow library administrators online access to all available EBSCOhost options. It is a graphical interface designed to help define and apply modifications to a variety of EBSCOhost configuration files. With EBSCOhost, libraries are able to set up individual site requirements by customizing the options and preferences for each individual site. The library administrator at each site will have the ability to tailor the EBSCO interface and the search screens to best suit the needs of the individual library. Additionally, library administrators with access to the authentication portion of EBSCO*admin* can update authentication methods and information as often as needed.

Library administrators have the ability to customize a variety of interface features including but not limited to branding and integration of local services such as ILL, links to locally subscribed journal content, limiters for full text and peer review, default limiting to full text and/or peer- reviewed articles, default system access to basic and other search interfaces as well as other features such as time out period, search history control, and date range control.

Designated consortial administrators have additional rights in EBSCO*admin* versus an individual library administrator, including:

• The ability to access and control EBSCO*admin* accounts for all accessing sites within the consortium. Consortial administrators can control authentication methods, profile maintenance, etc.

- The ability to apply "user defined fields," which allows the consortial administrator to label accessing sites. "User defined fields" are used for reporting purposes.
- The ability to run usage statistics for their own institution as well as all accessing sites within the state.
- Can we incorporate institutional / library branding?

EBSCO*admin* allows administrators to customize the *EBSCO Discovery Service* interface with either traditional or enhanced style branding options. As mentioned, the skinnable interface option allows libraries to adjust branding components including colors, logos and search pages.

 What is the complexity of installation? How much maintenance is needed to keep this project functioning?

The implementation of *EBSCO Discovery Service* is a straightforward operation, which requires minimal effort on the part of the customer. EDS is a hosted service and requires no software installations or maintenance on the part of the library, with regard to servers/hardware.

The general implementation plan will be to heavily leverage work that has been invested in sites' EBSCO*host* profiles. EBSCO*host* has been designed to support library systems efficiently.

Set up of EDS requires these basic steps:

- Provide access to the EBSCO Discovery Service Index
- Electronic transfer of catalog data and custom catalog build
- The HELIN Single Search Task Force will complete a catalog questionnaire survey.
- The HELIN Single Search Task Force will electronically transmit catalog data to EBSCO through FTP transfer or another mutually agreeable mode.
- EBSCO's Catalog Specialists will create a catalog database for the HELIN Single Search Task Force that will be searchable through EDS.
- EBSCO Catalog Specialists will work with the HELIN Single Search Task Force to ensure that catalog results retrieved via EDS are appearing at an optimal level.
- EBSCO Catalog Specialists will work to enable a real time availability check of the HELIN Single Search Task Force Catalog.

Customization of EBSCO Discovery Service Interface requires these basic steps:

- EBSCO's Integration Specialists will work with the HELIN Single Search Task Force to customize the EDS interface through the use of branding.
- EBSCO Integration Specialists will work with the HELIN Single Search Task Force to set interface search defaults that will optimize the search experience for end users.

EBSCO*host Integrated Search* (EHIS) is an optional, additional component of *EBSCO Discovery Service* solution. Setting up EHIS requires these basic steps:

Acquire and process information about the remote databases to be searched

- The HELIN Single Search Task Force will supply EBSCO with a list of resources which they would like to federate into *EBSCO Discovery Service* through EBSCO*host Integrated Search* (or another federated search engine, if applicable)
- EBSCO will work with the HELIN Single Search Task Force to determine what authentication settings are needed for the selected resources.

- EBSCO will register IP addresses with third party vendors. It is possible that some vendors may require the HELIN Single Search Task Force's approval to register these IP addresses.
- Remote Search Services are configured within the EBSCO Discovery Service infrastructure

EBSCO's Customer Satisfaction team will assign a project manager that will lead the implementation, working with the appropriate contacts at the HELIN Single Search Task Force.

For resources that require IP registration with the vendor, EBSCO's Integration Team will initiate contact with vendors to get the newly assigned IP addresses registered. The timetable for implementation will largely be dependent on these vendors. For an implementation that does not require this (i.e. all remote database authentication is username/password) the setup process typically goes more quickly.

EBSCO expects that HELIN Single Search Task Force patrons can be using the outlined system capabilities in EDS within 30 days of the original transfer of catalog data.

#### Which user profile will this benefit/not benefit?

This tool is most beneficial for face-to-face user interactions and subject specific customized search tools. Most users will need instruction.

- Distance Learners (JWU, RWU, URI, PC, CCRI?, Salve?)
- Novice Undergraduates (All)
- Advance Undergrads (All)
- Grad Students (JWU, RWU, URI, PC)
- Faculty (All)
- General Public (All)

*EBSCO Discovery Service* is well-suited to all of the above user profiles, since advanced and novice researchers can use the product with equal efficacy, whether on campus, at home, or via distance learning. EDS allows users of all types to simultaneously search all of a library's licensed research databases, the library OPAC, repositories, unstructured data (i.e. theses, white papers, reports), public web-sites, in-house databases—locally and remotely, from a single search box.

Besides offering access to a vast index of resources, the system encourages collaboration between its users. Via EBSCO*admin*, library administrators can enable folder sharing capabilities that allow users to add articles to their custom folders and share them with other EDS users such as fellow students, professional colleagues, or anyone interested in a specific topic. This can be useful to professors wishing to share articles relevant to coursework with their students, for example. Please note that users must be signed into 'My EBSCO*host*' to access shared folders.

With the 'My EBSCOhost' feature, a user has a personal folder to collect and store information across sessions. All the items that a user has saved to the personal folder remain in the folder until the user removes them. Only the specific user can access their 'My EBSCOhost' folder (via user name/password).

Creating personalized folders is accomplished using 'My EBSCOhost'. Upon creating these personalized search experiences, individual user accounts are accessible across multiple research sessions, so users can retrieve previously gathered information at a later time. Building on the concept of the EBSCOhost folder, which is still available for single sessions, EBSCO has expanded the capacity of the personalized

folders. Folders in 'My EBSCOhost' can save articles, individual search results, search histories, persistent links to searches, saved searches, search alerts, journal alerts and web pages.

EBSCO*host* allows users to collect results from different searches, store them in the Folder using the "Add to folder" option and manage the Folder contents to print, save, e-mail, or export to an ILS.

With regard to instruction, EBSCO offers world-class training in a variety of delivery methods, all designed to educate users and administrators on the rich functionality of our products, as well as help all types of organizations to successfully integrate use of these valuable resources into their libraries. EBSCO has the in-house capacity to provide online training to all its customers. All of EBSCO's training staff are fully trained in all aspects of *EBSCO Discovery Service*.

EBSCO will provide onsite training sessions on the use of *EBSCO Discovery Service*, EBSCO*host Integrated Search* and EBSCO*admin*, and the training schedule will be developed in conjunction with HELIN Single Search Task Force. There is no additional cost for the training sessions. EBSCO strongly believes that a successful implementation plan must include detailed training sessions. The purpose of the training is not to focus on basic search techniques; the product is made to be used by novices. The purpose of the training is to promote the content purchased by participating libraries and to educate librarians on the customization options available to them.

Our goal is to have training sessions in centralized sites that make sense to both our training staff and to our customers. Additional training annually or when there is a major change to the database(s) user interface will be provided upon request at no additional cost. Our goal is to provide customers with an unparalleled level of service.

#### Training Timeline:

In an effort to have all the libraries participating as soon as possible, and to provide the best possible service once the contract has been awarded, EBSCO would schedule the sessions immediately.

## Training Staff:

As part of providing customized periodical management services, EBSCO will provide EBSCO staff members to assist in training for participating libraries.

#### Training Requirements:

EBSCO recommends the following equipment to be available for the proposed training sessions:

- Computer Lab availability with PCs for hands-on time
- PC with Internet connectivity
- Projection unit attached to PC and Screen
- Microphone for large rooms
- Current version of Microsoft Internet Explorer and/or Firefox loaded on all PCs

The above information can easily be posted on libraries' homepages for simple distribution for further training sessions.

EBSCO also offers online training sessions taught by EBSCO personnel available to librarians and other staff at subscribing institutions.

EBSCO offers dozens of free, online training sessions each month. Via the EBSCO Support Site (http://support.ebscohost.com), librarians and other staff may click on the 'Sign Up for Training' link at the top right corner of the Support Site home page to view course titles & descriptions, see dates & times when courses are offered, and to register. To participate in online training, all that is needed is a computer with an Internet connection, and either a telephone, a headset with microphone attached to a computer, or a computer's internal speakers. Sessions generally last 45 minutes to one hour and cover a wide variety of topics including *EBSCO Discovery Service*, EBSCO*host Integrated Search*, EBSCO*host*, EBSCO*admin*, Reports & Statistics, My EBSCO*host* Folder, a suite of other specific EBSCO products, etc. As mentioned, there is no additional charge for the online training sessions provided via http://training.ebsco.com.

Additionally, please note that via the EBSCO Support Site, a number of Flash tutorials are also provided. These tutorials provide audio narration with matching text to guide users on how to make the most of EBSCO's most popular features. These are also provided at no additional cost.

# HELIN Single Search Task Force - Rubric PRODUCT: Encore Synergy Review Date: Response submitted Dec 2, 2010

John McCullough Vice President, Encore Division Innovative Interfaces Inc.

## Searchability & Results

• What content does/could the tool search/federate?

RESPONSE: Encore Synergy is a content neutral discovery solution, and does not restrict the content sources the Library may integrate. It is a foundation of the Encore philosophy that a discovery solution should leverage the Library's pre-existing content selection decisions, rather than replace them.

Encore uses a variety of lightweight aggregation technologies to pull in all of the Library's content, as follows:

Millennium catalog results are uploaded and indexed in real time, dynamically, with no work required by the Library – no output of MARC data, no revising of data profiles, no synchronization or scheduled loads.

Millennium Media records and course reserves are dynamically integrated as well, with no output or updating by the Library required.

Digital collections may be integrated using the Harvester component, which can dynamically harvest any OAI-PMH compliant digital archive and integrate the results into Encore. Harvested sources include Content Pro, Content DM, Digital Commons, and the Hathi Trust.

Article integration is achieved primarily using Web Services, in which Encore accesses the native data store and indexes of article databases in real time and integrates the results. Unlike traditional federated searching, Web services do not pass a search to the native search interface of a source like EBSCO; with Web Services Encore becomes the native search, using the same data APIs as those native search portals themselves do. Web Services are supported by all major vendors, and so Encore can search vendors including Proquest, EBSCO, JSTOR, Lexis Nexis Academic, Hein Online, Gale, Sage, Elsevier, and many more in this fashion. A complete spreadsheet of supported databases has been included with this response.

For those vendors who do not support Web Services yet, Encore seamlessly integrates traditional federated search connectors, so that the depth of the Web Services queries is supplemented by the breadth of federated search coverage. Encore's federated search can include any database supported by Research Pro, which number over a thousand database targets.

• Is it clear where the results content is coming from?

RESPONSE: Always. Encore consistently identifies the source of data, particularly for article results, identifying vendor (e.g. EBSCO) and database (e.g. Business Source Premier) and always linking back to the native source for full-text.

• Is there an ability to narrow or expand search by content source or format type?

RESPONSE: Yes. Encore supports narrowing or "Refining" searches using a variety of facets, including content source, format, full text, peer reviewed, or for local results location, language, and Date. Users also have the option to re-issue related searches using the subject-based tag cloud.

• How does the tool interact with natural language queries and boolean searching?

RESPONSE: In the 4.1 release Encore will support Boolean operators such as AND, OR, and NOT in the new Advanced Search Query Builder, as well as field-level searching, pre-search limits and complex queries. The system is not designed to recognize natural language per se, but the relevance algorithm has been tuned so that "filler" words in natural language queries do not interfere with the most relevant records retrieved and sorted to the top of results.

• What kind of facets, limits, or sorting is available and/or shown to the user?

RESPONSE: Encore supports sorting by Relevance, Title and Date for local results. Encore further supports both limiting and faceting.

The distinction between limits and facets is that limits are characteristics of the search query, and these are applied by the Advanced Search Query Builder. Limits include Collection (or Scope), Location, Format, Language, and Date.

Facets are characteristics of search results, and are also supported, including Availability (e.g. on shelf, online), Search Found In, Collection (or Scope), Location, Format, Language, Date, and Subject/Tag. Additionally, article results provide facets as supported by the individual article vendor, including Full Text, Peer Reviewed, Place, and Subject.

• Is there a browsable index?

RESPONSE: While there is not a phrase index-style browsable index, for every search result Encore provides a browsable summary of the current search results.

• How do you move to full text or ILL?

RESPONSE: Links to full text are provided within the search results themselves, and are direct, unmediated, live links to current content, rather than predictive link resolver links or panels.

ILL or resource sharing systems may be accessed either through a link resolver or through Encore's Other Sources feature, which allows resource sharing systems like InRhode or WorldCat to be searched and integrated in every Encore result.

• What are the export features?

RESPONSE: Encore supports exporting individual records to RefWorks and also exporting from within the Book Cart feature for multiple titles. Exporting lists may take the form of email or a Save to the Millennium patron record as a list.

Article exporting is currently planned for the next version of Encore, available in 2011. At present, since Encore refers users directly to the source for full-text, users export from the source itself.

• What is used as the authority - keyword, subject, title?

RESPONSE: The index is based on a keyword index, which can be faceted or limited to Author, Subject, or Title. Authority records are leveraged through Encore and all forms of authorities – author, title, subject, author/title (e.g. "mozart magic flute") are retrieved by the keyword search and presented to users as alternate search options.

• Does the tool automatically de-duplicate? Is there an option to show duplicates?

RESPONSE: Encore does not currently enforce de-duplication for article results, although this feature is planned for early 2011. There is some question over whether users actually want deduplicated results and we are looking forward to discussing with our development partners.

• How is the back-end indexed -- screen-scraping, direct searching, completely indexed?

RESPONSE: The back-end is indexed using the open source Lucene keyword for local results (catalog, reserves, harvested digital content). For remote article results Encore uses Web Services (see response to first question above) for direct and unmediated access to vendor indexes. This allows Encore to deliver real-time results which are completely consistent with results that a user would retrieve through an article vendor's native interface.

• Is it searching metadata, or full-text? What does it do when one database has only metadata, and one has all full text?

RESPONSE: For article databases Encore is querying as much data as the Web Service for that vendor is providing, which may be metadata only, may be full text, or for a source like HeinOnline may include metadata plus the abstract/first page of full text. Encore's lightweight search and aggregation technology does not impose a requirement on all vendors but will integrate results as they come back.

• Have there been user studies on ease of use? Results?

RESPONSE: Yes, Innovative has performed usability testing with undergraduates from UC Berkeley, and is making a number of changes to the interface in response to the feedback. Please find below the top 10 findings from the most recent review:

#### **Summary of Findings**

1. Users expected to be able to "flip through" a book, and expected the Explore link or the link to the full record to do this for them. We now provide a direct link to Google Books to achieve this.

2. The Location links were heavily used.

3. The enriched content links were consistently overlooked, despite being displayed on the browse and containing exactly the information the users consistently said they wanted. We would probably have better luck if we tucked all of this information under the "Explore" link and moved the link resolver links elsewhere.

4. Nearly 2/3 of users read comments and reviews when available and in general were interested in ratings, reviews and comments. There was also a strong desire to have access to the Table of Contents to make evaluative decisions about whether to check the book out. We took that as encouragement to continue with integrated community content.

5. 75% of users used facets, with more experienced users finding and using them very quickly during the search session. The Format facet was the predominant choice. We've continued to leverage the success of facets to allow users to navigate to Articles, digital collections, and course reserves.

6. Users primarily used the Articles facet, rather than the preview or the navigation at the top of the page, to go to the Articles mode. The fact that this facet displays a count of hits in the article databases was key; when this count was missing users did not click on it.

7. Users noticed and frequently use the Catalog Results channel in the Articles mode; it was a rare example of the "third column" being used (see #10).

8. Some users thought the Articles preview was an ad because of how it was displayed; as a result of this and feedback from our beta partners, we revised the UI on the preview so it is clear that these are results and not something different. Apparently in Web design you can't over-emphasize areas or they look like ads!

9. Users generally wanted full-text Articles to be a click away; only the sophisticated users understood the purpose of an abstract. Our Web Services software links directly to full text of articles, without going through a link resolver; even one extra screen creates frustration and confusion.

10. The right hand column was consistently overlooked and believed to be ad space, although the tools themselves were deemed to be of value when users were directed to them. As a result, Innovative in our next release is introducing a 2-column display option. This new, streamlined look and feel will also address the occasional comment that the Encore display is "cluttered".

• Does the tool change an existing tool or limit its standalone function - i.e., the catalog?

RESPONSE: No, Encore is generally complementary to existing tools such as the OPAC, although the article discovery function can be implemented to replace a federated search tool.

• How does it display results? How are they ranked?

RESPONSE: Unlike many solutions in the marketplace, Encore does not interfile results from local data sources like the catalog with remote, article data sources. We have followed the model of Google, which provides separate modes for Web Search and for News Search, for example, because optimal relevance requires these two searches to be separate. Google prefers to rank News results by currency, while Web searches are ranked by relevance – interfiling the two would force a sacrifice of one or the other. Instead, Google searches the two modes separately, but allows users to select either mode as a default, and provides a "preview" within the browse of one mode when results occur in the other – sources are searched concurrently and can be horizontally navigated by the user.

Innovative has applied the same design to searching Local results such as books and ebooks along side Article results. Every query searches all types of data, and every display includes all types of data, but Encore does not interfile books and articles, preferring to provide optimized displays for each, with relevance and facets geared towards a specific type of data, with easy Google-style navigation between the results sets.

Relevance ranking for local results uses Innovative's Right Result relevance, which includes the following:

- 5-tier ranking and grouping of results
- Field-level priority
- Priority ranking for exact matches on titles
- Priority ranking for journals and e-journal titles
- Librarian "Promote" feature for individual titles to go to the top of any set

Relevance ranking for article results uses the vendor's own native sort order, so results sets are consistent within Encore to those in the native interface.

• Icons to show format type?

RESPONSE: Yes, the system comes with standard icons.

## **Consortial Compatibility / Flexibility**

• Overall, how would the tool work in a consortial environment?

RESPONSE: Encore Synergy is currently being enhanced to support consortial accounts for article sources. This means that a given user will see the local institution's preferred article databases when that user searches from within the Library. In addition, a logged-in user will also see those databases available to them as a result of their Home Library designation – so all databases they are allowed to access, by virtue of where they are or who they are, are presented to them in easy-to-navigate lists. In this way each institution will be able to develop their own article profiles within Synergy and have those offered to their users within the libraries or from home. Generally institutions share the base Encore implementation as the HELIN consortium currently does; within a shared Encore implementation it is possible to "pre-scope" search forms to search within a given Library's scope if desired.

• What experience has the vendor had working with consortiums, or are there examples of other consortiums using the tool?

RESPONSE: Innovative is currently the HELIN Consortium's vendor for Millennium and the base Encore product. The consortium functionality is going into beta testing in December 2010 and is not currently installed at any consortium.

## Pricing & Pricing Structure

• What is the cost?

RESPONSE: Pricing is provided per institution:

### Encore Synergy Costs per institution

Encore Synergy Preview (one vendor service connector, e.g. Proquest, EBSCO, Gale, or HeinOnline; supports multiple databases from single vendor): **\$2,500** 

Encore Synergy Select (up to five connectors including one Preview vendor service connector as above): **\$4,250** 

Encore Synergy (up to 30 connectors including one Preview vendor service connector): \$7,500

We will also offer a discount based on the number of libraries who join up for the beta test period, as follows:

3 libraries: 30% discount 4-7 libraries: 45% discount 8-10 libraries: 60% discount

• What is the pricing structure - per connector, FTE, number of schools?

RESPONSE: Pricing is scaled per institution for articles and per data source within each institutional profile.

## **Customization & Technical Support**

• Is the search tool customizable by grouped subject resources by librarians or by individual users?

RESPONSE: Yes! Encore in the 4.1 release supports article resource "portfolios" which are assigned by Library staff and allow grouping of databases by subject or type. At present portfolios are library-defined; we are looking forward to introducing user portfolios in the near future.

• Is there an embeddable / customizable searchbox for Blackboard/Moodle, Libguides/SubjectsPlus, etc.

RESPONSE: No at present, although Encore is being "opened up" to such customizations in 2011.

• How easy is it to customize - what necessitates working with technical support?

RESPONSE: At present most customizations are implemented at the request of the Library by Encore Services. Innovative is happy to turn over files such as the CSS files to the Library for direct, hands-on customization if desired.

• Can we incorporate institutional / library branding?

RESPONSE: Yes. Encore supports branding and CSS customization, at the institutional level in the 4.1 release.

• What is the complexity of installation? How much maintenance is needed to keep this project functioning?

RESPONSE: Very little staff overhead is required. Encore Synergy provides seamless integration with the catalog and with the patron authentication database, so that one integrated user login – the user's Millennium circulation login - provides access to catalog features like holds, to authenticated database, and to community features such as user tags and ratings. Synergy does not require data to be output from the Millennium system, and Encore Services will set up all article database connectors for the Library.

# Which user profile will this benefit/not benefit?

This tool is most beneficial for face-to-face user interactions and subject specific customized search tools. Most users will need instruction.

- Distance Learners (JWU, RWU, URI, PC, CCRI?, Salve?)
- Novice Undergraduates (All)
- Advance Undergrads (All)
- Grad Students (JWU, RWU, URI, PC)

- Faculty (All)
- General Public (All)

RESPONSE: Encore is optimized for users who wish all their search results to be collected from a single search box, normally undergraduates and the general public. Its focus on electronic results and ability to default searches to Articles or facet to ebooks and ejournals makes it an ideal tool for distance learners who may not have immediate access to print collections.

"Power users" often prefer to go direct to tried-and-true databases and may bypass Synergy or any one-search' but Encore's commitment to providing consistent results to native database interfaces makes it a comfortable option for those users accustomed to the sorting and facets in native interfaces – we don't change the rules on them!

# **HELIN Single Search Task Force - Rubric** PRODUCT: **Review Date:**

## Searchability & Results

- What content does/could the tool search/federate?
  - Summon provides a unified search of the full depth and breadth of the library's collection – both electronic and print. The index contains over 500 Million items. more than any other available service. Summon does not utilize federated search in any form.
- Is it clear where the results content is coming from?
  - Yes, all results come from the Summon Unified Index.
- Is there an ability to narrow or expand search by content source or format type?
  - Yes, the Content Type facet allows for selection (or exclusion) of relevant content type or combination of content types.
- How does the tool interact with natural language queries and boolean searching?
  - Both natural language and Boolean searching are supported. 0
- What kind of facets, limits, or sorting is available and/or shown to the user?
  - Summon includes a number of facets (visible from any site). For example: http://dartmouth.summon.serialssolutions.com/search?s.cmd=setHoldingsOnly(fa lse)&s.pn=1. Summon expands available facets for users to offer additional options for relevant subsets of the index, currently for the local catalog: http://dartmouth.summon.serialssolutions.com/search?s.fg[]=SourceType:(%22Li brary+Catalog%22).
- Is there a browsable index?
  - Yes.
- How do you move to full text or ILL?
  Full Text and ILL (where full text is not available) are accessed via the libraries OpenURL link resolver (360 Link for HELIN libraries).
  - What are the export features?
    - Summon supports printing, emailing, or exporting to a number of BCM options (RefWorks, EndNote, etc.)
  - What is used as the authority keyword, subject, title?
    - Summon utilizes an extension of the MODS metadata schema. Multiple data points contribute to the authority of a merged record. All of the referenced fields above can be searched.

- Does the tool automatically de-duplicate? Is there an option to show duplicates?
  - Summon is a Unified Index, and is therefore de-duplicated. Duplicates are not visible (this implies that the solution is a "database of databases", which Summon is not).
- How is the back-end indexed -- screen-scraping, direct searching, completely indexed?
  Summon uses a single merged index. We employ several methods to pre-index content.
- Is it searching metadata, or full-text? What does it do when one database has only metadata, and one has all full text?
  - Summon searches both metadata and Full Text and will search all available content.
- Have there been user studies on ease of use? Results?
  - Yes. All of our research, including that which inspires us, is archived at: http://www.serialssolutions.com/summon-research/
- Does the tool change an existing tool or limit its standalone function i.e., the catalog?
  - Summon incorporates the local catalog into its results, but does not limit or restrict its standalone function. It does not alter the standalone qualities of any individual database.
- How does it display results? How are they ranked?
  - Summon displays results in a relevance-ranked list. Users can opt to sort chronologically as well.
- Icons to show format type?
  - Yes

## **Consortial Compatibility / Flexibility**

- Overall, how would the tool work in a consortial environment?
  - There are multiple consortium configurations possible. Most likely HELIN members will want individual sites which incorporate the HELIN consortium catalog.
- What experience has the vendor had working with consortiums, or are there examples of other consortiums using the tool?
  - We have significant experience supporting both academic and mixed-type consortia. Most relevant to HELIN are the State of Maine and University System of Maine.

## Pricing & Pricing Structure

- What is the cost?
  - Summon is offered on an annual subscription basis with a one-time setup fee.
    Prices are determined by FTE and library type. There are no extras, support charges, or variations based on content in the library's collection.
- What is the pricing structure per connector, FTE, number of schools?
  See above.

### Customization & Technical Support

- Is the search tool customizable by grouped subject resources by librarians or by individual users?
  - Yes. Any combination of facets, and searches can be embedded into library boxes. We are also developing a "discipline" facet for high-level (e.g. "business", "biology") segmentation. This will be completed before HELIN libraries subscribe. Librarians can also pull RSS feeds into library subject guides and pages.
- Is there an embeddable / customizable searchbox for Blackboard/Moodle,
  - Libguides/SubjectsPlus, etc.
    - Yes.
- How easy is it to customize what necessitates working with technical support?
  - Summon is quite flexible. The degree of customization and engagement with our technical support team is dependent varies with your local technical capabilities.
- Can we incorporate institutional / library branding?
  - Yes.

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- What is the complexity of installation? How much maintenance is needed to keep this project functioning?
  - Summon utilizes a 6-week implementation process. Individual HELIN libraries are already performing most of the work needed to maintain the service on an ongoing basis. We would need the HELIN catalog records delivered – most of the 6-week implementation process surrounds the library catalog.

## Which user profile will this benefit/not benefit?

This tool is most beneficial for face-to-face user interactions and subject specific customized search tools. Most users will need instruction.

- Distance Learners (JWU, RWU, URI, PC, CCRI?, Salve?)
- Novice Undergraduates (All)
- Advance Undergrads (All)
- Grad Students (JWU, RWU, URI, PC)
- Faculty (All)

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General Public (All)