

WorldCat Local Knowledge Base (WCL KB): Summary of Features & Effort

CDL WCL Operations Team; compiled by Lena Zentall; last revised: 12/17/12. See the Appendix for definitions of terms used in this report.

Executive Summary

FINDINGS

The CDL WCL Operations Team proposes not to implement the WorldCat Local Knowledge Base (WCL KB) at this time. The effort on CDL and the campuses to implement and maintain the WCL KB would be substantial, and the features important to UC, which depend on the WCL KB, are still fairly immature or have functioning solutions already in place.

BACKGROUND

The impetus to investigate the feasibility of implementing the WCL KB in Melvyl and the campus instances of WorldCat Local was two-fold: 1) a desire to stay in the mainstream of the product and to benefit from useful features, and 2) to determine if any critical functionality was dependent on the WCL KB.

This summary is the result of a preliminary investigation of the WCL Knowledge Base by members of the CDL WCL Operations Team. In addition, the team has asked OCLC to validate Part 1 (features, value, level of maturity), but has not yet received a response.

Part 1: Features Important to UC

These features, powered by the WCL KB, could be useful to University of California. Demand for these features at UC is unknown.

Level of Maturity:

- **High – established feature; functions well; few problems.**
- **Medium – functions well; few problems.**
- **Low – new feature; still identifying problems and working out the kinks.**

Feature	What's the value?	Value to users	Level of maturity	Notes
WorldCat Resource Sharing	Tells users who are in the process of requesting an item via ILL that the item is already available.	Saves time; deters an unnecessary ILL request.	High	<ul style="list-style-type: none"> • Duplicates Request functionality (Request shows online links via the SFX KB). • Would have to cease using Request & VDX to take advantage of this feature. You cannot use two different patron-initiated-request systems at once. • None of the UC campuses use this on the borrowing side.
Set holdings	Automatically sets institution holding symbols on records in WCL.	If a record is cataloged by UC Shared Cataloging Program (SCP), users can see that UC holds it.	Low	<ul style="list-style-type: none"> • Problematic for UC since we have two holdings symbols for the items in the WCL KB depending on who manages the license. • 'buggy' for ebrary (ebooks), and interferes with the sort order of search results (relevancy) according to the WCL KB discussion on the SFX Discuss listserv, and the WCL KB forum.
View Now (for licensed resources)	Links to fulltext appear in search results so users get to content with fewer clicks.	Saves time. Avoids drilling down into records to find links to content.	Low-Medium	<ul style="list-style-type: none"> • Sort by Provider in View Now doesn't have as much flexibility as UC-eLinks for sorting providers. • Links may not resolve to the same place for View Now links & UC-eLinks links (View Now may get user to the journal home page rather than to the article level.) • Currently, CDL only has a few View Now resources activated (for selected freely-available resources).

Feature	What's the value?	Value to users	Level of maturity	Notes
				<ul style="list-style-type: none"> CDL did analysis on open-access content and has not yet tested View Now for licensed content.
Limit to Fulltext (requires View Now)	Users can limit search results to fulltext items (your WCL KB tracks your fulltext)	Saves time in reviewing search results by highlighting fulltext items in results.	Low-Medium	<ul style="list-style-type: none"> Advanced Search can only be turned on if the Links to full text is also activated (View Now).

Part 2: Effort to Implement & Maintain WCL KB

CDL is currently managing two separate knowledge bases for licensed resources: the ExLibris SFX KB (for UC-eLinks) and the Serials Solutions KB (for the CDL ERMS). The WCL KB would be a third knowledge base; it would require setting up and maintaining as a completely separate knowledge base – substantially increasing the workload for CDL and the campuses. The options listed in the table below are possible ways to use existing data from the SFX KB to at least partially populate and maintain the WCL KB. The CDL ERMS is not a consideration for sharing data since it only contains CDL-managed resources.

Effort to Implement:

- **High** – More than 6 months work for campuses and CDL; more than 2 staff members from each campus working more than 25% time.
- **Medium** – 3-6 months work for campuses and CDL; multiple staff working less than 25% time.
- **Low** – Less than 3 months work. Minimal work for CDL and campuses.

Maintenance:

- **High** – primarily manual processes; more than 20 hours per month; multiple staff involved; coordination involved; requires technical skills and training.
- **Medium** – semi-automated processes; less than 20 hours per month; minimal training and low technical skills required.
- **Low** – automated processes; less than 20 hours per month; minimal staffing and training.

OPTIONS	Effort to Implement	Effort to Maintain	Who does the work?	Notes
Pubget (Pubget.com is a Copyright Clearance Center company)	N/A	N/A	N/A	<ul style="list-style-type: none"> Not an option. Conflicts with UC business practices (including requiring giving Pubget admin access, and uses click-thru license.) Relies on publisher data - doesn't cover our licensed entitlements.
SFX Export A (single file per SFX instance)	High	High	CDL generates exports. Campuses review error reports.	<ul style="list-style-type: none"> Not an option. Cannot verify if a record was successfully imported – only tells you the % of overall records successfully imported.
SFX Export B (single file per SFX instance per target)	High	Medium	CDL generates exports. Campuses review error reports.	<ul style="list-style-type: none"> Provides error reports. KBART standard* would make exporting/importing easier. Some manual reconciliation required.
Manual	High	Medium	SCP & Campuses	<ul style="list-style-type: none"> Fully manual. Use publisher title lists to activate titles.

CONSIDERATIONS – IMPLEMENTATION & MAINTENANCE

- Mapping licensed content from SFX KB to WCL KB has been partially done. We have about 200 licensed packages with about 50% match rate (CDL could do this work for campuses.)
- Reconciling error reports is time consuming and would need to be done at least monthly.
- Updating work would be done for CDL by UC-eLinks administrators at UCSD and by UC-eLinks administrators at each campus.
- The difference in KB update schedules may cause problems: SFX KB is updated weekly. WCL KB is updated monthly.
- It is impossible to fully sync different KB's due to variations in: publisher packages, level of granularity tracked, titles tracked.
- Tools may mature but implementation and maintenance costs will stay consistent.
- For the CDL ERMS implementation in 2009, Serials Solutions provided a full-time data entry person who worked for several months, along with a four-member team at UC who reviewed the data entry person's work.

Part 3: Recommendations

1. **Wait on implementing the WCL KB** until we have better options for populating and maintaining the knowledge base, and/or until the features become essential to UC users.
2. **Pursue tools that would make it easier to populate the WCL KB.** Today, the options we have identified are PubGet, SFX exports, and manually. Looking to the future, KBART outputs from SFX would help with ongoing maintenance (e.g., make it possible to easily identify what's changed in our SFX KB, so we could make the change in the WCL KB.)
3. **(In progress) Request an enhanced Basic text export (in KBART format) from ExLibris** with a last maintained date parameter. This enhancement request was sent to ExLibris on 8/31/2012, and was voted on by the SFX user community in October 2012.
4. **(In progress) Monitor the experiences of peer institutions** (similar size) that have SFX or another link resolver and have implemented or experimented with the WCL KB. Determine if anyone has found an efficient solution for populating and maintaining the data in both systems.
5. **Encourage vendors to work together** (ExLibris and OCLC) to facilitate data sharing between the systems.

Appendix

DEFINITIONS

OpenURL link resolver

A link resolver is software that uses structured data in an OpenURL to link a user to an online resource like an article or ebook. University of California uses SFX from ExLibris as our OpenURL link resolver software for UC-eLinks.

How does it work? A user does a search on “giant squid” in a *source* like Google Scholar and clicks on a UC-eLinks link in search results. The link takes the user to a licensed copy of the article in a *target* publisher website like Elsevier. Depending on how specific the data is in the OpenURL, the user may go to the specific article or may only get to the journal home page. How does Google Scholar know UC licenses the title? CDL creates reports in SFX that Google Scholar picks up weekly. These reports list all the titles CDL and each campus licenses. Google Scholar also maintains a list of all the UC IP addresses so it recognizes users and gives them the UC-eLinks link in search results.

Knowledge base

A knowledge base is an extensive database containing information about electronic resources such as electronic journals or ebooks and their availability, accessibility, cost information and license terms. For example using a knowledge base, an OpenURL link resolver can determine if an item (article, book etc.) is available electronically and what the appropriate copy for a user is. The knowledge base helps a library to identify the content they have access to and present it to the users for access.

Another example: Using the CDL ERMS (Serials Solutions 360) a user can learn the ILL terms as represented in the license. Vendor-maintained knowledge bases seek to offer comprehensive coverage of items that are available to a wider community. As not every institution has access to all content under their individual license agreements the knowledge bases usually offer customization tools to localize its content. Individual institutions can then modify a knowledge base to reflect their local collections, for example, which titles can be accessed electronically by their users; which website provides access to their users; and which resources are owned by the library in print format.

Adapted from: http://en.wikipedia.org/wiki/OpenURL_knowledge_base

KBART

Knowledge Bases And Related Tools (KBART) working group. KBART is a standard for sharing OpenURL data. See <http://www.uksg.org/kbart> or <http://www.niso.org/workrooms/kbart>

To be able to direct the user to the right content and to provide correct information it is essential for a knowledge base that the data is accurate, comprehensive and up to date. Knowledge base vendors usually obtain this information from the publishers, aggregators and other sources in many different shapes and format. In 2006 UKSG commissioned a research report that identified and described issues affecting the efficiency of OpenURL linking. One of the key issues identified was the exchange of metadata in the supply chain and the need for more common formats to aid the transfer of metadata from content providers to link resolver knowledge bases. As a result, in 2008 UKSG and NISO set up a joint initiative called Knowledge Bases and Related Tools (KBART), to make recommendations for the transfer of metadata. The first set of guidelines was published in January 2010 as a NISO Recommended Practice.

One of the key challenges highlighted in this Recommended Practice was the importance of engaging the whole supply chain, including content providers, link resolvers, and libraries, in transferring accurate metadata describing electronic content. **It has become increasingly difficult for libraries to manually maintain localized knowledge bases, due to the rapid growth in the availability of subscription and open access electronic publications and the complexity of consortial and institutional subscriptions.** As a result, more emphasis is being placed on content provider provision of accurate metadata at its source, to enable link resolver vendors to provide a much more efficient and less labor-intensive knowledge base to libraries. KBART is focusing effort on this area in order to increase uptake of best practice recommendations and embed the recommendations in content provider service provision.

Source: http://en.wikipedia.org/wiki/OpenURL_knowledge_base

RECENT PUBLICATIONS

Presentation by Marshall Breeding, March 2012. OpenURL Knowledge Bases and Link Resolvers. A report on the current landscape.

<http://www.librarytechnology.org/docs/16700.ppt>

Final Report: E-resource knowledge bases and link resolvers: an assessment of the current products and emerging trends:

<http://uksg.metapress.com/content/5155lh5253114111/>

Includes useful definitions:

Trainor, Cindi, "Rethinking Linking: Breathing New Life into OpenURL" (2010). Library Faculty and Staff Papers and Presentations. Paper 1.

http://encompass.eku.edu/faculty_staff/1

CAN THE WCL KB REPLACE UC-ELINKS (SFX KB)?

WorldCat Local has a tool, View Now, which provides direct linking from WorldCat Local to fulltext on vendor websites. Why not turn off UC-eLinks and use the WorldCat Local Knowledge Base and View Now linking instead?

Link resolvers like UC-eLinks connect users to all UC's licensed resources. WorldCat Local is only one of hundreds of resources. UC-eLinks puts links where users are – in Google Scholar, PubMed, WorldCat Local, rather than compelling users to go to one source like WorldCat Local.

Why UC-eLinks not WCL View Now?

- UC-eLinks puts links everywhere with maintenance in ONE place.
- UC-eLinks links are customized to users (i.e., access codes are embedded into UC-eLinks OpenURLs).
- SFX is open software that CDL can modify and extend functionally. For example, CDL added the off-campus detection function to alert users to logon to their campus network.