

OpenURL Resolvers

Report of MERAC Subcommittee

March 17, 2003

Introduction

Context-sensitive linking, that is, providing library users appropriate links between electronic resources such as article citations and full-text articles, is currently a hot topic among academic libraries. Numerous libraries, though seemingly none in Missouri, have invested in the first such commercial product, SFX from Ex Libris. There are an increasing number of competing products; so many products, in fact, that any library wishing to institute such a service would have a difficult time identifying and evaluating all of them.

Background

At the October 2002 meeting of the MOBIUS Electronic Resources Advisory Committee, it was proposed that MOBIUS members be surveyed to gauge the level of interest in two topics: OpenURL resolvers and digital reference. A survey was duly sent to the members. About OpenURL products, it said:

'The other topic is Open URL resolvers. Examples of Open URL resolvers are SFX from Ex Libris, Endeavor's Linkfinder Plus, Innovative's WebBridge, and Gold Rush Linker by the Colorado Alliance of Research Libraries. A resolver is software that provides the user with the most appropriate copy of a resource based on an institution's holdings and defined criteria. Such services could include links to the most appropriate source of a full text article or links to the OPAC to check local holdings.

The initial role of a subcommittee on this topic would be to gather and evaluate information on different products so the MOBIUS community might be better informed. This information could be used by individual members if they choose to pursue such tools on their own as well as for the Committee's consideration in subsequent years for the Cafeteria Program.'

Quite a few positive responses were received, and a subcommittee of MERAC was established to address the issue. The charge to the subcommittee was:

- a. identify open URL resolver products currently on the market
- b. compare/contrast features, functionality and price
- c. explore costs/benefits
- d. determine appropriateness of application for MOBIUS
- e. submit recommendations for future actions to MERAC

Definition of 'OpenURL Resolver'

One of the subcommittee's first tasks was to define just what type of service we were to investigate. Here's one fairly succinct definition we found:

'The OpenURL is a standardized way of constructing a URL to describe a specific item, usually an article or a journal. The OpenURL is a means for transporting this data in a consistent manner that is easily processed by an OpenURL link resolver (or link-server). The OpenURL itself does not "find content" or "link seamlessly." This is the role of the link resolver.

Many content providers include functionality that creates an OpenURL to describe each article or journal that is cited in an abstract or index. This OpenURL typically sits next to the citation and displays "search for this content" or the name or logo of an OpenURL vendor. When a patron clicks on the link, the OpenURL is directed to the library's link resolver.

When the OpenURL is received by the link resolver, the link resolver processes the data in the OpenURL and is able to provide a number of services to the patron, using the information in the OpenURL. The most popular service is to provide URLs that should point your patrons to the full-text of that article or journal, if article-level links are available from the content provider. When article level links are not available (as is often the case) the link resolver provides the next best URL, typically at the journal level. Additionally, the link resolver may offer links to alternative sources for finding the desired content.' [These alternative sources can include your online catalog, links to your Interlibrary Loan request function, etc.]²

Comparison of OpenURL Resolvers

The subcommittee identified 9 products currently available for purchase, as of March 2003. Please note that some of these products are very new (recently released, or about to be released in the next few months), so they have no installed base of users as yet, and that more products are undoubtedly forthcoming. Also, many products offer OpenURL resolution along with other services; some in combination with ejournal management services, some with metasearch/broadcast search engines, or other services. The focus of the subcommittee was the OpenURL resolution services themselves.

This report has several sections, all of which reside in the 'OpenURL Documents' folder under the Governance tab, MOBIUS Electronic Resources Advisory Committee on the MCO website (direct URL <http://mco.mobius.missouri.edu/filemanager/list/268/>). There is this summary report; there are individual profiles of each of the nine OpenURL products we reviewed; there is a Features Comparison Table that summarizes all nine products; and there is a Literature Search for background reading on OpenURL and related topics.

System Requirements and Functionality

Eight of the nine identified products can be hosted by the vendor; that is, the service resides on servers at the vendor. Three of these eight do not offer a locally-hosted option; the other five offer both local and remote options. One product, Innovative Interfaces' WebBridge, is offered *only* in a locally-hosted environment, on the library's Innopac catalog server. The locally-hosted options require that the library purchase one or more servers, or in some cases use existing servers. This can be viewed as either an advantage or a disadvantage: while a local server has obvious costs for hardware and staff time, the locally-hosted products seem to offer more options in terms of customization and features than the remotely-hosted products. Please see the product profiles for further details on hardware requirements for locally-hosted products.

Services Provided

All of the identified products provide context-sensitive linking from article citations in databases to full-text articles. All provide this linking via the OpenURL, which is an emerging (but not yet finalized) standard of NISO. (Please see <http://library.caltech.edu/openurl/> for more information.) Most claim to be able to work

with any resource which is OpenURL-compliant, so one might assume that the number of resources that each product can provide links to and from would be roughly the same. However, the source and target lists provided by some of the vendors are quite different in the number of resources listed. Other vendors do not provide lists.

One major point of difference between the products is whether or not a 'knowledge base' of sources and targets is provided to the library customer, from which to build the library's profile of subscribed services. Seven of the nine products provide a knowledge base; WebBridge and OL2 do not. It is difficult to compare the size of the knowledge bases, as some vendors provide numbers of ejournals they can link to, and others state a number of 'databases' – without defining what that means. Serials Solutions claims 400 databases; CARL claims 500; Sirsi claims 'over 300 publishers and nearly 100 aggregator suppliers;' Endeavor claims 'over 13,000 scholarly sources.' In some instances, the knowledge base is also the basis for ejournal tracking services, such as A-Z lists (Article Linker, Sirsi Resolver, Gold Rush Complete). Other products, such as LinkSource and LinkFinderPlus, say their knowledge bases are *not* intended to be tracking services, but claim to be able to work with such vendors to upload data (of course, that means the library customer must subscribe to both services).

Another point of difference is that some products require the library customer to become a member of CrossRef (\$500/year) in order to make use of DOIs for linking; other products do not. (Please see <http://www.crossref.org/03libraries/16fastfacts.html> and <http://www.doi.org/> for more information on CrossRef and DOI.)

All of the OpenURL products state that they provide links to the library's local web OPAC for local holdings; other library catalogs, as specified by the library customer; and most state that links can be created to the library's ILL service. Some products can link to web search engines; Web of Science (if the library subscribes) for papers citing an article; for books, links to Amazon.com and similar websites. How these links are displayed to the library user (visual appearance, library logo) is in some cases very customizable (SFX, Sirsi Resolver, OL2, WebBridge, LinkFinderPlus, LinkSource), and in other cases not at all customizable, at least as yet (Article Linker, Gold Rush).

All of the products claim to work with Innovative Interfaces web OPACs. However, it is not clear whether most of them can do more than pass a single element at a time (ISSN, title, author), to the web OPAC as a target. True OpenURL communication, using the web OPAC as both a source and target, may be limited to Innovative's product, WebBridge – or to libraries that purchase WebBridge in addition to another OpenURL resolver.

Some of the products also allow libraries to rank the target resources, to 'weight' them in order to steer the user to preferred resources before less-preferred resources. LinkFinderPlus and LinkSource allow such weighting. Article Linker does not, until the release of version 2 by the end of 2003; this is a planned future enhancement for Sirsi Resolver.

Eight of the nine products are available as stand-alone services; only OL2 from Fretwell-Downing cannot be purchased separately from the vendor's portal service, ZPortal (although Fretwell is considering making OL2 a stand-alone product). A number of the vendors offer companion products, however, that library customers should probably take into consideration when evaluating OpenURL resolvers. Innovative's WebBridge can be purchased in a package with both a metasearch engine (MetaFind) and/or proxy server (Web Access Management). Sirsi's Resolver is part of Sirsi Rooms, which they say is not a portal or a search engine, but a 'context management solution' (see <http://www.sirsi.com/Sirsiproducts/rooms.html> for more information). Ex Libris provides MetaLib, a metasearch engine, in addition to SFX. Endeavor's metasearch product is ENCompass, which works with LinkFinderPlus. CARL, Serials Solutions, and

Ebsco all provide ejournal management services (A-Z lists) in addition to their OpenURL resolvers.

Some vendors claim their OpenURL resolvers will work with other vendor's metasearch engines and/or portals, such as 1cate with ZPortal and WebFeat Prism. Evaluating these companion products was beyond the scope of this subcommittee.

Setup and Technical Support

Setup time for the various products varies greatly, depending on whether it is a locally-hosted installation or not. The estimates range from a week to 2-10 weeks to 60 days to 2-3 months; how much of this time is hardware setup and software installation and training, and how much is profile building of subscribed services, depends on the vendor. For the remotely-hosted services, the timeframe from contract signing to rollout depends almost entirely on the library customer's staff: it is the library staff who must build a profile of the library's subscriptions, and 'turn-on' of the service at the vendor's end takes little time. If the library is already a customer of a vendor's ejournal tracking services, the profile is already essentially established.

The library staff must also configure their A&I database subscriptions to link to the link resolver service; this is not something the OpenURL resolver vendor can do for the customer, though a number of them offer specific instructions for many database vendors' interfaces.

Some vendors provide training, either for a fee or included in the contract; most of the remotely-hosted services say that no training is necessary, but some offer it if requested. Most or all provide technical support via a toll-free phone number and/or email.

Pricing

Some vendors will provide pricing upon request for a quote, but do not have a published price list. For those that do, the lowest price quoted is \$4,000/library/year (Gold Rush Complete). Price will depend greatly on whether a local server is installed. A number of the services base their prices on FTE count, others on number of ejournals tracked, or some other algorithm. Several offer consortial discounts, either to individual libraries (simply based on consortium membership), or to groups of libraries within a consortium subscribing together (a buying club).

Consortial issues

Article Linker will not work with consortia; each library would have a separate subscription to set up and maintain, though they do give a price discount based on MOBIUS membership. 1cate would only work for a consortium of all the target and source resources were shared; since that is not true for MOBIUS members, in effect each member would have their own subscription. All the other products claim to work with consortia, though in some cases the products are so new that there are no existing consortium customers.

MOBIUS members who share a cluster catalog might consider sharing an OpenURL resolver product as well. It might make sense to purchase an OpenURL resolver at the cluster level, and in effect be treated as a mini-consortium – so choosing a product that works well in the consortial environment would be important.

For details, please see the 'Consortia' section of the Features table, and the product profiles.

Conclusion

There is little doubt that providing context-sensitive linking between our electronic resources would greatly benefit our users. Having compiled the information in this report, it is clear that implementing an OpenURL resolver service is not simple, or inexpensive, either in direct costs or staff time. We recommend that MERAC and in turn the MOBIUS Executive Council share this report with each MOBIUS member, so that they may use the information as a starting point for their own evaluation of whether to provide such service to their users, and if so, which product(s) to investigate in more detail.

Respectfully submitted,

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¹ Email message from Axie Hindman to MOBIUS Electronic Resources Advisory Reps MERAC-L@PO.MISSOURI.EDU, October 14, 2002.

² <http://www.serialssolutions.com/articlelinker.asp#OpenURL> (note: site has been updated, and quoted text is no longer available, as of 3/17/03)