By selecting "Report Bad Link," the link to any menu can

Improving the Resolver Menu

The Most Bang for Your Buck

Abstract

Chapter 2 of "Rethinking Library Linking" details improvements made to the SFX resolver menu at Eastern Kentucky University and makes suggestions that other libraries can use to improve resolver menus. Also covered here are improvements that can be made by examining queries available in a standard SFX installation.

ny library can benefit from thinking critically about the use and usability of its link resolver. Many improvements can be made to the resolver interface by applying basic web usability principles; other improvements can be made using tools and reports contained within the resolver itself.

Usability is key to a satisfactory patron experience, whether one is planning a new OpenURL link resolver installation or seeking to improve a current implementation. It is important to set up a resolver menu so that the sometimes complex steps to obtaining an item are as simple as possible. Use brief and active language without library jargon, such as "Get it online," rather than "Download full text." Take advantage of rules that will minimize dead ends, if available, such as suppressing a link into the library catalog if there are no print holdings, suppressing a document delivery link when online full text is available, and suppressing a link back into the originating database.

Resolver Menu Redesign at EKU

The SFX Work Group was established as a subcommittee of the Online User Experience Team (UX), which was given the responsibility of thinking more holistically about all library Web content and systems and improving the usability and functionality of each. Thus, changes to the resolver menu were governed by basic Web usability principles. In

a redesign process during the summer of 2009, the SFX Work Group at EKU Libraries was charged with analyzing and improving the SFX interface and made the following improvements in our link resolver menu.

At the start of the redesign process, the menu looked like figure 2.

The process of obtaining the text of an item can involve several steps. It can be held by the library online or in print; it can be obtained via interlibrary loan; and an increasing number of articles are freely available online, thanks to the open access movement. Figure 2 illustrates two of these steps, a link to full text online and a link to the library catalog. A third step, the interlibrary loan request, is not present because the article is available online. The thinking at the time-whether deliberate or not-mirrored the library instruction process by which undergraduates were introduced to online searching. This numbering system and the extra text it represented were removed in our redesign. The interlibrary loan request was also added to every menu, facilitating user requests for articles from the menu that cannot be found or that are falsely represented in the knowledge base. We significantly reduced the amount of text used to describe each service and collapsed the listing for each service into a single line, with a second line for any available holdings. Outdated "Go" buttons were removed in favor of linking the action: "Get it online," "Get it in print," "Get it from another library." Small icons were added as visual cues relative to each service.

We also created additional services, integrating more options into the menu. Figure 3 illustrates the redesigned menu with online full text targets, and figure 4 illustrates the redesigned menu with print holdings and the distance education request, one of these additional services.

"Report Bad Link"

be sent to the electronic resources librarians with a single click. Users are required to leave their name and e-mail address and are given the option of leaving comments. A link to the menu is sent via e-mail to EKU's electronic resources librarians, who frequently respond to link reports within one to two business days. This target was used 225 times in its first year, or only one tenth of one percent of the time that it appeared on menus, an interesting statistic in itself.

"Search Google Scholar"

The target "Search Google Scholar" was used nearly 500 times the first two months it was available, or 6 percent of the time that it appeared on SFX menus. As our testing revealed, this target is particularly useful for items available via Google Books and for articles and conference proceedings available via open access from publishers or in institutional repositories. Previews, tables of contents, reviews, tags, maps, and other information are often available for books. A Google Book preview often provides enough text to indicate to the user whether obtaining the book via interlibrary loan would meet his or her needs.

"Distance Education Request"

EKU has four regional campuses and other centers located in the university's 22-county service region and an increasing number of online-only students located nationwide. EKU provides equivalent library services to these students, as defined by the ACRL Guidelines for Distance Learning Library Services, including mediated access to print materials located on the main Richmond campus. The "Distance Education Request" link (see figure 4) in SFX offers a quick and accurate way to submit these requests. It is much preferable to the former method, which required users to copy and paste each field of the citation, as well as their personal information, for each request. The new request service was used more than eighty times in its first month, during a summer semester, an increase of more than tenfold over the number of distance education requests submitted during the same time the previous year. Discussions are underway at EKU for combining and streamlining our current three delivery services to eliminate needless referrals and to deliver as many requests online as possible, rather than via ground courier. Those services are traditional interlibrary loan, document delivery, and distance education requests. It is expected that SFX and Illiad will play significant roles in this transition.



Figure 2 Former EKU SFX menu.



Figure 3 Current EKU SFX menu.



Figure 4 EKU SFX menu with "Get it in Print" and "Distance Education Request" links.

"Get It in Print"

Journal titles were activated in our SFX knowledge base, but we did not add holdings. When SFX finds an ISSN match for a journal, a target link to the catalog, "Get it in Print," is presented (see figure 4). It is important to note that because this is a match at the title level rather than at the issue level, this method occasionally results in false positives, such as when the library is missing issues or does not own a complete print copy. There are several options for making print holdings information available in a resolver menu. In the future, EKU may revisit David Walker's Chameleon SFX plugin to enable real-time lookup of book and journal holdings, but the journal holdings in the catalog must be cleaned up and made consistent before this can happen. SFX menus representing books will present a "Get it in print" link if there is an ISBN or-failing that-a title match in the library catalog. EKU will be investigating connecting SFX to OCLC's xISBN service to make this service more robust.

Chameleon SFX Catalog Integration Plugin www.exlibrisgroup.org/display/SFXCC/Chameleon+SFX +Catalog+Integration+Plugin

Resolver Rules and Direct-to-Full-Text

Resolver products typically have rules built in for conditionally displaying a target, taking advantage of CrossRef DOI linking, and pushing the user directly to the full text of an article instead of displaying the resolver menu. Examples of conditional target display include suppressing a link to the interlibrary loan form if full text or print holdings are found and suppressing a link into the database from which the OpenURL originated. Before enabling direct links to full text in lieu of displaying the resolver menu, a library must test this capability and exclude any targets that don't work reliably. A library could conversely enable only those targets that are most often used or that resolve most reliably. It is important that these full text windows display a button or banner that can return the user to the full resolver menu. If for some reason the target item is not available, the menu will facilitate the use of other services, rather than being a dead end.

Use Statistics: SFX

Examination of reports built into the link resolver can assist libraries in deciding where to focus energies when seeking to make improvements. SFX makes several statistical reports accessible that reveal how the system is (and isn't) used. While many of the reports, such as "Journals Requested without Full Text" and "Unused Full Text Journals," are geared toward collection management, some can be used to examine resolver functionality. For an excellent introduction to the queries available in a standard SFX installation, see "SFX Statistical Reports: A Primer for Collection Assessment Librarians" by Chrzastowski, Norman, and Miller.1

Using these standard SFX queries, it is possible to gauge which sources and targets are used the most, which could assist in identifying priorities for testing. "Top Target Services Shown in the SFX Menu" (Query 6) reveals the number of times a particular target and its concomitant service have been displayed in SFX menus over a period of time. To get an idea of how these requested menus were used, the report from Query 6 must be combined with Query 7 or Query 8, which detail "click-throughs," or how many times each target was clicked by users.

EKU generally has only one service per target. Libraries that use more than one service per target (for example, those which enable GetFullText and GetAbstract or GetAuthor) could use Query 8, "Number of Click-Throughs per Target Service," to get an idea of the demand for these different services. In table 1, results from Query 6, "Top Target Services Shown in the SFX Menu," were combined with Query 7, "Number of Click-Throughs per Target," to begin to paint a picture of high-demand targets. The table is sorted by number of click-throughs.

Table 1 provides a good indication of where we at EKU could focus our energies in testing target URLs. Errors in highly used targets affect more people, and therefore fixing these errors would benefit the highest number of users.

Query 19, "Most Popular Journals," displays a title and ISSN list of the most frequently-used journals linked from the resolver, as well as the number of times the title was presented in a menu and subsequently clicked. This query's results could also be used to prioritize target links for testing. Table 2 shows the top five most popular journals at EKU in April 2010.

These results are particularly disturbing, as the top two "journals" are in fact requests for individual dissertation titles that we know failed, without exception. Upon further examination, we found the source URLs to be technically correct. These titles may very well be found in ProQuest's Dissertations Full Text, but the resolver is not able to translate citations from Dissertation Abstracts International into links for items within the Dissertations Full Text database. See chapter 3 for an explanation of the work-around needed to fix this problem, which was implemented at EKU in August 2010.

The guery that is perhaps the most useful for troubleshooting individual journal titles is Query 20, "OpenURLs that resulted in no full text services, selected by source." This query displays individual journal titles used by patrons but for which no full text targets are presented. Full text for articles can be unavailable for varying reasons: the article in question lies within an embargo

Target	Requests	Click-throughs	Click-through Rate
Interlibrary Loan Request	40,039	1,282	3.20%
EBSCOhost Academic Search Premier	1,663	889	53.46%
Library Catalog	6,545	763	11.66%
Miscellaneous Free Ejournals*	1,351	557	41.23%
Elsevier Science Direct	513	385	75.05%
EBSCOhost CINAHL with Full Text	517	324	62.67%
EBSCOhost Business Source Premier	559	275	49.19%
Miscellaneous EJournals**	448	269	60.04%
Sage Criminology Full Text Collection	305	245	80.33%
Gale Opposing Viewpoints	474	184	38.82%

Table 1Top ten click-through targets at EKU, April 2010.

Journal	Requests	Click-throughs	Click-through Rate
Dissertation abstracts international	97	21	21.65%
Dissertation abstracts international. B, The sciences and engineering	96	13	13.54%
Science	77	73	94.81%
Criminology	68	37	54.41%
Journal of Criminal Justice	67	52	77.61%

Table 2Top five journals at EKU, April 2010

period; the library's online subscription does not start early enough; the online version contains only selected full text. The full text of books, chapters, dissertations, and other formats is sometimes not found due to errors in the OpenURL syntax; see chapter 3 for examples of how to examine and code source OpenURLs like those identified in this query. Query 20 results are listed by source; a source that lists many OpenURLs in this report might be a good place to begin troubleshooting. Source URL troubleshooting requires communication with database vendors and publishers. It's worth noting that administrators of locally hosted SFX installations have the ability to edit source parsers, the source-to-resolver translators; this facilitates addressing persistent source problems locally.

SFX Query 11, "Most Popular Journals Selected by Source," lists the journals used most frequently for any given source database. These reports might be used to identify how a new database is performing or to estimate how widely word of a trial database spread across the community.

Caveats

The SFX Queries module is not intuitive to use. Even with the excellent primer found in Chrzastowski, Norman, and Miller's "SFX Statistical Reports," navigating the interface can be difficult. We suggest the above queries as a starting point for a discussion among library staff about which sources seem most difficult to use and which targets seem to fail most frequently.

Codes for source databases are nearly unfathomable, making the reports that are generated by source or that present results sorted by source are particularly difficult to interpret. A key to interpreting the Source ID, or the "sid," would be helpful to the library community but does not yet exist.

Serials Solutions does not provide standard reports that address resolver usage, except at a level of the total number of click-throughs for a given time period. This number of click-throughs is compared with the A–Z title list and with 856 links clicked in the library catalog, for customers that use MARC records generated by Serials Solutions. Target click-to statistics are available, but they do not separate A–Z list or MARC record use. OpenURL server logs that could be parsed by customers are not readily available, though they can be requested. We hope that Serials Solutions will invest development resources in making 360 Link evaluation possible as a part of its core assessment utilities.

Note

 Tina E. Chrzastowski, Michael Norman, and Sarah Elizabeth Miller. "SFX Statistical Reports: A Primer for Collection Assessment Librarians," Collection Management 34, no. 4 (2009): 286–303.

^{* &}quot;Miscellaneous Free Ejournals" is a target comprising 18,302 individual titles at EKU that are freely available via the Web. These websites are not available on other platforms. These titles are not sent through the library proxy server.

^{**&}quot;Miscellaneous EJournals" is a target comprising 95 individual journal titles at EKU that are not available on another target platform. These are proxied titles.