

NELLCO's Universal Search Solution: a Report on a NASIG 2009 Conference Session

Barbara M. Pope (bpope@pittstate.edu)

Periodicals/Reference Librarian, Leonard H. Axe Library, Pittsburg State University, Pittsburg, KS 66762

Abstract

This article summarizes a session at the 24th Annual North American Serials Interest Group (NASIG) Conference held in Asheville, NC on June 6, 2009. The presenter for the session, Roberta F. Woods of Franklin Pierce Law Center, gave the history behind the New England Law Library Consortium (NELLCO) development of an alternative to a federated search engine that they dubbed Universal Search Solution. The search tool helped the consortia libraries to resolve their problem of underutilized resources.

Keywords: Federated Search Engines, Consortia, Databases, Open source software, New England Law Library Consortium, NELLCO, Law libraries

Introduction

The 24th Annual North American Serials Interest Group (NASIG) Conference was held in Asheville, N.C. at the Renaissance Asheville Hotel from June 3-7, 2009. Roberta F. Woods, Reference and Electronic Resources Librarian and Assistant Professor of Franklin Pierce Law Center, presented the session titled "NELLCO's Universal Search Solution (USS)" on June 6th. In her presentation, Woods described how the members of New England Law Library Consortium (NELLCO) devised a solution to the problem of underutilized electronic resources held throughout the consortium.

Background

The "Current Members" section of NELLCO's website notes that NELLCO has 25 full members, 68 affiliate members from 33 states across the United States, and 9 affiliate members from 3 countries. Members collaborate on many areas, including consortial database purchases, licensing, and reciprocal interlibrary loan. The NELLCO website's "About" section notes that NELLCO's "mission promotes cooperative resource sharing," enabling consortium members to share resources for the benefit of their organizations, and with this project are further colla-

borating to make their resources more useful to patrons.

The Problem

Woods began the session by describing the consortium members' problem of underutilized resources due to lack of visibility or lack of ease of use of various databases. She added that the member libraries have a great number of "hidden resources" including locally developed resources that are not indexed in any database. In addition, consortium libraries' resources could not be searched from a single search location. These factors became the beginnings of the objectives behind NELLCO's project, Universal Search Solution. One of NELLCO's primary objectives with the project was to optimize visibility of the consortium libraries' existing resources and make them easier to use by being able to search all resources, including the online catalog, databases, vetted free websites, and locally developed content simultaneously. In her presentation, Woods identified three project goals with the Universal Search Solution Project: 1) improving resource discovery, 2) having a single search box, and 3) limiting results to a single search set. Woods added that consortia members wanted the system to have a familiar, easy to use interface as

well as have the ability to limit searching to a specific library's resources.

The Search for a "Solution"

NELLCO began its search by investigating federated search products, but Woods emphasized that members were not satisfied with these products because none offered access to any legal databases. In addition, federated searching is problematic because searches are done in real time. Upon testing federated search products, members found them to be largely unsatisfactory due to the irrelevancy of search results. For example, while consortium members wanted to highlight online catalog results, those results were buried. In addition, vendors did not reveal their relevancy ranking algorithms. The consortium found that the search statistics were skewed, making it appear that the products were being used more often than they actually were. Woods noted the extremely slow connection and loading times and that increased traffic caused database servers to crash.

Woods added that the consortium also investigated using a Google search appliance, but upon testing found that online catalog results were buried just as with the federated search products. However, the appliance performed an index search instead of a real-time search resulting in much faster connection and loading times. Similarly, Google Scholar contacted Woods about using its product, but using Google Scholar would mean the user would be searching a multitude of resources beyond those of the member libraries.

Creating the Solution

Woods noted in her presentation that the consortium carefully examined many methods of providing searching across all available resources, including federated search engines, a Google search appliance, and Google Scholar. However, none of them worked well for the consortium. NELLCO then applied for the National Leadership Grant from the Institute of Museum and Library Services to obtain funding for product development. After the grant was

awarded, the consortium formed an eight-member committee representing two small law schools, three large law schools that also have undergraduate programs, one public law library, as well as Index Data, the company hired to create the product, and Hein-Online, a database vendor. Index Data created the tool, which they dubbed the Universal Search Solution. Woods noted that product development took most of 2008 and that beginning in early 2009, beta testing began in 27 libraries. Like the Google search appliance, the Universal Search Solution performs index searches, making the searching and loading times fast. It removes duplication from the results, displays them as a single set, and notes the owning library. Faceted searching allows patrons to restrict searching by law school, author, vetted free websites, and paid databases. The default search type is phrase searching, and while advanced searching is available, Woods notes that anecdotal evidence indicates that students do not regularly use this search method. Libraries will be adding more resources before fall 2009 and they plan to roll it out to students at that time.

Testing the Universal Search Solution

I performed searches on several topics in Universal Search Solution and found it to be very fast in searching and loading the results. Results are displayed in order of relevancy by default, but this can easily be changed to alphabetical order by title or by publication date, as desired. In addition, the results are also available by facets on the right side of the screen. This allows patrons to easily filter results by their home library or a particular database. The relevancy ranking algorithm of the Universal Search Solution is based on the number of times a certain phrase appears in a document and throughout the index.

Conclusion

While other options that NELLCO looked at were not useful, Universal Search Solution has proven to be a satisfactory alternative that solves the problems the libraries had. The search interface and results display are clean and easy to use and once released to

patrons, the search tool will increase the accessibility and visibility of libraries' resources. Once the product is finished with beta testing, Ms. Woods noted that the tool will be available via open source to any library that wants to download it and use it. In the meantime, she has invited libraries to try out the tool. For additional information and to search, please go to <http://www.nellco.org/index.cfm?pageId=505&parentID=504>.

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