NELLCO’s
Universal Search Solution

An Alternative to Traditional Federated Searching

CLC: Trendspotting IV
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NELLCO

- Founded 1983 in New England
- Expanded in 2003 nationally
- Expanded in 2008 internationally
- 100+ law library members
Federated Search and NELLCO

- 2004 Reference Interest Group – BU
- Why do our users need federated search?
  - Our users go to Westlaw, Lexis and Google (the ‘anchors’)
THE PROBLEM
Federated Search and NELLCO

- 2004 Reference Interest Group – BU
- Why do our users (law libraries) need federated search?
  - Our users go to Westlaw, Lexis and Google (the ‘anchors’)
  - Miss out on ‘boutique’ resources
    - Current discovery (out)mode is through OPACs and A-Z lists
  - We need to steer researchers to relevant resources
    - Enhance scholarship
    - Justify budgets
The Information ‘Mall’

Google

Lexis

Westlaw
One Member’s Approach

- Franklin Pierce Law Center (FPLC) – Director Judy Gire commissioned working group – Roberta Woods (Chair)
  - Charge? - find the best fed search tool for FPLC
  - Result of year-long study? – the fed search paradigm isn’t sustainable
Fed Search Paradigm

- Real-time search across multiple databases
- User enters search string
- Search is broadcast to ALL associated databases, regardless of content
- Search string is translated into native search language
- Search results are delivered as they are retrieved
Federated Search Paradigm

1) Search is entered

2) Search is broadcast to content providers

3) Search results are returned as they are received
Problems with the Paradigm

- Excessive/unnecessary vendor server traffic – scattershot approach
- Search may not translate as expected
- Difficulty ranking – first-in-time delivery
- Difficulty de-duping
- Skewed usage statistics
FPLC’s Vision

• Search across ALL electronic content sources
  – OPAC
  – Third-party (paid) resources
  – Free web
  – Internal datasets

• Keep the librarian involved in collection development/selection

• Harness NELLCO’s leverage/vendor relationships?
An Alternative Approach

- FPLC committee began exploring enterprise search technology
  - Developed for fortune 500 companies
  - Intended for searching proprietary content
- Examples
  - Google’s GSA
  - Thunderstone’s Enterprise Search Appliance
  - Vivisimo
  - Endeca
Enterprise Search Paradigm

- Host creates local index of content
- Searcher enters search string
- Search is run against the index
- Search results are displayed
- Results link to content, not index
It’s the Paradigm

- **Index**
  - Real Time *Retrievals*
  - Search a local index (fast)
  - Index is de-duped
  - Relevance ranking algorithm
  - Vendors are part of the solution (partnering)
  - Statistics show retrievals not searches

- **Federated Search**
  - Real Time Search
  - Search entire databases
  - De-Duping problems
  - Result list problems
  - Vendor sites are overwhelmed without notice
  - Statistics are skewed by searches not retrievals
The UNIVERSE SEARCH SOLUTION
What is the U§?

- Universal Search Solution
  - Open Source/Standards Based Solution
- NELLCO Receives National Leadership Grant from Institute of Museum and Library Services!
  - Focus on discovery
  - $384,000 over 2 years – through Nov. 30, 2009
  - Universal Search Solution Project - U§
    - Single-search discovery of your library’s print and e-resources (OPAC, subscription-based resources, free internet content, local content, etc.)
    - Alternative to federated search
The Vision

• Search across ALL electronic content sources
  – OPAC
  – Third-party subscription resources
  – Free web
  – Internal datasets
  – Institutional Repositories

• Increase use and enhance usage stats

• Keep the librarian involved in collection development/selection

• Harness NELLCO’s leverage/vendor relationships?

• How?
NELLCO: The “Mothership”
The Index

• Local index of metadata and full-text
• Advanced search capability
• Faceted search results
• Employs known standards – OAI-PMH, MARC, Dublin core
• IndexData – development partner
Universal Search Solution Paradigm

1) Content providers’ data is indexed locally by NELLCO

2) User enters search against index

3) Search results are returned, relevancy ranked and de-duped

4) Relevant search results link user to content provider
Level 1:
What is your institutional affiliation?

Level 2:
Are you an authorized user?

Search results reflect affiliation

Vendor A
Vendor B
Vendor C

Researcher

Shared Index
Populating the Index

- OAI-PMH (harvesting of vendor records)
  - HeinOnline (primary vendor)
  - Other Vendors Will Follow
- MARC (catalog records)
  - File of MARC Records on a Web Server
  - Syntax to deep link to catalog
- Free Web Crawls (spiders)
Universal Search Solution

- **All** NELLCO Members are entitled to participate at no cost!
- Participating libraries must:
  - Designate a project manager for your library
  - Provide OPAC data for harvesting on a regular schedule
  - Market the application to your users
  - Evaluate the U
- Complete the Library Commitment Form
  - [www.nellco.org](http://www.nellco.org) – click on IMLS Project, then resources
Open Source Software (OSS)

• Licensing Agreement – Gives Rights to
  – Use
  – Modify
  – Redistribute
• Source Code Part of the Distribution
• Allows Derived Works
• Users Become Co-Developers
PARTICIPANTS
Putting Libraries on the Map

- USS Libraries
- Google Maps
Vendors

- Hein
- Oceana/OUP
- LLMC
- Manupatra
- Vlex
- Lexis
- Westlaw
- Gale
- MyiLibrary
- CILP
- IFLP
- Justis
- isinolaw
- Wilson
- Worldtradelaw
- Fastcase
- Lawtel
- Readex
- Paratext - Poole's ILPL
- Indlaw
Demo

- User Interface
- Admin Interface
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Thank you!
Q&A