The Future of the OPAC
Newfoundland & Labrador Library Association
May 2\textsuperscript{nd}, 2008

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Emerging Services Librarian
Memorial University Libraries
State of the OPAC

- Old technology, proprietary architecture
- Not easy to customize or integrate with other services
- Weds an inventory control tool with a discovery tool
- Functions reasonably well for locating known physical items cataloged within the library's collection.
- Marketplace provides a disincentive for vendors to re-write their ILS “code monolith”
## State of the OPAC: ILS Vendors

<table>
<thead>
<tr>
<th>Company</th>
<th>ILS Product</th>
<th>Market</th>
<th>Open Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovative Interfaces</td>
<td>Millenium</td>
<td>Academic</td>
<td>N</td>
</tr>
<tr>
<td>SirsiDynix</td>
<td>Symphony</td>
<td>Public, Academic, K-12</td>
<td>N</td>
</tr>
<tr>
<td>Ex Libris</td>
<td>Aleph, Voyageur</td>
<td>Academic</td>
<td>N</td>
</tr>
<tr>
<td>Follet</td>
<td>Destiny</td>
<td>K-12</td>
<td>N</td>
</tr>
<tr>
<td>Auto Graphics</td>
<td>A Gent VERSO</td>
<td>Small libraries</td>
<td>N</td>
</tr>
<tr>
<td>Polaris</td>
<td>Polaris ILS</td>
<td>Public</td>
<td>N</td>
</tr>
<tr>
<td>TLC</td>
<td>CARLX</td>
<td>Public</td>
<td>N</td>
</tr>
<tr>
<td>LibLime</td>
<td>Koha</td>
<td>Small libraries</td>
<td>Y</td>
</tr>
<tr>
<td>Equinox</td>
<td>Evergreen</td>
<td>Public</td>
<td>Y</td>
</tr>
</tbody>
</table>
Missing OPAC Functionality

- Spell checking
- RSS Feeds
- De-duping (FRBR)
- Relevancy Ranking
- Faceted search results
- User-generated reviews
- End-user tagging, bookmarking, alerting services
- Support for non-MARC formats
- Integrated searching with other sources
## OPAC Add-Ons

<table>
<thead>
<tr>
<th>Company</th>
<th>Add-On Product</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovative Interfaces</td>
<td>Encore</td>
<td>Relevancy, Facets, Tagging, Ratings, Federated Search</td>
</tr>
<tr>
<td>SirsiDynix</td>
<td>Enterprise, Single Search</td>
<td>Relevancy, Facets, Federated Search</td>
</tr>
<tr>
<td>Ex Libris</td>
<td>Primo, Metalib</td>
<td>Relevancy, Facets, Federated Search</td>
</tr>
<tr>
<td>LibLime</td>
<td>Koha Zoom</td>
<td>Integrated Federated Search</td>
</tr>
<tr>
<td>TLC</td>
<td>Endeca, Aquabrowser</td>
<td>Relevancy, Facets, Visual Search</td>
</tr>
<tr>
<td>Serials Solutions</td>
<td>360, Webfeat, Vivisimo</td>
<td>Saas, Facets, Federated Search</td>
</tr>
<tr>
<td>OCLC</td>
<td>Worldcat Local</td>
<td>Saas, Facets</td>
</tr>
<tr>
<td>Homegrown/Open Source</td>
<td>Scriblio, VuFind, Drupal, Fac-Back-OPAC (Solr)</td>
<td>OPAC Replacements, Relevancy, Facets, Tagging, Reviews</td>
</tr>
</tbody>
</table>
The Big Issues

- Maintenance
- Search
- User-generated content
- Integration
Maintenance
Maintenance: Solutions

- High overhead for maintaining MARC records
- Authorities processing services (e.g. Marcive)
- TOC services (e.g. Blackwell’s North America)
- Content Enrichment (e.g. book covers, reviews, author bios)
- Serials Solutions MARC record service
- OCLC delivery of MARC records that match the materials you order through vendors, library holdings automatically updated in WorldCat.
- Software as a Service: Remote hosting of ILS/OPAC
Maintenance: WorldCat Local

- Uses bibliographic records from Worldcat.org
- Relevancy ranking
- Multiple versions of a work together under one record
- Faceted browse
- Citation formatting/exporting
- Cover art and additional evaluative content.
Developing Semantic Web services
by H P Alesso; C F Smith

Type: Book; English
Editions: 6 Editions
ISBN: 1568812124 9781568812120
OCLC: 54822014
Related Subjects: Semantic Web, Web services, Web sémantique
Citations: Cite this Item, Export to EndNote, Export to RefWorks

Get this Item

Preview Item (Google Books)  Request Item

University of Washington Libraries (4 of 5 copies available)

<table>
<thead>
<tr>
<th>Location</th>
<th>Call Number</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tacoma Stacks</td>
<td>TK5105.88815 .A55 2005 text</td>
<td>MISSING</td>
</tr>
<tr>
<td>Tacoma Media</td>
<td>TK5105.88815 .A55 2005 text</td>
<td>AVAILABLE</td>
</tr>
<tr>
<td>Bothell/CCC Stacks</td>
<td>TK5105.88815 .A55 2005 text</td>
<td>AVAILABLE</td>
</tr>
<tr>
<td>Bothell/CCC Circ Desk</td>
<td>TK5105.88815 .A55 2005 disc</td>
<td>AVAILABLE</td>
</tr>
</tbody>
</table>
Usability studies show that misspelled words cause up to 10% of user failure. Some vendors have added this functionality to OPAC (e.g. Koho Zoom).
Search: Spelling

- Third party add-on: Lucien spell check
Search: Relevancy ranking

- Traditional Boolean, Last-in First-out sorting is not very good for large result sets or full-text indexes.

- Relevancy ranking algorithms are based on:
  - Term frequency
  - Inverse document frequency (the fewer times the term shows up in the entire database, the more important, or unique, it is.)
  - Field weighting (allows a word to be considered more relevant if it appears in certain fields e.g. 245)
  - Proximity of query words
  - Stemming: variant word forms
Several vendors offer relevancy ranking (e.g. Endeavor's WebVoyage has offered it for about 9 years now) but libraries have often not turned it on.

Many relevancy ranking algorithms are designed for full-text documents, they don't always work that well against citation data.
Facets are clusters of related terms that appear within a results set. Facets allow you to limit your searches, drill down, or browse areas that interest you. Facets are useful for manipulating large sets of results.
Some institutions have chosen to build this on top of their existing catalogues e.g. Endeca, Solr/Lucene, VuFind. Most vendors are developing add-on products for their OPACS that include faceted search. Some examples include:

- Innovative Interfaces Encore (multi-ILS support)
- Ex Libris Primo
- SirsiDynix Enterprise
- VTLS Visualizer
Search: Visualization

- Translations, spelling variations, related terms are presented as a clickable map beside the search results.

- Clicking on a term helps to refine your original search.

- Aquabrowser, Grokker
Search: Visualization

Aquabrowser – Queen's Library, NY
http://aqua.queenslibrary.org/

Results 1 – 10 of about 4,000 for feminism, sorted by: relevance

The coming of Lilith
essays on feminism, Judaism, and sexual ethics, 1972–2003
Judith Plaskow, Donna Berman
Call number: 296.082 P
Year: 2005
Found: Feminism (4) ; Judaism (5) ; feminist (7)
Subject: women in judaism, feminism, ...

Standing again at Sinai
Judaism from a feminist perspective
Judith Plaskow
Year: 1990
Found: Feminism (1) ; Judaism (2) ; feminist (1)
Subject: women in judaism, feminism

The voice of Sarah
feminine spirituality and traditional Judaism
Tamar Frankiel
Call number: 296.082 F
Year: 1995
Found: Feminism (1) ; Judaism (3) ; feminine (1)
Subject: women in judaism, jewish women, ...

God, sex, and women of the Bible
discovering our sensual, spiritual selves
Shoni Labowitz
Call number: 221.922 L
Year: 1998
Found: Feminism (2) ; Judaism (1) ; feminist (1)
Subject: women in the bible, bible and feminism, ...
User Generated Content: Tagging

- Allows end users to bookmark items
- Allows professors to tag books for their classes
- Allows instruction and reference librarians to tag books for specific assignments
- Allows collection librarians to tag gifts with donor name
User Generated Content: Tagging

View: Cloud | Alphabetic List

african-american_studies (28)  alice_walker (9)  ambrose_bierce (15)  august_wilson (9)  autism (9)  baseball (9) basketball (16)  bobbie_ann_mason (9)  caps (8)  dorothy_parker (9)  edgar_allan_poe (29)  eng102 (24) ernest_hemingway (7)  family_violence (15)  flannery_oconnor (27)  flannery_oconnor_criticism (38) gay_and_lesbian_studies (36)  greg (9)  html (17)  information_literacy (8)  james_baldwin (13) jewish_studies (40)  john_cheever (11)  john_steinbeck (12)  john_updike (17)  john_updike_criticism (13) joyce_carol_oates (16)  langston_hughes (13)  linux (10)  literary_journals (21)  michelangelo (8) nathaniel_hawthorne (16)  native_american_studies (8)  opposing_viewpoints (29)  php (10)  procrastination (19)  raymond_carver_criticism (9)  real_estate (15)  richard_wright (14)  sat (8)  shirley_jackson (8)  smith (10) southern_culture (13)  tag (8)  weight_loss (82)  william_faulkner (23) william_faulkner_criticism (82)  women's_studies (14)  zora_hurston (15) zora_neale_hurston_criticism (10)
The Semantic Web: crafting infrastructure for agency
Leuf, Bo.
AVAILABLE - Storage - TK5105.88815 .L48 2006
Request this title

Information sharing on the semantic Web
Stuckenschmidt, Heiner.
AVAILABLE - Storage - TK5105.88815 .S84 2005
Request this title

A semantic Web primer
Antoniou, G. (Grigoris)
AVAILABLE - Storage - TK5105.88815 .A58 2004
Request this title

Intelligent information integration for the Semantic Web
Visser, Ubbo.
AVAILABLE - Storage - TK5105.88815 .V58 2004
Request this title

Spinning the semantic Web: bringing
The good, the bad, and the ugly
Detroit Tigers: heart-pounding, jaw-dropping, and gut-wrenching moments from Detroit Tigers history
by George Cantor
Cantor, George, 1941-
Chicago : Triumph Books, c2008
178 p
ISBN1600780520

View without comments

Add a note to the card:

Use the following graphic to select which position you want to add your note:

Position 1:

Position 2:

Position 3:

Add your marginalia!
Search

Your search found 33 items with all of the following terms:

- Keyword: american psycho [x]

Click [x] to remove a term, or use the facets in the sidebar to narrow your search. What are facets? Results sorted by keyword relevance.

1 2 3 Next »

American Psycho : A Novel

by Bret Easton Ellis

Book 1991

Description: Now a major motion picture from Lion's Gate Films starring Christian Bale (Metroland), Chloe Sevigny (The Last Days of Disco), Jared Leto (My So Called Life), and Reese Witherspoon (Cruel Intentions), and directed by Mary Harron (I Shot Andy Warhol).

summarized from Amazon.com

Tags: Ellis, Bret Easton

Availability

LOCATION       CALL #          STATUS
(UPPER LEVEL)  PS3555.L5937 A8 1991 AVAILABLE
(UPPER LEVEL)  PS3555.L5937 A8 1991 c.2 AVAILABLE

Comments (0) | Click for location and availability
The kite runner
by Khaled Hosseini

Members | Reviews | Popularity | Average rating | Conversations
---|---|---|---|---
13,536 | 380 | 45 | ★★★★½ (4.3) | 125

Recently added by: selddine, darlingmisty, pioneercynthia, BurlingtonNorthern, clind07, jadfair, kgsmims (see more)

Member reviews

Showing 1-3 of 380 (next | show all)

A gripping story of friendship, betrayal and forgiveness/redemption. When I finished this book I told everyone I knew about it. [ ★★★★★]

kims-embroidery | Apr 27, 2008 | 

I agree with everyone who wrote that this is a wonderful book and a must read... I must say that it was just too depressing and it seemed to become more and more depressing as it went on. I just didn't love the way the book made me feel. ( ★★★★)

quiebus | Apr 27, 2008 | 

Winner of the Penguin/Orange Reader’s Group Prize 2006 and 2007 this book was a compelling read. Ranging from the cold Afghanistan winter of 1975 with friends Amir and Hassan in Kabul flying kites to the plight of refugees fleeing to Pakistan in the most appalling of circumstances we follow Amir to America and finally his return to his homeland in 2001.

At times it is an almost unbearably sad and tragic tale. There are striking contrasts between terror and tenderness, love and the cowardice and vengefulness of bullying. The main theme is one of ‘giving’ in boundless amounts yet not asking for anything in return as exemplified in Hassan's
Integration
Integration: Widgets

Find Books

Use the Library Catalogue to search for books.

Go

Here are some suggested subject searches in the Library Catalogue:

- Folklore - Newfoundland and Labrador
- Tales - Newfoundland and Labrador
- Newfoundland and Labrador - Social life and customs
- Folk music - Newfoundland and Labrador

Find Reserves

To find reserves for your Anthropology course, type in the four digit number of your course.

ANTH [ ] Go

Or, search by course instructor.
Integration: RSS Feeds

- Saved searches
- New Books
Integration: Linking & Bookmarking

• From “Scriblio” at Plymouth State

Link or embed this

<table>
<thead>
<tr>
<th>Permalink</th>
<th>Embed Small</th>
<th>Embed Large</th>
</tr>
</thead>
</table>

Bookmark this at

- del.icio.us
- Facebook
- Digg
- StumbleUpon
- reddit
- BlinkList
- Newsvine
- Furl
- Tailrank
- Ma.gnolia
- Netscape
- Yahoo! My Web
- Google Bookmarks
- Technorati
- Windows Live
Integration: Union Indexes

- BlackLight at University of Virginia
  - ~3.7M MARC records
  - ~500 text object subset from the Digital Collections Repository
  - 320 Tang Dynasty Chinese poems from the Chinese Text Initiative

- Records are harvested into Solr/Lucene, and a common XML structure is applied to allow for searching and sorting of several sources simultaneously

http://www.lib.virginia.edu/digital/resndev/blacklight.html
Integration: Union Indexes

- **VuFind**: OPAC Replacement
  - 2.0 Features (e.g. tagging, comments, relevancy, facets)
  - Free, Open source (Gnu Public License)
  - Ability to search multiple targets:
    - Catalog Records
    - Locally Cached Journals
    - Digital Library Items
    - Institutional Repository
    - Institutional Bibliography
    - Other Library Collections and Resources
The catalogue is no longer the primary finding tool for research material. The role of the catalogue is a little unclear, but it still has a place of prominence in most libraries.
Trends

- Decoupling the front-end interface from the back-end ILS
- Relevancy ranking & facets
- User-generated content
- Portability, exposing metadata to mash-ups
- Open architecture & web standards
- Catalogue as one of many useful targets
Further Reading


  http://www.libraryjournal.com/article/CA516027.html

  http://www.techsource.ala.org/blog/2006/03/how-opacs-suck-part-1-relevance-rank-or-the-lack-of-it.html

  http://www.libraryjournal.com/blog/1090000309/post/220009022.html

Further Reading

  http://www.libraryjournal.com/blog/109000309/post/1950023995.html

- JISC & SCONUL. Library Management Systems Study: An Evaluation and horizon scan of the current library management systems … for UK higher education. March 2008
  http://www.jisc.ac.uk/media/documents/programmes/resourcediscovery/lmsstudy.pdf

- INGC4LIB listserv (Next Generation Catalogs for Libraries)
  http://listserv.nd.edu/archives/ngc4lib.html

- Web4LIB discussion list  http://lists.webjunction.org/web4lib/


  http://www.librarytechnology.org/
Thank You.