Web Services: Libraries in the Cloud

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19th October 2011

Internet Librarian 2011
The Internet Conference and Exhibition for Librarians and Information Managers

OCLC™ The world’s libraries. Connected.
• “Revolutionizing the Net with Content, Connections & Conversations”
• What and Why is WMS?
• WMS is real
• The power of Infrastructure, Data, and Community
• Let’s hear from the libraries
Why I joined a revolution

- A long history of whining about the state of library automation
- Sorta fixed the OPAC
- Sorta built an ERM
- Sorta didn’t know what to do next
- Then lightning struck

Web-scale Management Services: What and why?
A Web-based cooperative library management tool to streamline cataloging, acquisitions and circulation and provide a next gen discovery tool for patrons.
Why? The changing library environment

We were, are and will be facing:

• Changing formats and usage patterns
• Customized systems for each of the above
• Incredible demand with associated resource pressures (staff and budget)
• Challenges managing associated local hardware and software
• And... we expect the above to continue
It’s real....
Search results for "product marketing" limited to Libraries Worldwide

1. Product marketing for technology companies
   - Author: Mark Butje
   - Format: eBook, Document
   - Language: English
   - Publisher: Oxford; Burlington, MA: Elsevier Butterworth-Heinemann, ©2005
   - Database: WorldCat.org
   - Libraries that own this item: OCLC Library

2. The marketing imagination
   - Author: Theodore Levitt
   - Format: Book
   - Language: English
   - Database: WorldCat.org
   - Libraries that own this item: OCLC Library

3. Advances in electronic marketing
## Account Overview

<table>
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<tr>
<th>Details</th>
<th>Status</th>
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<tr>
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<td>4</td>
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<tr>
<td>Items overdue</td>
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<tr>
<td>Current fine balance</td>
<td>$0.00</td>
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<tr>
<td>Requested items ready to pick up</td>
<td>0</td>
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<tr>
<td>Requested items not yet available</td>
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<tr>
<td>Items claimed returned</td>
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### Enter barcode

- **Enter barcode**: [].

### Set Due Before Date

- **Set Due Before Date**: [ ].

### Results 1-4 of 4

<table>
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<th>Format</th>
<th>Title</th>
<th>Call Number</th>
<th>Barcode</th>
<th>Checked Out Date</th>
<th>Due Before Date</th>
<th>Renewal Count</th>
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<td>📚</td>
<td>The Mahabodhi taleology (Walton, Evangeline)</td>
<td>PS3545.A6293 M33 2002</td>
<td>7489567436740634</td>
<td>09/21/11 1:59:06 PM</td>
<td>10/20/11 12:00:00 AM</td>
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<td>Paradigm shift: the new promise of information technology (Tapscott, Don)</td>
<td>652.01 M215</td>
<td>311186000958508</td>
<td>09/21/11 1:53:51 PM</td>
<td>10/20/11 12:00:00 AM</td>
<td>0</td>
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<td>The role of the academic reference librarian (Whitlock, Jo Bell)</td>
<td>355.1 U141</td>
<td>311186001562773</td>
<td>09/21/11 10:51:50 AM</td>
<td>10/21/11 12:00:00 AM</td>
<td>2</td>
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<td>📚</td>
<td>The terra cotta army: China's first emperor and the birth of a nation (Allen, John)</td>
<td>DST747.9.C47 M34 2008</td>
<td>574386735420577453</td>
<td>09/22/11 4:13:39 PM</td>
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<tr>
<td>1. The quality library: a guide to staff-driven improvement, better efficiency, and happier customers / by Sara Laughlin</td>
<td>✔ This item is being held for you at Main</td>
<td>Starts: 2011-03-22 Expires: 2012-03-22</td>
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<tr>
<td>2. The new rules of marketing and PR: how to use news releases, blogs, podcasting, viral marketing, &amp; online media to reach buyers directly / by David Meerman Scott</td>
<td>✔ This item is being held for you at South</td>
<td>Starts: 2011-04-14 Expires: 2012-04-15</td>
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<tr>
<td>3. The great libraries: from antiquity to the Renaissance (3000 B.C. to A.D. 1600) / by V. Edero</td>
<td>✔ This item is being held for you at Main</td>
<td>Starts: 2011-06-10 Expires: 2011-06-30</td>
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Course Reserves

Search for courses or reserve items

Search results for 'Jeff Schilling' courses:

1. CZECH 101.51 lecture: Elementary Czech I: Individualized Track (14 Items)
   - Description: "Development of oral and written language skills. Not open to native speakers of this language through regular course enrollment or EM credit. GEC for lang course. FL Admis Cond courses. Repeatable to a maximum of 5 cr hrs. Students register for..."
   - Instructor(s): kent rowand, bruce wolfe, amy collins, jeff schilling, tyler james, tyler ferguson, elina greif, rob ross
   - Notes: Foreign Language

2. CZECH 101.51 lecture: Elementary Czech II: Group Track (16 Items)
   - Description: "Development of oral and written language skills. Not open to native speakers of this language through regular course enrollment or EM credit. GEC for lang course. FL Admis Cond courses. Repeatable to a maximum of 5 cr hrs. Students register for..."
   - Instructor(s): kent rowand, bruce wolfe, amy collins, jeff schilling, tyler james, tyler ferguson, elina greif, rob ross
   - Notes: Foreign Language
## Collection with ebsco

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<td>Titles in Collection: (0 / 1839)</td>
</tr>
<tr>
<td>Provider: EBSCO Host</td>
<td>Select Collection</td>
</tr>
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<td>EBSCO America: History and Life with Full Text</td>
<td>Titles in Collection: (2505 / 2505)</td>
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<td>Provider: EBSCO Host</td>
<td>Deselect All Titles</td>
</tr>
<tr>
<td>EBSCO Arte Público Hispanic Historical Collection: Series 1</td>
<td>Titles in Collection: (0 / 995)</td>
</tr>
<tr>
<td>Provider: EBSCO Host</td>
<td>Select Entire Collection</td>
</tr>
<tr>
<td>EBSCO Australia/New Zealand Points of View Reference Centre</td>
<td>Titles in Collection: (645 / 646)</td>
</tr>
<tr>
<td>Provider: EBSCO Host</td>
<td>Deselect All Titles</td>
</tr>
<tr>
<td>EBSCO Business Continuity and Disaster Recovery Reference Center</td>
<td>Titles in Collection: (2 / 181)</td>
</tr>
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<td>Provider: EBSCO Host</td>
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<td>EBSCO Business Source Alumni Edition: Government Edition</td>
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</tr>
<tr>
<td>EBSCO Business Source Complete: Government Edition</td>
<td>Titles in Collection: (1 / 31950)</td>
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<tr>
<td>Provider: EBSCO Host</td>
<td>Deselect All Titles</td>
</tr>
<tr>
<td>EBSCO Business Source Elite: Government Edition</td>
<td>Titles in Collection: (0 / 1871)</td>
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<tr>
<td>Provider: EBSCO Host</td>
<td>Select Entire Collection</td>
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<td>EBSCO Business Source Premier: Government Edition</td>
<td>Titles in Collection: (0 / 13301)</td>
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<tr>
<td>EBSCO Energy &amp; Power Source</td>
<td>Titles in Collection: (1 / 1148)</td>
</tr>
<tr>
<td>Provider: EBSCO Host</td>
<td>Deselect All Titles</td>
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</table>
License Manager: License Terms

License

Please note:
Fields marked with an * asterisk are required.

License Name: * EBSCO Master agreement

Licenser: * EBSCO
Licensee: * OCLC Library

Start Date: * 03/01/2011
Date Signed: 

Valid Until: * 02/29/2012
Enable license for use: 

Collections (3)

Collection Lookup: *

Add Collection

Included in this license

- EBSCO Business Source Premier: Government Edition (EBSCO Host)
- EBSCO Business Continuity and Disaster Recovery Reference Center (EBSCO Host)
- EBSCO NAS Complete (EBSCO Host)

Terms of Use (1)

Documents (1)
Over 150 libraries worldwide committed to Web scale

UNPRECEDENTED

32 libraries lead the way to Web-scale innovation—OCLC Web-scale Management Services on target for July 1 general release

DUBLIN, Ohio, USA, 2 June 2011—Since OCLC announced it was making its cloud-based library management system available to libraries, more than 30 libraries have expressed interest in the Web-scale Management Services, which will be released in phases starting in the summer. OCLC is now preparing the release of the general release version of the system on July 1, 2011.

Among the libraries that have signed up so far:

- Banning Legal Services Library
- Bay Path College
- Boundary Cycle
- Bucknell University
- California State University, Fullerton
- Cañada College
- Calvin University
- Catholic University of America
- California State University, Fullerton
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- California State University, Fuller...
OCLC WMS community worldwide
WMS is a tactic....

Building Web scale with libraries

is a strategy
“‘Web-scale’ refers to how major Web presences architect systems and services to scale as use grows. But it also seems evocative in a broader way of the general attributes of the large gravitational hubs which are such a feature of the current Web (eBay, Amazon, Google, WikiPedia, ...).”

Lorcan Dempsey

blog posting January, 2007
OCLC: collaboratively building Web scale with libraries
Libraries and Web scale?

Infrastructure

Data

Community
Massively Aggregated Evaluative Content
Status: 44+ million data elements included

- 6.5 million book jacket covers
- 14.4 million ToCs
- 3.1 million summaries
- 294 thousand author biographies
- 291 thousand first chapters
- 398 thousand million album covers
- 1.7 million user reviews
- 360 thousand album reviews
- 12 million ratings

Data
Change in the library: share and save

Web-based applications with shared data and services

Cloud = major infrastructure;
NB: Web scale is more than just infrastructure

Required OCLC Cloud infrastructure

Web-scale Management Services for libraries
“Library Web scale”

Worldwide libraries and worldwide library transactions

Libraries worldwide

Books: physical processing

Back-office transactions

OPAC searches

Database searches

Circulation / ILL

+ Adds/deletes; patron record maintenance, etc.

Annual transactions

=> Massive infrastructure cost reductions possible for libraries

5,265 transactions / second
That’s a big community

72,035 libraries in 171 countries

55,820
1,418
1,752
1,091
1,752
381
4,058
1,800
A growing WMS community!

Jet Propulsion Lab - NASA

Boundary County Public Library

CPC Regional Library System
Platform

*Open and extensible platform* built on an *extended view of WorldCat*

- A “toolbox” for developers who want to use OCLC services and data to build new or enhance existing applications
- An “App Gallery” through which libraries can easily share apps created by the community
  - App Store, plug-ins, etc.
- Support for collaboration and cooperation within the library community

Harnessing collective innovation
- Build an app, upload an app, install an app

Manage Apps

Add an App to the repository (max size: 5120K)

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<tr>
<th>ID</th>
<th>App Name</th>
<th>Status</th>
<th>Action</th>
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<tr>
<td>238</td>
<td>The Librarian's Book Revoogle</td>
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<td>239</td>
<td>Montréal Library Network</td>
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<td>Hamster</td>
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<td>243</td>
<td>Tetrix</td>
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The platform: early app examples

Current Budget: 4,573.21
Remaining Budget: 4,348.43

http://redlaser.com

Infrastructure

Community

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<th>Erling Fossan</th>
<th>Profil</th>
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<td>Relaterte bibliotek</td>
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// Query the server for items and build an array of items
$xml = simplexml_load_file($requestURL);

$xml->registerXPathNamespace("atom", "http://www.w3.org/2005/Atom");

foreach ($xml->xpath('//atom:entry/atom:content/atom:item') as $item) {
    $callNum = strval($item->callNumber);
    $title = strval($item->title);
    $author = strval($item->author);
Collaboratively building Web scale with libraries

- Design for library Web scale
  - Design for scale
  - Design for capability
  - Design for economy
  - Design for community
Be agile and listen carefully

CHANGE DOES NOT HAVE TO TAKE MONTHS OR YEARS

Agile Development

Waterfall Development

• Engage with us to build functionality needed by your libraries

• FY11: 30 significant features delivered: 43% increase in additional features (13) based on Early Adopter feedback
Top reasons that OCLC Web-scale Management Services define a different future

• Concentration of sharable data
  • Built by the community: WorldCat, holdings, vendors, etc.
  • Added for the community: knowledge base, evaluative content, etc.

• Innovative and enabling infrastructure
  • At best, other services are “hosted” in the cloud
  • System is Service-Oriented Architecture (SOA) by design
  • Provides a platform on which to build extended services
  • New workflows made possible through use of real workflow engine technology

• Global collaborative community
  • OCLC is uniquely positioned to add the OCLC network to the data, services and infrastructure that is being offered
  • Allows collaborative adoption by libraries
  • Allows for collective innovation among libraries
But enough of my yackin’...
Life in the cloud: What's it really like?

Robin Hartman
Director of Library Services
Hope International University

C304 – Web Services: Libraries in the Cloud
Internet Librarian 2011
Hope International University

http://library.hiu.edu/
Darling Library
Darling Librarians
Electronic Resources: A Brief History

- OCLC customer since 1974
- FirstSearch since 1990?
- SCELC members since 1998
- Voyager 1999
- EZproxy since 2000
Creeping up on the cloud

- Serials Solutions
- Blogs
  - News & Events, 2006
  - Student Assistants Training, 2007
- LibGuides, 2008
- LibAnswers, 2011
Jumping out of the plane

- Summer 2010 – Introduction
- November 2010 – what’s that WMS thingy?
- December 2010 – agreement signed
- February 2011 – begin meeting with Cohort
- May 2011 – data exported
- June 2011 – go live
The Promise: Why I was sold

- Staff expertise
- Student centered services
- Resource Sharing
- OCLC's reputation
- Cost
- Trends
Web scale value proposition

70%  30%

INFRASTRUCTURE  INITIATIVE

Amazon Web Services™
aws.amazon.com
The Delivery: Staff expertise

- UNIX vs web 2.0
  - Passing the baton
- Support
  - IT support (at home)
  - Cohort (sharing)
  - OCLC
The Delivery: Student centered services

- Self-initiated holds, renewals, and Interlibrary Loan requests
- WorldCat Local interface & discovery tool
- Integration with databases
- WorldCat, Google books, iMyLibrary, etc.
- Logging in – EZproxy
- Time to explore other services?
The Delivery: Resource Sharing

- OCLC – WorldCat
  - Cataloging? Done.
  - ILL request forms? Done.
  - EZproxy? Done.
- RDA?
The Delivery: OCLC's reputation

- Training
- Payment plans
- Good vendor/client relations
The Delivery: Cost

- Initial implementation
- Annual subscription
The Delivery: Trends

- Buzz
Any questions?

Robin Hartman
Director of Library Services
Hugh and Hazel Darling Library
Hope International University
2500 E. Nutwood Ave.
Fullerton, CA 92831
(714) 879-3901, ext. 1212
rhartman@hiu.edu
Http://library.hiu.edu
WMS: A 10-Word Assessment

Larry L. Haight, Director of Library Services
Redding, CA
Visionary
Visionary
Independent
Visionary
Independent
Affordable
Visionary
Independent
Affordable
Holistic
Visionary
Independent
Affordable
Holistic
Efficient
Visionary
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