



## OCLC Grid Services


Roy Tennant  
Senior Program Officer

OCLC Research



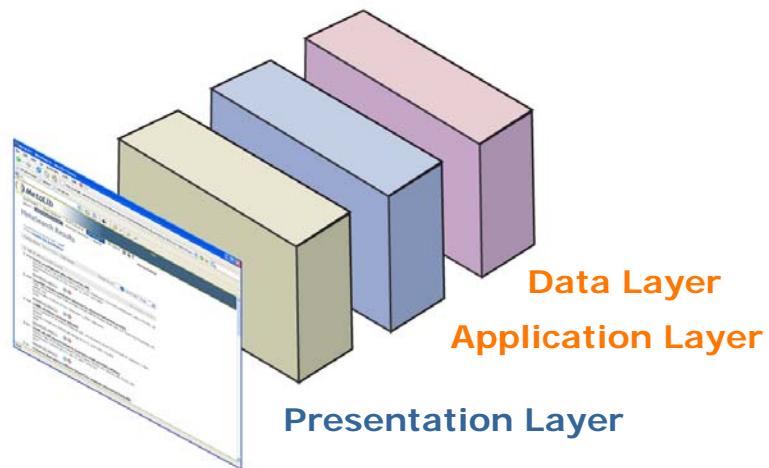
OCLC™ The world's libraries.  
Connected.

## Outline

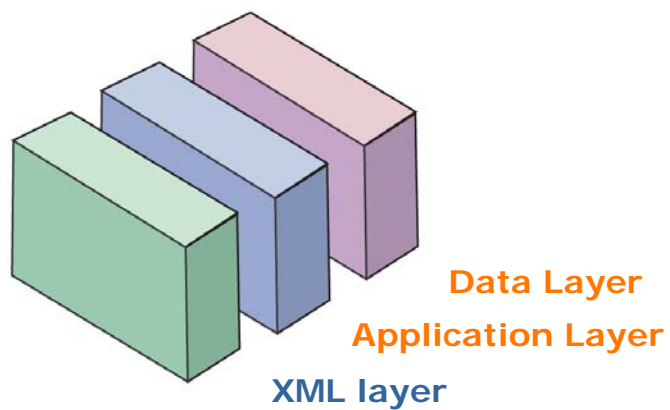


- Brief Introduction to APIs and Web Services
- OCLC Grid Services
- WorldCat Search API
- OCLC Developers' Network

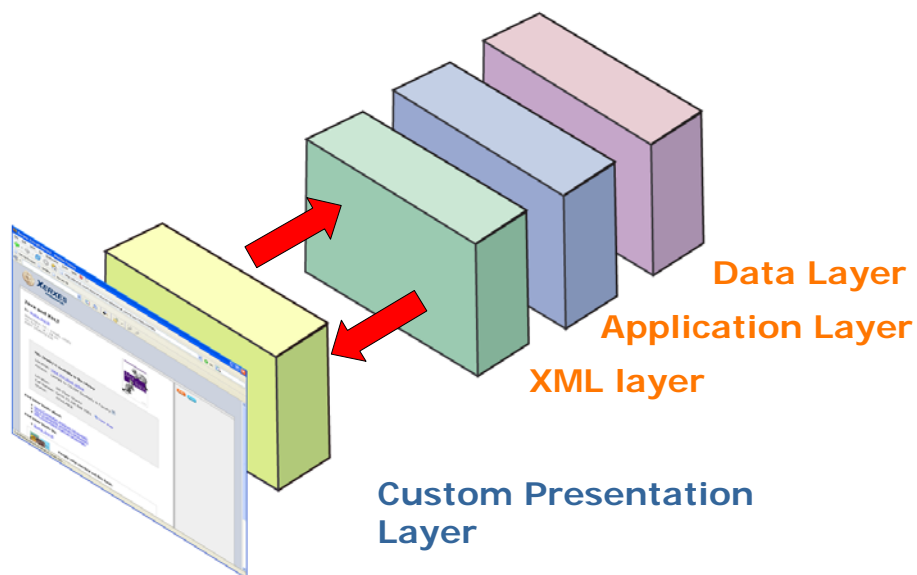
## Typical Application



## API-based Application



## API-Based Application



**Sent to another source to retrieve**

**Java and XSLT**

By [Burke, Eric M](#)

Sebastopol, CA : O'Reilly, c2001  
xvi, 510 p. : ill. ; 24 cm  
ISBN: 0596001436

**This (book) is available in the Library**

Location: [View this book online](#)

Access: Limited to CSUSM Students & Faculty

Location: 5th Floor Stacks  
Call Number: QA76.73.338 B88 2001 [View map](#)  
Status: AVAILABLE

**Find other books about:**

- [Java \(Computer program language\)](#)
- [XSLT \(Computer program language\)](#)
- [XML \(Document markup language\)](#)

**Find other books by:**

- [Burke, Eric M](#)

**People who checked out this book:**

[checked out these other books](#)

```

- <datafield tag="020" ind1="1" ind2="1">
  <subfield code="a">0596001436</subfield>
</datafield>
+ <datafield tag="040" ind1="1" ind2="1"></datafield>
+ <datafield tag="042" ind1="1" ind2="1"></datafield>
+ <datafield tag="050" ind1="0" ind2="0"></datafield>
- <datafield tag="100" ind1="1" ind2="1">
  <subfield code="a">Burke, Eric M</subfield>
</datafield>
- <datafield tag="245" ind1="1" ind2="0">
  <subfield code="a">Java and XSLT</subfield>
  <subfield code="c">Eric M. Burke</subfield>
</datafield>
+ <datafield tag="246" ind1="1" ind2="1"></datafield>
+ <datafield tag="250" ind1="1" ind2="1"></datafield>
+ <datafield tag="260" ind1="1" ind2="1"></datafield>
+ <datafield tag="300" ind1="1" ind2="1"></datafield>
+ <datafield tag="500" ind1="1" ind2="1"></datafield>
+ <datafield tag="530" ind1="1" ind2="1"></datafield>
- <datafield tag="650" ind1="1" ind2="0">
  <subfield code="a">Java (Computer program language)</subfield>
</datafield>
- <datafield tag="650" ind1="1" ind2="0">
  <subfield code="a">XSLT (Computer program language)</subfield>
</datafield>
- <datafield tag="650" ind1="1" ind2="0">
  <subfield code="a">XML (Document markup language)</subfield>
</datafield>

```

## Web Services



- Machine-to-machine protocol for sharing data and services
- Officially, a somewhat standards-heavy framework that includes aspects not commonly used (e.g., WSDL, UDDI, etc.)
- In a nutshell:
  1. Send a request as a set of parameters in a URL:  
`http://worldcat.org/webservices/catalog/search/openserch?q=civil%20war&wskey=[key]`
  2. Get back an XML document

## OCLC Grid Services



- Not grid *computing*, grid *services*
- Web Services based
- Exposes data (e.g., MARC records) and services (e.g., find related works) in machine-readable form

## Why OCLC Grid Services?



- Gain internal operational efficiencies
- Provide added value to member libraries
- Develop community to advise us on external needs and priorities



## OCLC Grid Services

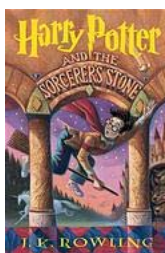


- Examples of Grid Services:
  - Identifier Services (e.g., xISBN, xISSN)
  - Registry Services (e.g., Institution Registry)
  - Authentication Services (i.e., EZProxy)
  - WorldCat Search API
  - Experimental Services (e.g., Terminologies, often coming out of OCLC Research)
- Support Service: Developers' Network

## xISBN



- Find all related editions of a book or serial
- Easily incorporated into library catalogs, Web sites, and other library applications



100+ ISBNs for *Sorcerers Stone*

32 English (US and UK)

9 Spanish

3 Russian, German, Finnish, Latin

2 Chinese, Czech, French, Korean, Norwegian, Persian, Polish, Portuguese, Romanian, Turkish, Welsh,

1 Afrikaans, Albanian, Armenian, Basque, Bengali, Georgian, Galician, Gaelic, Ancient Greek, Greek, Gujarati, Hindi, Hungarian, Icelandic, Italian, Japanese, Latvian, Lithuanian, Malayalam, Sherpa, Slovenian, Swedish, Thai, Ukrainian, Urdu

16 Audio

59 Book

## WorldCat Registry [www.worldcat.org/registry/institutions](http://www.worldcat.org/registry/institutions)



- A global directory of libraries, their locations, contacts, and the services they provide
- Free for all libraries to maintain and share with partners
- Pre-populated with data we already have, augmented by libraries and partners
- Centralized data essential for delivering content and services more efficiently on the Web



## Registry Profile Example



WorldCat Registry - Microsoft Internet Explorer provided by OCLC, Inc.

You are not signed in ([Sign In](#) or [Register](#)) [My Account](#)

[Registry Home](#) [About](#) [FAQ](#) [Get E-mail Updates](#) [Feedback](#)

Search for Institutions:  [Advanced Search](#) [Search](#)

[Create a new WorldCat Registry profile](#)

Profile Summary

### University of Washington Libraries

<a href="#">Profile Summary</a> <a href="#">Download this Profile as XML</a> <a href="#">Name and Location</a> <a href="#">Identifiers</a> <a href="#">Relationships:</a> <a href="#">Branches</a> <a href="#">Affiliations</a> <a href="#">Services:</a> <a href="#">IP Addresses</a> <a href="#">Online Catalog</a> <a href="#">OpenURL Resolvers</a> <a href="#">Virtual Reference</a> <a href="#">Administrative Information</a> <a href="#">Contacts</a>	<p><b>Institution Name:</b> University of Washington Libraries</p> <p><b>Also Called:</b></p> <p><b>Institution Type:</b> ARL Library</p> <p><b>Street Address:</b> SUZZALLO LIBR BOX 352900 SEATTLE, Washington 98195-2900 United States</p> <p><b>Business Address:</b> SUZZALLO LIBR BOX 352900 SEATTLE, Washington 98195-2900 United States</p> <p><b>Phone:</b></p> <p><b>Fax:</b></p> <p><b>E-mail Address:</b></p> <p><b>Home Page:</b> <a href="http://www.lib.washington.edu/">http://www.lib.washington.edu/</a></p> <p><b>Information Page:</b> <a href="http://www.lib.washington.edu/">http://www.lib.washington.edu/</a></p> <p><b>Services:</b></p> <p><b>IP Addresses:</b></p> <p><b>Online Catalog:</b> <a href="http://catalog.lib.washington.edu/">http://catalog.lib.washington.edu/</a></p> <p><b>OpenURL Resolvers:</b> <a href="http://catalog.lib.washington.edu:4550/nessy?">http://catalog.lib.washington.edu:4550/nessy?</a></p> <p><b>Virtual Reference:</b></p>
--	--

Last updated on 2007-12-11

## Registry Deep Links



[Suggest Links](#) [Clear Suggested](#)

**Library System Used:**

**Base URL:**

**Online Catalog Direct to ISBN:**  [test](#)

**Online Catalog Direct to ISSN:**  [test](#)

**e-Serial ISSN Search:**  [test](#)

**Online Catalog direct to OCLC Number:**  [test](#)

**Add Leading Zeroes to the OCLC search Term:** ☐ Yes

**OCLC Number Prefix:**

☐ Do not add prefix to the OCLC Number

☐ Add ocn/ocm prefix to the OCLC Number

☐ Add the following custom prefix to all OCLC Numbers

**Custom Prefix:**

[Save Changes](#) [Cancel Changes](#)

The whole digital library handbook [WorldCat.org]

http://www.worldcat.org/oclc/71126827&tab=holdings?loc=95476#tabs

**The whole digital library handbook**  
by [Diane Kresh](#); [Council on Library and Information Resources](#).

☆☆☆☆☆  
(not yet rated)

Type: Book; English  
 Publisher: Chicago : American Library Association, 2007.  
 Editions: [2 Editions](#)  
 ISBN: 0838906264 9780638909263  
 OCLC: 71126827  
 Related Subjects: [Digital libraries -- Handbooks, manuals, etc.](#)  
 Citations: [Cite this item](#) [Export to EndNote](#) [Export to RefWorks](#)  
 Additional Info: [Table of contents only](#)  
 User-created lists: This item is featured on [5 public list\(s\)](#)

**Get It**  
[Search my library](#)  
[Buy from Amazon.com](#)

**Save It**  
[Add This Page to Favorites](#)  
 Give to:  [Save](#)

**Add to It**  
[Review this item](#)  
[Tag this item](#)

**Share It**  
[Link to this page](#)  
[E-mail this item](#)  
[BOOKMARK](#)

Services from OCLC Library for this item: [test](#) [GET IT from ILLiad](#) [Check for Online Resources](#) [Request item through ILL](#) [Search the catalog of the OCLC Library](#) [Request item](#) [OCLC FirstSearch](#)

**Libraries** | Details | Reviews | Tags | Read by Others

Enter Location Information:  [Go](#)  
Enter postal code, state, province or country

Displaying libraries 1-10 out of 693 for all 2 editions **95476 Sonoma, CA** [First](#) [Prev](#) [1](#) [2](#) [Next](#) [Last](#)

Showing libraries that own: [Any Edition](#) [Just this Edition](#)

1. [Napa City County Library](#) Napa, CA 94559 United States **10 miles**  
[Add to favorites](#)  
[Book](#)  
 Services: [Library Information](#)

**Buy This Item**  
  
[The Whole Digital Library Handbook](#)  
 Diane Kresh  
 Best Price \$49.50  
 or Buy New \$49.50  
[Buy from amazon.com](#)

## The WorldCat Search API



- Searches with familiar protocols: OpenSearch and SRU
- Returns results in XML: RSS, Atom, MARC21 XML, Dublin Core
- Sorts library locations geographically (using a zip code, an IP address that is associated with a location, or a country)
- Can reformat records as standard citations ... APA, Chicago, Harvard, MLA, and Turabian



## Test Requests and Responses



**WorldCat Search API**  
URI Evaluator

Use this form to test requests sent to and responses received from the WorldCat Search Web Service

Request Protocol	Response Format	Search Terms	SRU Sort	Starting Position	Maximum Records	Service Level
OpenSearch SRU	Atom RSS MARCXML Dublin Core	civil war	relevance Author Title Date Ascending Date Descending Library Count Ascending Library Count Descending Score Ascending Score Descending OCLC Number	1	10	default Full

[Build the Request]

<http://www.worldcat.org/webservices/otelo/search/worldcat/sru?query=war%20civil&start=1&max=10&sort=relevance&format=atom>

**Other Resources**

- WorldCat Search API overview
- SRU Explain response for the WorldCat Search API
- OpenSearch service description document

The URI Evaluator offers an easy way to test API requests and evaluate their responses.

## Demo: include WorldCat.org book links in a web site sidebar



WorldCat Search Web Service AJAX Demonstrator - Mozilla Firefox

File Edit View History Bookmarks Tools Help de/lo/us

### CIVIL WAR

Lorem ipsum

Sed suscipit ipsum, diam non aenean, ullamcorper lobortis.

Sed suscipit ipsum

Mi dignissim eu maecenas quisque et, quam vehicula blandit molestie in pharetra, eleifend lacina id ipsum eu, explicabo hac sapien amet. Lacus convallis, id lacina, a donec metus dui tellus, convallis eget. Tortor faucibus elit, orci nullam metus pellentesque libero.

Lorem ipsum

Sed suscipit ipsum, diam non aenean, ullamcorper lobortis.

Lorem ipsum

Sed suscipit ipsum, diam non aenean, ullamcorper lobortis.

Find books about **civil war** in your local library

Battle cry of freedom : the Civil War era  
by McPherson, James M.

Search with WorldCat®

Sed suscipit ipsum

Mi dignissim eu maecenas quisque et, quam vehicula blandit molestie in pharetra, eleifend lacina id ipsum eu, explicabo hac sapien amet. Lacus convallis, id lacina, a donec metus dui tellus, convallis eget. Tortor faucibus elit, orci nullam metus pellentesque libero.

Done

zotero

## WorldCat Search API and Facebook



**WorldCat** Hello Bruce!

Home Advanced Something to Read Favorite W

Search for an item in libraries near you

Enter title, subject or author

raymond chandler

**The big sleep**  
by Raymond Chandler - Published 1992  
Find in a library Format a citation

**The long embrace : Raymond Chandler and**  
by Judith Freeman - Published 2007  
Raymond Chandler was one of the most original and enduring  
Yet much of his pre-writing life, including his unconventional me  
In this wholly original book, author Freeman sets out to solve t  
he became the writer who would create in Philip Marlowe an ic  
Find in a library Format a citation

**Later novels and other writings**  
by Raymond Chandler - Published 1995  
The lady in the lake -- The little sister -- The long goodbye -- P  
essays and letters.  
Find in a library Format a citation

**CiteMe**  
Get formatted citations from the world's largest library catalog, WorldCat

Search for a book by its title, author, subject, or isbn:

raymond chandler

Go!

APA Chicago Harvard MLA Turabian

Invite Friends

Chandler, R. (1992). *The big sleep*. Vintage crime/Black Lizard. New York: Vintage Books.  
View all editions | Find in a library with WorldCat

Freeman, J. (2007). *The long embrace: Raymond Chandler and the woman he loved*. New York: Pantheon Books.  
View all editions | Find in a library with WorldCat

Chandler, R. (1995). *Later novels and other writings*. The Library of America, 80. New York: Library of America.  
View all editions | Find in a library with WorldCat

Speir, J. (1981). *Raymond Chandler*. New York: Unger.  
View all editions | Find in a library with WorldCat

Marling, W. (1986). *Raymond Chandler*. Twayne's United States authors series, TUSAS 508. Boston: Twayne.  
View all editions | Find in a library with WorldCat

## Karen Coombs' WordPress Widget



**UH Libraries News** (View site »)

Howdy, Admin. (Sign Out, My Profile)

Dashboard Site Admin Write Manage Comments Blogroll Presentation Plugins Users Options

Themes Widgets

**Sidebar Arrangement**  
You can drag and drop widgets onto your sidebar below.

**LeftSidebar**

- Recent Posts
- Add WorldCat Search

**RightSidebar**

- Links
- Categories 1

**Add WorldCat Search**

Widget Title: Karen Book List

Search Type: Title

Search: ambient findability

Limit by Specific Library (OCLC Symbol):

Number of results to display: 3

Show Book Cover: ☒

Amazon Web Services Developer Key: J1VEM8XZPBDVTSPVMR08

Show Google Links: ☐

Show Rating: ☒

Save Changes »

**Available Widgets**

- Archives
- Calendar
- Meebo
- Meta
- Pages
- Recent Comments
- RSS 1
- Search

# Karen Coombs' WordPress Widget



University of Houston Libraries logo

University of Houston Libraries

## UH Libraries News

Recent Posts

- [Test Post](#)
- [New Research Resources for Business, Education, and Social Sciences](#)
- [Summer Book Club Return!](#)
- [New Interdisciplinary Research Resources](#)
- [Chat Reference on break during Intercession](#)

**Test Post**

testing

Posted on May 29th, 2008 by Admin and filed under [Announcements](#) | [Edit or Comment](#)

### New Research Resources for Business, Education, and Social Sciences

These new databases are now available from the University of Houston Libraries:

**CQ Voting and Elections Collection:** It integrates data, authoritative analyses, concise explanations, and historical material to provide a research and reference tool on voting and elections in America. From the American voter, to major and minor political parties, to actual races for Congress, the presidency, and governorships, the collection provides context-driven intelligence on the state of elections in America. Election data can be downloaded.

**Educational Administration Abstracts:** It provides bibliographic records covering essential areas related to educational administration, including education research, higher education administration theory, and other areas of key relevance to the discipline.

**Health and Psychosocial Instruments (HAPI):** It provides bibliographic information about behavioral measurement instruments. Information in the database is abstracted from hundreds of leading journals covering health sciences and psychosocial sciences. Additionally, instruments from Industrial/Organizational Behavior and Education are included.

**Small Business Resource Center:** This database provides relevant, authoritative, and easy-to-understand information

**test**

Search

Categories

- [Announcements](#)
- [Building Announcements](#)
- [Libraries Survey](#)
- [New Resource](#)
- [New Service](#)
- [Planned Closure](#)
- [Planned Down Time](#)
- [Special Event or Display](#)


Archives

2008: Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

2007: Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

2006: Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

**Karen Book List**

 [Ambient Improbability / 21 reviews @ LibraryThing](#)

RSS feed icon [Subscribe to this blog!](#)

Authors

Holdings: Barack Obama in his own words /

http://yufind.library.yale.edu/yufind/Record/7840880

Yale University Library

Log in | Orbit catalog | Ask / a Librarian | Help | Server upgrade success

Find Advanced

Similar Items

- [Dreams from my father : a story of race and inheritance](#)  
By: Obama, Barack.  
Published: (1995)
- [The elasticity of hope : thoughts on reclaiming the American dream](#)  
By: Obama, Barack.  
Published: (2006)
- [The status of the Negro, from a Negro's standpoint, in his own dialect. A thrilling tragedy in the days of reconstruction. Anniversary of my seventy-sixth birthday. Read before the Little Rock medical society](#)  
By: Nash, Charles Edward.  
Published: (1900)
- [Places of their own : African American suburbanization in the twentieth century](#)  
By: Wiese, Andrew.  
Published: (2004)
- [Fighting words : Black women and the search for justice](#)  
By: Collins, Patricia Hill, 1948-  
Published: (1998)

Other Local Copies

- John Jay College of Criminal Justice Library
- New York Public Library - Research
- New York Public Library, Branch Library
- New York University
- Laguardia Community College Library Media

Barack Obama in his own words / edited by Lisa Rogak.

Main Author: Obama, Barack.  
Other Authors: Rogak, Lisa, 1962-  
Language: English  
Published: New York : Carroll & Graf, c2007.  
Subjects: Legislators > Quotations. > United States African American legislators > Quotations. Obama, Barack > Quotations.

Preview

More Info

Holdings Description Reviews Excerpt Staff View

Copy	Status	Due Date	Call Number	On Reserve	Location	Get It
1	Charged	29-APR-09	E185.97.O23 A25 2007 (LC)	N	SML Stacks, LC Classification	View in Orbit

Holdings: Barack Obama in his own words /

http://yufind.library.yale.edu/yufind/Record/7840880

YU FIND BETA  
YALE UNIVERSITY LIBRARY

Orbis catalog | Ask / a Librarian | Help  
Server upgrade success

Similar Items

- Dreams from my father : a story of race and inheritance  
By: Obama, Barack.  
Published: (1995)
- The audacity of hope : thoughts on reclaiming the American dream  
By: Obama, Barack.  
Published: (2006)
- The status of the Negro, from a Negro's standpoint, in his own dialect. A thrilling tragedy in the days of reconstruction. Anniversary of my seventy-sixth birthday. Read before the Little Rock medical society  
By: Nash, Charles Edward.  
Published: (1930)
- Places of their own : African American

Barack Obama in his own words /  
edited by Lisa Rogak.

Main Author: Obama, Barack.  
Other Authors: Rogak, Lisa, 1962-  
Language: English  
Published: New York : Carroll & Graf, c2007.  
Subjects: Legislators > Quotations. > United States  
African American legislators > Quotations.  
Obama, Barack > Quotations.  
Preview:

Links to other catalogs  
Could add "GoogleMaps" link too

Other Local Copies

- John Jay College of Criminal Justice Library
- New York Public Library - Research
- New York Public Library - Branch Library
- New York University
- Laguardia Community College Library Media

Copy	Status	Due Date	Call Number	On Reserve	Location	Get It
1	Charged	29- APR- 09	E185.97.O23 A25 2007 (LC)	N	SML, Stacks, LC Classification	View in Orbis

## Developers' Network



- Documentation (wiki)
- Communication (blog, discussion list)
- Infrastructure for collaboration (wiki, code repository)
- Web services pilots
- Sponsorship of events (e.g., Hackathon)

<http://worldcat.org/devnet>



Main Page - WorldCat Developers' Network

http://worldcat.org/devnet/wiki/Main\_Page

article discussion edit history unprotect delete move unwatch

**WorldCat Developer's Network**

The WorldCat Developer's Network is a community of developers collaborating in a "sandbox" environment in order to propose, discuss and test [WorldCat Grid Services](#). This open source, code-sharing infrastructure improves the value of OCLC data for all users by encouraging new Grid Service uses.

The W

<http://worldcat.org/devnet/>

- share software code with other network members and the community-at-large in an open source environment; and,
- provide feedback points for the library community to engage with.

**How do I participate in the Network?**

- Coming!** [WorldCat Hackathon](#), November 7-8 at the New York Public Library!
- Membership in the network is open to any developer in the library services industry, and to any other informed, interested user of library services.
- There is no charge to be a member of the network.
- OCLC hosts this wiki space and [a blog](#) for members to use for communication and code posting.
- OCLC hosts the Developer's Network Listserv. To subscribe, visit [this](#) page and look for WC-DEVNET-L at the bottom. Participation in mailing lists is open to anyone, as is access to any information on the Developer's Network web site.

**Learn more about OCLC Grid Services**

Including... WorldCat API, xID services, Registry services

This page was last modified 16:53, 20 October 2006. This page has been accessed 5,686 times. © 2008 OCLC Privacy policy

About WorldCat Developers' Network Disclaimers

Powered By MediaWiki

Done

## Future Plans



- Hosted EZproxy Pilot
- Updates to WorldCat API & xID services
- Data Services Bundle (validation, terminologies, crosswalks)
- Additional Hackathons: Europe (Spring?), West Coast (Fall?)

Stay tuned to Developers' Network for details...

## Essential Addresses



OCLC Grid Services and Developers' Network:

<http://worldcat.org/devnet/>

Don Hamparian, Grid Services Portfolio Manager:

[hamparid@oclc.org](mailto:hamparid@oclc.org)

Roy Tennant, OCLC Research: [tennantr@oclc.org](mailto:tennantr@oclc.org)