Breaking Open the Silos: Building a Collaborative ILS Middleware Platform

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DLF ILS Discovery Interface TG

- 2007: DLF convened task group “to recommend standard interfaces for integrating the data and services of the Integrated Library System (ILS) with new applications supporting user discovery.”
- Task Group official recommendation released December 2008

DLF ILS Discovery Interface Task Group (ILS-DI) Technical Recommendation

An API for effective interoperation between integrated library systems and external discovery applications

Revision 1.1
December 8, 2008

ILS-DI Task Group Members
- John Mark Ockerbloom, Univ. of Penn. (chair)
- Terry Reese, Oregon State Univ.
- Patricia Martin, California Digital Library
- Emily Lynema, North Carolina State Univ.
- Todd Grappone, Univ. of Southern California
- Dave Kennedy, Univ. of Maryland
- David Bucknum, Library of Congress
- Dianne McCutcheon, National Library of Medicine
ILS Basic Discovery Interfaces

- Basic set of functionality essential for libraries to take advantage of new discovery systems (ILS-BDI)
- Harvesting
  - Full and incremental, bib and holdings/circ
- Availability
  - Real-time availability of items
- Linking
  - Stable link to item in OPAC providing request links
The fallout

• Berkeley Accord
  – Agreement made April 4, 2008
  – 10 vendors / organizations agreed to develop support for ILS-BDI
  – Implementers group defined technical specs to meet this functionality

• No resources at DLF to guide project and make sure it happens!
Status: early 2010

• Developers supportive!
  – Individual experiments prove need for actual technical specifications
  – DLF working group disbanded in 2008
  – No cohesive group paving way toward unified future
New *ad hoc* effort

- February 2010 at Code4Lib Karen Coombs and Roy Tennant convened a meeting of interested parties
- Main goal: Actual re-usable code implementations of ILS-DI recommendations across all Integrated Library Systems
- Bring together those who have written code with those who want standardized adapters
- Strategy: regular, ongoing conference calls
Major players

• Open source discovery interface projects
  – VuFind
  – eXtensible Catalog
  – Blacklight
  – Jangle

• Discovery interface vendors
  – OCLC
  – Serials Solutions / ProQuest

• Other interested parties
Determining Priorities

• Survey those building discovery systems and library technology community in general
• What is most important ILS-DI functionality?
• Not quite ILS-BDI!
  – Discovery system projects interested in enabling patron functionality
  – Metadata harvesting not seen as a primary issue
**eXtensible Catalog project**

- Mellon Foundation grant project
- Goal: enable libraries to harvest metadata (including ILS) into a central repository for transformation, indexing, and discovery
- Modular development
  - NCIP toolkit
  - OAI-PMH toolkit
  - Metadata Services toolkit
  - Drupal toolkit
What Has Happened

• XC NCIP toolkit seems to already address most use cases
  – Implements an existing in-use standard
  – Some prior art available

• How does the XC NCIP toolkit work?
  – Core Java toolkit understands NCIP requests & responses
  – ILS-specific connectors provide data to core

• OCLC commits with code donation for XC NCIP 2.0 core implementation
Implementation Status

• Contributing core NCIP 2.0 toolkit code
  – OCLC: LookupItem, RequestItem, CheckOutItem, CheckInItem, AcceptItem
  – XC: LookupUser, RenewItem, XC GetAvailability

• Creating (or updating) connectors
  – Ex Libris Aleph: Notre Dame
  – Ex Libris Voyager: XCO/CARLI
  – III Millenium: UNC Charlotte
  – SirsiDynix Symphony: Lehigh
Current challenges

• Handling authentication across a broad variety of use cases
  – Trusted client
  – Username/password credentials
  – OAuth

• Dealing with use cases addressed in ILS-DI but not currently supported by NCIP standard
  – Ex: GetAvailability requires ability to submit a bibliographic ID; not part of NCIP LookupItem
How you can help, part I

• Can you contribute a core NCIP 2.0 service implementation to the XC NCIP toolkit?
• Can you write an a connector for your ILS?
• Can you implement additional services for an existing ILS connector?
How you can help, part II

• Can you host a publicly available read-write test instance of an ILS with a connector for testing?
• Can you download, install, and beta test ILS connectors?
• Can you provide test data? We want to test all connectors against baseline data to determine compliance.
How you can get involved

• Join the discussion:
  – http://groups.google.com/group/ils-di

• Monitor the site:
  – https://sites.google.com/site/ilsinterop/

• Join (or visit) the weekly conference call by requesting info on the discussion list.