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.**