Technical Reference

This page acts as a gateway to reference and development information gathered on standards and technologies related to Sakaibrary.

Categories on this page:

- Citations and Querying Standards
- Context-Sensitive Linking
- Metasearch
- Open Service Interface Definitions (OSIDs)
- Web Services
- Digital Objects
- Sakaibrary-like projects

Citations and Querying Standards

- MARCXML - Library of Congress Machine Readable Catalogue using XML: widely used format for representing bibliographic data (although not as widely as regular MARC21).
- Dublin Core Metadata Initiative: an open forum engaged in the development of interoperable online metadata standards that support a broad range of purposes and business models.
- Metadata Crosswalks: A way to transform one metadata scheme to another.
- SRU-SRW - Library of Congress Search and Retrieve via URL or Web Services: standard search protocols for Internet search queries, utilizing CQL (Common Query Language), a standard query syntax for representing queries.
- NISO Metasearch Initiative: National Information Standards Organization initiative to develop standards to make metasearching/federated searching easier and more interoperable.
- IMS Resource List Interoperability: an IMS specification that details how structured metadata can be exchanged between systems that store and expose resources for the purpose of creating resource lists.
- Common citation-management software interchange formats such as RIS and BibTeX.

Context-Sensitive Linking

- OpenURL 1.0: a NISO standard for context-sensitive linking in networked environments (i.e. the Internet).
- SFX 3.0: an ExLibris OpenURL 1.0-compliant link-resolver software application.

OpenURL Resolvers and our Survey - this page contains a listing of OpenURL resolver products and vendors and information regarding our OpenURL resolver survey of the library-Sakai community.

Metasearch

- MetaLib: an ExLibris library portal software application including features to metasearch across heterogeneous resources or link to the resources' native interface.
- MetaLib X-Server: a component of MetaLib with a public API to invoke MetaLib's metasearching services through HTTP. The X-Server is the Sakaibrary project's main tool in conducting MetaLib metasearches from within Sakai.
- SIRSI SingleSearch: a SirsiDynix library portal software application similar to MetaLib.

Open Service Interface Definitions (OSIDs)

- O.K.I. Repository OSID: the O.K.I. Repository Open Service Interface Definition covers storing and retrieving digital content, referred to as Assets, as well as information about the Assets.
- SRW Repository OSID Implementation: a Sakai implementation of the O.K.I. Repository OSID using SRW.

Web Services

- What are Web Services?: our working definition and use of Web Services in the context of Sakaiibrary.

Digital Objects

- DLF Aquifer Asset Actions experiments

Sakaibrary-like projects

- Xerxes: a system that leverages the Metalib X-Server and other APIs to create a custom search-and-link library portal. Developed by David Walker at California State University, San Marcos.
- Twin Peaks: an Indiana University Libraries Information Technology pilot user interface tool for accessing digital library resources from within the Sakai course management environment.
- California Digital Library: the California Digital Library (CDL) has two projects of interest, the CDL Common Framework and the Metasearch Infrastructure Project, that deal with challenges Sakaibrary faces.
• Scholar’s Box - UC Berkeley’s Interactive University Project is currently prototyping a web-based suite of tools that will enable faculty, K-12 teachers, students, and the public to create, manipulate, annotate, and save and share personal collections of digital learning and cultural material.