METADATA AGGREGATION:
OAI-PMH: IMLS Digital Collections & Content (2002-07)
Library-GSLIS research indexing digital collections
- Early testing & measurement of the Open Archives Initiative Protocol for Metadata Harvesting
- Defining approaches to collection-based description
- Importance & usefulness of collection-based description
- Trends & patterns in metadata creation practice
- Use of GRAMICCI & OAI-PMH implementation
- Diffusion of best practices into IMLS community
- Scope:
  - 250+ collections
  - 250,000+ item-level records
  - Resulting from IMLS NLG & LSTA funds

OAI-PMH: CIC Metadata Portal (2003-06)
A project of the research libraries of the Committee on Institutional Cooperation
Primary research areas:
- New models for CIC Library collaboration & interoperability
- Interface design & testing across multiple CIC sites
- Analysis of interface design & its impact on user search behavior
- Experiments with varied levels of data description (MARC, MODS, QDC, DC)
- Scope:
  - 280+ collections
  - 1,280,000+ item-level records

Custom Metasearch Engine Features
- Spell checking of user search arguments with clickable spelling corrections;
- Search term stopword removal & table-driven query term switching;
- Guided search assistance and navigational prompts;
- Specified target result display removal when there are no hits;
- Software controlled database selection algorithms;
- Links into the native interface at the point of completed search for further user searching.

Applications of Metasearch Software at UIUC Library
Search Assistant: searches multiple hidden Web resources
Results aggregated by source
Funded by NSF, Mellon

Typical Metasearch Software

Services Layered Over Repositories: BibApp: Understanding Faculty Publishing
A mash-up of citations, directory info & publisher policies

Repository Infrastructure
- DSpace open-source software (MIT & HP)
  - Java, PostgreSQL database, Tomcat web server
  - Wide acceptance (200+ institutions, 45+ countries)
  - Persistent URLs (using Handle System)
  - Customizations/Localizations
    - OpenOffice.org format conversions (e.g. Word to PDF)
    - Bluestem NetID login
    - UIUC Active Directory Groups
  - Server Infrastructure
    - Managed by CITES System Management Group
    - Expandable 6TB SAN
    - Off-campus backups

Coordinated Science Laboratory
www.csl.uiuc.edu

SUSTAINED ACCESS
Available at:
www.csl.uiuc.edu

CONTENT DISCOVERY, SERVICES, AND SUSTAINED ACCESS
Timothy Cole, William Misko, Beth Sandrome, Sarah Shreeves - University of Illinois Library

Other Applications of OAI-PMH
Automated Capture of Thumbnail Images
Using collection-level descriptions to enhance item retrieval
Funded by Mellon & Digital Library Federation

METASEARCH DEVELOPMENT
Broadcast search and retrieval spanning multiple databases, sources, platforms, protocols, and vendors all at once.
- Libraries typically spend over half of their materials budgets on electronic resources licensed from publishers, vendors, information centers.
- Users face a bewildering array of distributed, discrete, heterogeneous online information resources.
- Many of these online resources are not available through Web search engines.
- Libraries are using metasearch techniques to simultaneously search and access these discrete information resources.

Global Infotech: Pathways to the Future with Global Partnerships