

INTEGRATED ACCESS & SHAREABLE METADATA

SEI 06
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Interoperability

The ability of multiple systems to exchange data with minimal loss of content and functionality.

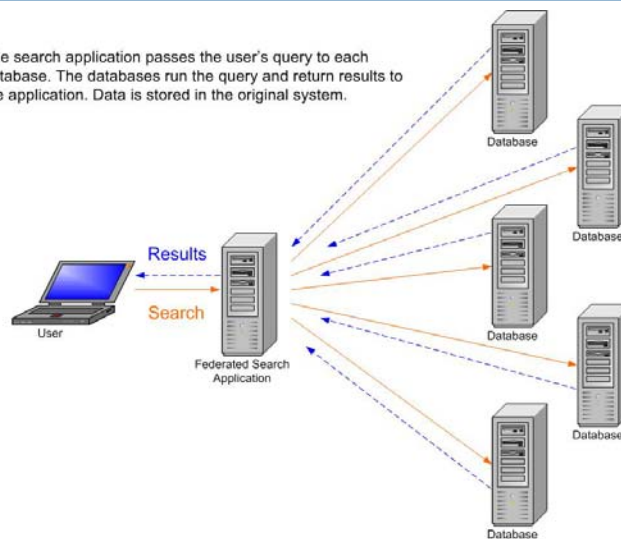
-NISO, Understanding Metadata

Crosswalks

- A mapping of elements from one metadata standard to another
- Allows metadata to be used across communities
- Supports reuse, harvesting, cross system searching
- Often included in documentation of the standard
- Getty Crosswalk:
http://www.getty.edu/research/conducting_research/standards/intrometa/data/metadata_element_sets.html

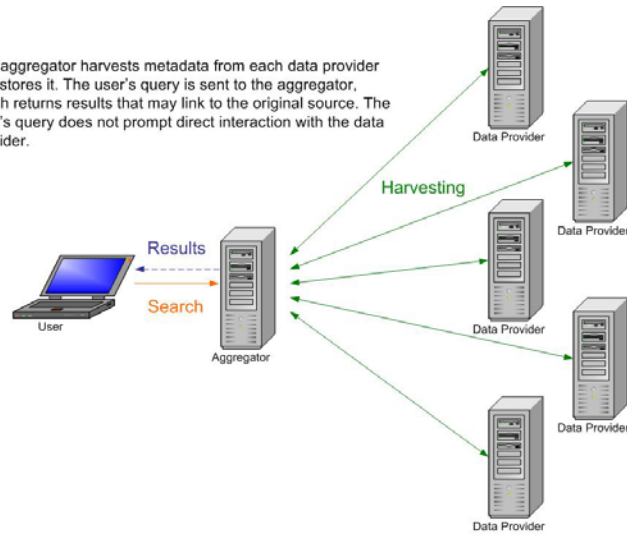
Federated Searching

The search application passes the user's query to each database. The databases run the query and return results to the application. Data is stored in the original system.



Metadata Aggregation

The aggregator harvests metadata from each data provider and stores it. The user's query is sent to the aggregator, which returns results that may link to the original source. The user's query does not prompt direct interaction with the data provider.



Open Archives Initiative (OAI-PMH)

- Metadata harvesting protocol based on HTTP and XML standards
- Requires Dublin Core in XML as minimal metadata, but can accommodate other XML standards
- Data providers expose metadata, service providers harvest and aggregate the metadata

OAster
find the pearls

Home Search Help About Using OAster News

About OAster
OAster currently provides access to 16,903,597 records from 1001 contributors.
OAster is a union catalog of digital resources. We provide access to these digital resources by "harvesting" their descriptive metadata (records) using [OAI-DMT](#) (the Open Archives Initiative Protocol for Metadata Harvesting).
More...

[View Data Contributors](#)
[Collection Development Policy](#)
[Improvements](#)
[Presentations & Publications](#)
[Statistics on our Growth](#)
[Staff](#)

Using OAster
OAster can be searched by Title, Author/Creator, Subject, Language or Entire Record. Searches can also be limited by resource type (text, image, audio, video, dataset) and sorted by title, author, date and hit frequency. Results allow further limiting by data contributor (i.e., where the record was harvested from).
More...
SEARCH
[Search Help](#)
[View Data Contributors](#)
[How to Become a Data Contributor](#)
[Using OAster Data Outside this Interface](#)

News & Updates
2008 Jun 27
OAster aggregates records from more than 1000 repositories as of today!
2008 Jun 12
There will be infrequent updates to OAster in the months of July and August due to changes in how we process records, full harvests of all repositories, and vacation time.
More...
Last update: 27 Jun 2008
Next update: mid-July 2008
New data contributors harvested:
Heidelberger Historische Bestände (Digit)
Nature Precedings
NDLTD Union Catalog
TCU Electronic Thesis and Dissertation Archive
The University of Montana Electronic Thesis, Dissertation, and Professional Paper (ETDP) Collection

Product of [DISE/TOLKES](#) at the University of Michigan
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<http://www.oaister.org/>

What does this record describe?

Example courtesy of Sarah Shreeves, University of Illinois at Urbana-Champaign

- identifier:** [http://name.university.edu/IC-FISH3IC-X0802\]1004_112](http://name.university.edu/IC-FISH3IC-X0802]1004_112)
- publisher:** Museum of Zoology, Fish Field Notes
- format:** jpeg
- rights:** These pages may be freely searched and displayed. Permission must be received for subsequent distribution in print or electronically.
- type:** image
- subject:** 1926-05-18; 1926; 0812; 18; Trib. to Sixteen Cr. Trib. Pine River, Manistee R.; JAM26-460; 05; 1926/05/18; R10W; S26; S27; T21N
- language:** UND
- source:** Michigan 1926 Metzelaar, 1926--1926;
- description:** Flora and Fauna of the Great Lakes Region

Orig. No. 460 Sta. No.

Locality Michigan: Trib. to Sixteen Cr., Dec. 26-27,
T. 21N. R. 10W, Wexford Co.
Trib. Pine River → Mainster

Water: mostly spring-fed; clear, spring floods rather bad
some surface

Vegetation: not much at all, absolutely nothing

Bottom: sand; no mud, rather deep Temp. 47° air 62°

Shore: mostly cleared → farms; some brush Current: none

Distance from shore: across width 4 ft Tide:

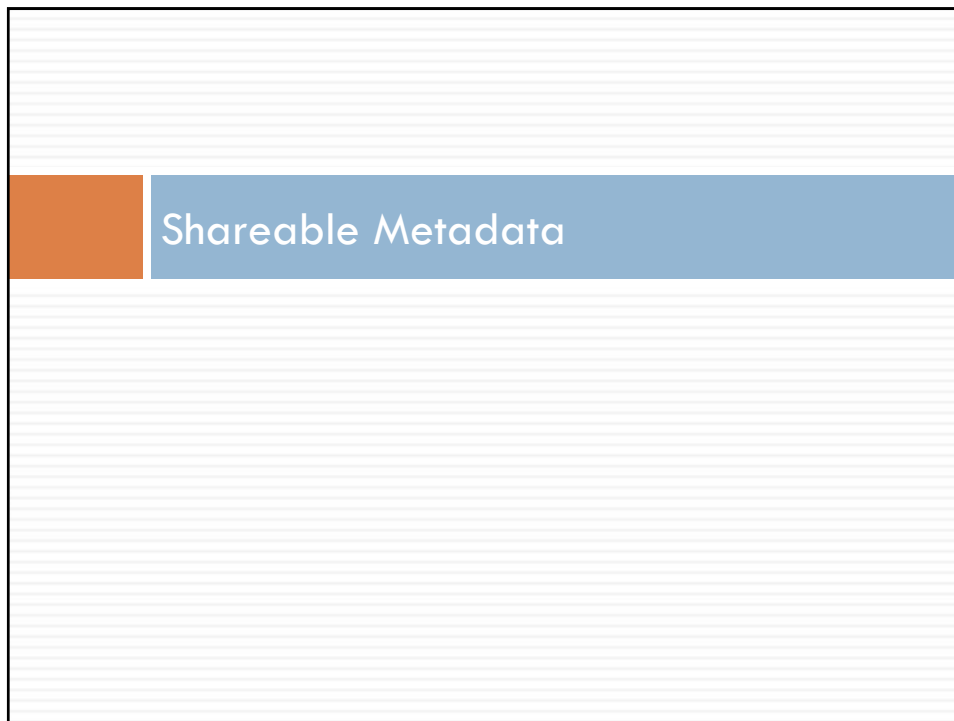
Depth of capture: Depth of water: 6 in 1 ft

Method of capture:

Collected by Mitchell Date: V: 18: 1926

Orig. preserv. Time:

Animal life subnormal



Content

- Choose appropriate vocabularies
- Choose appropriate granularity
- Make it obvious what to display
- Make it obvious what to index
- Exclude unnecessary “filler”
- Make it clear what links point to

Consistency

- Records in a set should all reflect the same practice
 - ▣ Fields used
 - ▣ Vocabularies
 - ▣ Syntax encoding schemes
- Allows aggregators to apply same enhancement logic to an entire group of records

Coherence

- Record should be self-explanatory
- Values must appear in appropriate elements
- Repeat fields instead of “packing” to explicitly indicate where one value ends and another begins

Context


- Include information not used locally
- Exclude information *only* used locally
- Current safe assumptions
 - ▣ Users discover material through shared record
 - ▣ User then delivered to your environment for full context
- Context driven by intended use

Communication

- Method for creating shared records
- Vocabularies and content standards used in shared records
- Record updating practices and schedules
- Accrual practices and schedules
- Existence of analytical or supplementary materials
- Provenance of materials

Conformance to Standards

- Metadata standards
- Vocabulary and encoding standards
- Descriptive content standards
- Technical standards



Discovery happens elsewhere.
-Lorcan Dempsey



Shareable Metadata slides courtesy of:
Jenn Riley, Metadata Librarian
Indiana University Digital Library Program
<http://www.dlib.indiana.edu/~jenrile/>