New Standards for Resource Delivery

Bridging the gap between discovery and delivery

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Multiple Points of Discovery

- Institutions wish maximum exposure
- Increasing use of harvesting and multi-target searching
And also....

Multi target portals

Sites using search boxes

OCLC Online Computer Library Center

Multi-National Union and Census Catalogues:

- WorldCat
  - Public access version of the largest union catalogue of library holdings world-wide.

- COPAC
  - UK and Irish Academic and National Library catalogues.

Normal

Mystic Bourgeoise

NUMINOUS LUNACY & THE SANCTIMONIOUS NARCISSISM OF THE NEWAGE++

MAY 6
INTERMISSION
Discovery increasingly separate from Delivery

- Need to convey requests from a discovery environment to a delivery environment
- Existing standards are inappropriate
  - ISO 10161 – aging, complex, automates entire process, mediates between 2 delivery systems
  - NCIP – transacts on a known item with a known identifier
OpenURL

- **Version 0.1 released in 2000**
  - Sends information about a wanted item to a resolver
    - Key Value pairs within a URL
  - Most use – online full text access

- **NISO version 2005 Z39.88**
  - OCLC maintenance agency 2006+
  - Remodelled
    - Referent, Requester, Service Type, Referrer, Referring System
    - Either Key Value Pairs or XML schemas
Request Transfer Message

- Request Submission Message
  - IPIG XML schema 2001
  - Recast into OpenURL in 2004
  - No known implementations; IPIG stalled

- Request Transfer Message
  - Some additions and deletions to the Request Submission Message
  - Allows incorporation of existing XML schemas (uses http POST)
    - Bibliographic description, holdings, rights management
POST by http or https

By-Value or By-Reference

Request Transfer Community Profile

OpenURL

Requester

Resource User

Identifiers

Wanted Resource

ISO Holdings Schema

Metadata formats

Referent

Identifiers

Referrer

Identifiers

Service Type

Resource Delivery Service
First requester schema to be registered
2nd service type schema to be registered
User wants a resource not owned by her library / institution

Request formulated into OpenURL Request Transfer Message (RTM)
Example Scenarios

- Request placed in Google Scholar by a user associated with the University of Amsterdam sent to Dutch national delivery service (NCC)

- Request placed in worldcat.org by a user associated with the University of Sydney sent to Australian national delivery service (Libraries Australia)

- Request placed in Libraries Australia by a user associated with the University of Amsterdam sent to Dutch national delivery service (NCC)
WorldCat sends **Request Transfer Message** to User’s Library’s Delivery System
ISO Holdings

- MODS, MARC21 Holdings, COPAC, ONIX
  - Designed for bulk reporting of STABLE information

- ISO Holdings
  - Designed to respond to enquiries
    - Availability and Usage
  - Stable and dynamic information
  - Copy equivalence query specific – individual copy, manifestation, work, result set levels
ISO Holdings

- **Holdings Simple**
  - Summary availability for easy display
  - Copies interchangeable (multiple copies of a manifestation, periodical article, work, any copy of any work in a result set)

- **Holdings Structured**
  - Copies not interchangeable, so no summary availability
  - Server presents structure (multi-part work, serial); subsequent selection process
Completing the picture

- **New environment**
  - Users accustomed to self service
  - Systems interoperating with many different systems for discrete functions

- **Standards needs**
  - Discrete tasks; authenticate, request, pay, deliver, enquire, notify
  - Systems not standards should control work flow
  - Standards frameworks provide guidance on how systems should employ diverse standards within processes
Requests

- **Request Transfer Message**
  - May result in immediate access to online digital object
  - But it may not

- **Request follow up**
  - Notification (push)
  - Enquiry (pull)
Anatomy of a Request

Referrer system
- Authentication
- Authorisation
- Payment
- Rights Management

Delivery system

Notify: SMTP, RSS, SRU update, HTTP POST, ebXML, Atom
Request Notification

Identification Date

Request History
Current status

Requester, Service,
Referent

Requester
Requester’s service
Responder
Intermediary

From

To

Requested
Action

Action Taken

Role

Reply Address

Confirm conditions
Provide payment evic
Cancel
Renew
Recall
Correct, n/a +++

Sent
Cancelled
Not cancelled
Renewed
Received
Reported lost....++
Request Enquiry

[Same Schema]

- Request History
  - From
    - Role
  - To
    - Role
  - Requested Action
  - Action Taken
- Identification Date
- Requester, Service, Referent
- Current Status
Hypothesis

- Create a notification / enquiry schema
  - Notification via HTTP POST, ebXML, ATOM, SRU update, SMTP
  - Enquiry via SRU
Conclusion

- Exposure and Enquiry are ahead of delivery. Need to bridge the gap
- Request Transfer Message with ISO Holdings Schema are important new components
- Further effort need to effectively interoperate diverse systems and services
  - Need request enquiry and notification
Thank you

http://www.openurl.info/registry