A Registry of Collections and their Services: from Metadata to Implementation

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Outline

• Purpose of JISC Information Environment Service Registry (IESR)
• IESR content description
• Types of technical services described
• IESR’s interfaces
• Implementation of IESR
• Future of IESR
Why IESR?

• JISC Information Environment:
  – Collections of resources for researchers, learners, teachers in UK

• Single central catalogue - m2m access
  – Improve awareness and access

• Funded by the JISC:
  – MIMAS, UKOLN, University of Liverpool
  – Prototype Registry developed at MIMAS
IESR for Portals

• Portal: amalgamated set of resources
  – cross-searching, harvesting
• IESR provides:
  – Discovery of resource collections
  – Details of access to collections
• Using IESR, portal could:
  – Cross-search including collections
  – Link to collection web pages
  – Harvest IESR data
IESR Content

• Descriptions of:
  – Collections of resources
  – Informational Services that provide access
  – Agents: Owners / Administrators
  – Transactional Services

• Supplied by resource providers
• Quality check by IESR content manager
IESR Entities

Collection

Service

Agent

provides access

owns

administers
IESR Identifiers

- Every entity has a URI
- Assigned on registration in IESR
- Provide identification for resources in IE
- Links between entities in IESR
- PURL-based Object Identifier (POI)
- Example:
  http://purl.org/poi/iesr.ac.uk/105636559-25788
IESR Collection Metadata

- Based on RSLP Collection Description
- Simplification for electronic resources
- Backbone subject scheme (Dewey)
- Some additional IESR terms
  - hasService: IESR id (service)
  - usesControlledList
- Owner: IESR id (agent)
IESR Service Metadata

- More than RSLP CD ‘locator’
- Bespoke IESR scheme, uses open standards
- Single access method:
  - Z39.50, SOAP, OAI-PMH, Web/CGI
- Location URL
- Interface property for some service types
- Administrator: IESR id (agent)
Agent: 1
Agent Name: EDINA
Agent id: http://purl.org/iesr.ac.uk/1077197306-5288
Agt: EDINA is based at Edinburgh University Data Library, a JISC-funded national datacentre. It offers the UK tertiary education and research community networked access to a library of data, information and research resources. All EDINA services are available free of charge to members of UK tertiary education institutions for academic use, although institutional subscription and end-user registration are required for most services.
Agent Telephone: +441316503802
Agent email: edina@ed.ac.uk
Agent URL: http://edina.ac.uk
Agent Logo: http://edina.ac.uk/imagesedinaplusminus.gif

MIMAS

ASA records are licensed under a Creative Commons Licence

BY Attribution Required, Non-Commercial, Share-
IESR Administrative Metadata

• Included with every entity
• Data suppliers can include:
  – creator / contributor, creation dates,
  – language, source
• IESR includes:
  – latest modification date
  – rights
IESR Creative Commons Licence

• All IESR records licensed under a Creative Commons licence:
  – Non-commercial (freely available)
  – Share-alike (maintain same licence)
  – Attribution-required (attribute provenance)

• Suppliers agree to this licence
• http://creativecommons.org
<table>
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<th>Service Title:</th>
<th>Mimas Litlink Service</th>
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</tr>
<tr>
<td>Description:</td>
<td>This Litlink service is provided by Mimas for use by the UK academic community, and also by users at Inst and Scandinavian institutions that subscribe to the CHEST CrossFire agreement.</td>
</tr>
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<tr>
<td>Access:</td>
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<tr>
<td>Method:</td>
<td></td>
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<td>Access Control:</td>
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<td>Standard:</td>
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</tr>
<tr>
<td>Svc:</td>
<td><a href="http://purl.org/mimasis/ac.uk/1084445246-9103">http://purl.org/mimasis/ac.uk/1084445246-9103</a></td>
</tr>
<tr>
<td>Administrator:</td>
<td></td>
</tr>
</tbody>
</table>

| Agent:       | 1 |
| Agent Name:  | Mimas |
| Agent Id:    | http://purl.org/mimasis/ac.uk/1084445246-9103 |
| Agent:       | Service administrator |
| Description: |                     |
| Agent:       | +441612756109 |
| Telephone:   |                     |
| Agent email: | info@mimas.ac.uk |
| Agent URL:   | http://www.mimas.ac.uk/ |
| Agent Logo:  | http://www.mimas.ac.uk/images/mimas&mimas_c2.gif |
Other Service types

• SOAP:
  – Locator: access URL
  – Interface: WSDL

• OAI-PMH:
  – Locator: BaseURL
  – Interrogate service (Identify) for more details

• Web page: Locator: URL
IESR Interfaces

- Z39.50: Bib-1 Search
  - SUTRS (B & F), GRS1, XML (DC and IESR)
- OAI-PMH (soon):
  - XML (DC and IESR)
- Web Services SOAP (SRW) later
- Web Search
IESR XML

• Composite Collection record:
  – Collection
  – All services that provide access
  – All agents:
    • Owners of collection
    • Administrators of services

• Composite Transactional Service record:
  – Service and all administrator agents
IESR Data Supply

- Descriptions provided as single entities
- Currently data provided using templates
  - XML
  - Excel
  - Entities correlated using local identifiers
- Web form data entry interface soon
IESR Implementation

• Cheshire II:
  – Advanced information retrieval system
  – Data held as XML with indexes
  – Customisable Z39.50 interface
  – Rudimentary Web interface

• IESR data: composite collection records
• Database re-indexed overnight after change
IESR Meta-Registry

• Records entities and relationships
• Holds ‘master’ copies of entities
• Controls build of registry
• Provides browse interface
• Provides single entity records
IESR Content

- Collections from main JISC IE data providers
- Collections: 258; Agents: 172
- Services: 305
  - OAI-PMH: 4; OpenURL: 2; RSS: 7
  - SOAP: 1; Z39.50: 20; WebCGI: 5
  - WebPage: 256
M2M Interfaces

• IESR aims to provide middleware service in m2m world
• Few collections in JISC IE have m2m interfaces
• Institutional repositories of learning materials and e-prints under development
• Portals can link to resource websites.
IESR Future

- In second 14 month phase of project (until Feb 2005)
- Hope for further funding from JISC - eventually a service
- More content and beyond JISC IE
- Further interfaces
- Will enhance information landscape
IESR Details

Web site: http://www.iesr.ac.uk
Search IESR: http://iesr.ac.uk/registry/
Helpline: iesr@mimas.ac.uk

Ann Apps: ann.apps@manchester.ac.uk