

**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

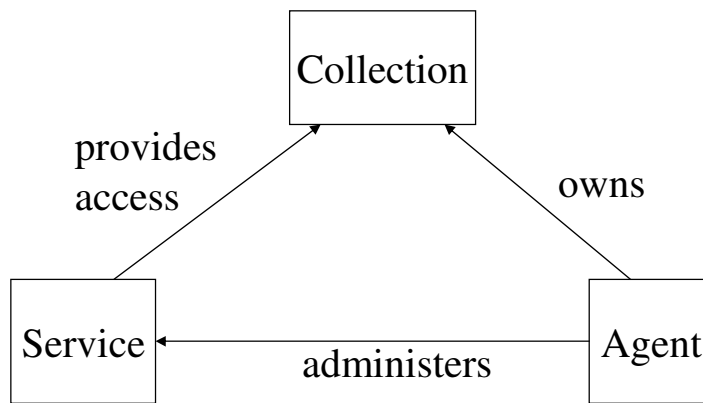
# IESR for Portals

- 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



2004-10-12

IESR. DC2004

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## 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)



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Address <C:\confs\pepc2004\psigate.html> Go Lin

IESR Type: Collection  
 Title: PSigate  
 Alternative Title: Physical Sciences Hub of the Resource Discovery Network  
 Collection Id: <http://purl.org/doi/iesr.ac.uk/1084527297-21797>  
 Coll Description: PSigate - the physical sciences hub of the Resource Discovery Network. PSigate is a free service that provides access to a searchable catalogue of high quality Internet-based resources in the physical sciences. The service is made up of a series of specialist subject gateways covering: astronomy, chemistry, earth sciences, materials sciences, physics and policy and history of science. Many additional services are provided including: Timelines, the Spotlight science magazine, plug-in bank, jobs and courses, current science news, and the ability to broaden searches via an internal search engine - the "Web Catalogue".  
 Type: Catalogue.Internet.Text; Collection.Internet.Text  
 Format: Collection of metadata records about web resources.  
 Coll: <http://purl.org/doi/iesr.ac.uk/1084526666-17399>; <http://purl.org/doi/iesr.ac.uk/1084526653-17319>;  
 hasService: <http://purl.org/doi/iesr.ac.uk/1084526679-17485>  
 Coll Copyright: Copyright. (c) PSigate  
 Coll Use: Catalogue descriptions may not be used without permission.  
 Rights:  
 Coll Licence: Freely available.  
 Collection: [http://www.psigate.ac.uk/newsite/main/psigatologo\\_small.gif](http://www.psigate.ac.uk/newsite/main/psigatologo_small.gif)  
 Logo:  
 Subject (DDC): 500; 501; 509; 520; 530; 540; 550; 620.11  
 Subject (JACS): F100; F200; F300; F500; F600; F700; F820; F860; F900; H140; H340; H310; H440; J200; J300; J400; J500; V380; V550  
 Contents Date: 2000-06/  
 Coll Owner: <http://purl.org/doi/iesr.ac.uk/1084526488-15897>  
 Coll isPartOf: <http://www.rdn.ac.uk/>  
 hasPublication: <http://www.psigate.ac.uk/newsite/about.html>

Done Internet

## 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)

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Back Forward Stop Refresh Home Search Favorites History Mail Print Edit Messenger

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# JISC Information Environment Service Registry

## IESR Full Record

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Displaying Record [1](#) of 1.




[New Search](#) [Brief Records](#) Search terms: [{anywhere=1088607166-14586}](#)

Service Title: Arts and Humanities Data Service  
 Service Id: <http://purl.org/oi/iesr.ac.uk/1088607166-14586>  
 Service Location: <http://www.ahds.ac.uk/development/xirepos/oai>  
 Access Method: oai-pmh  
 Access Control: none  
 Service Standard: oai-pmh-2\_0  
 Svc Administrator: <http://purl.org/oi/iesr.ac.uk/1088606945-12868>

[New Search](#) [Brief Records](#)

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New Search Brief Records Next Search terms: [{anywhere=1077197306-5288}](#)

Agent 1  
 Agent Name: EDINA  
 Agent Id: <http://purl.org/ptdp/iesr.ac.uk/1077197306-5288>  
 Agt EDINA, based at Edinburgh University Data Library, is 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.  
 Description:  
 Agent +441316503302  
 Telephone:  
 Agent email: [edina@ed.ac.uk](mailto:edina@ed.ac.uk)  
 Agent URL: <http://edina.ac.uk/>  
 Agent Logo: <http://edina.ac.uk/images/edinaplusminus.gif>

New Search Brief Records Next

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## 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>

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Back Forward Stop Refresh Home Search Favorites History Mail Print Edit Messenger

Address  C:\confs\pepc2004\zetoc.html

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## IESR Full Record


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Displaying Record **1** of 1.


Search terms: [{anywhere=1084445578-11684}](#)


Service Title: zetoc Z39.50 search  
Service Id: <http://purl.org/doi/iesr.ac.uk/1084445578-11684>  
Service Location: z3950s://zetoc.mimas.ac.uk:2121/zetoc  
Service Interface: <http://iesr.ac.uk/registry/intf/zeerex/1084445578-11684-zx.xml>  
Access Method: z3950  
Access Control: ip; athens  
Service Standard: bath-1-c  
Service Help: <http://zetoc.mimas.ac.uk/z3950.html>  
Svc Administrator: <http://purl.org/doi/iesr.ac.uk/1084445246-9103>

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Displaying Record 1 of 1.




[New Search](#) [Brief Records](#) Search terms: [{anywhere=1084445356-9939}](#)




Service Title: Linking to COPAC  
 Service Id: <http://purl.org/doi/iesr.ac.uk/1084445356-9939>  
 Service Location: <http://copac.ac.uk/copac/wzgw>  
 Service Interface: <http://iesr.ac.uk/registry/intf/keys/1084445356-9939-keys.xml>  
 Access Method: webcgi  
 Service Output: text/html  
 Access Control: none  
 Service Help: <http://copac.ac.uk/linking.html>  
 Svc Administrator: <http://purl.org/doi/iesr.ac.uk/1084445246-9103>

[New Search](#) [Brief Records](#)

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Address <http://iesr.ac.uk/cgi-bin/iesrsrch?form=gen&sess=207&type=Search&anywhere=1084445332-9667> Go Lin

Service Title: MIMAS LitLink Service  
Service Id: <http://purl.org/poi/iesr.ac.uk/1084445332-9667>  
Svc: This LitLink service is provided by MIMAS for use by the UK academic community, and also by users at Irish and Scandinavian institutions that subscribe to the CHEST CrossFire agreement.  
Description: Scandinavian institutions that subscribe to the CHEST CrossFire agreement.  
Service: <http://litlink.mimas.ac.uk/LitLink/servlet/LitLink?>  
Location:  
Access: openurl  
Method:  
Service Type: OpenURL Resolver  
Service Output: text/html  
Access Control: athens; ip  
Service: openurl-01  
Standard:  
Service Help: <http://litlink.mimas.ac.uk/>  
Svc: <http://purl.org/poi/iesr.ac.uk/1084445246-9103>  
Administrator:

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Agent: 1  
Agent Name: MIMAS  
Agent Id: <http://purl.org/poi/iesr.ac.uk/1084445246-9103>  
Agt: Service administrator  
Description:  
Agent Telephone: +441612756109  
Agent email: [info@mimas.ac.uk](mailto:info@mimas.ac.uk)  
Agent URL: <http://www.mimas.ac.uk/>  
Agent Logo: [http://www.mimas.ac.uk/images/mimas/mimas\\_d2.gif](http://www.mimas.ac.uk/images/mimas/mimas_d2.gif)

New Search Brief Records

Done Internet

## 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](mailto:iesr@mimas.ac.uk)

Ann Apps: [ann.apps@manchester.ac.uk](mailto:ann.apps@manchester.ac.uk)