

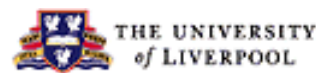
Using a Registry to Disclose and Discover Resources for Metasearching



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Outline



- Purpose of JISC Information Environment Service Registry (IESR)
- IESR content description
 - Based on NISO MI but some differences
- IESR services
- Using IESR for metasearch
- The future

Why IESR?



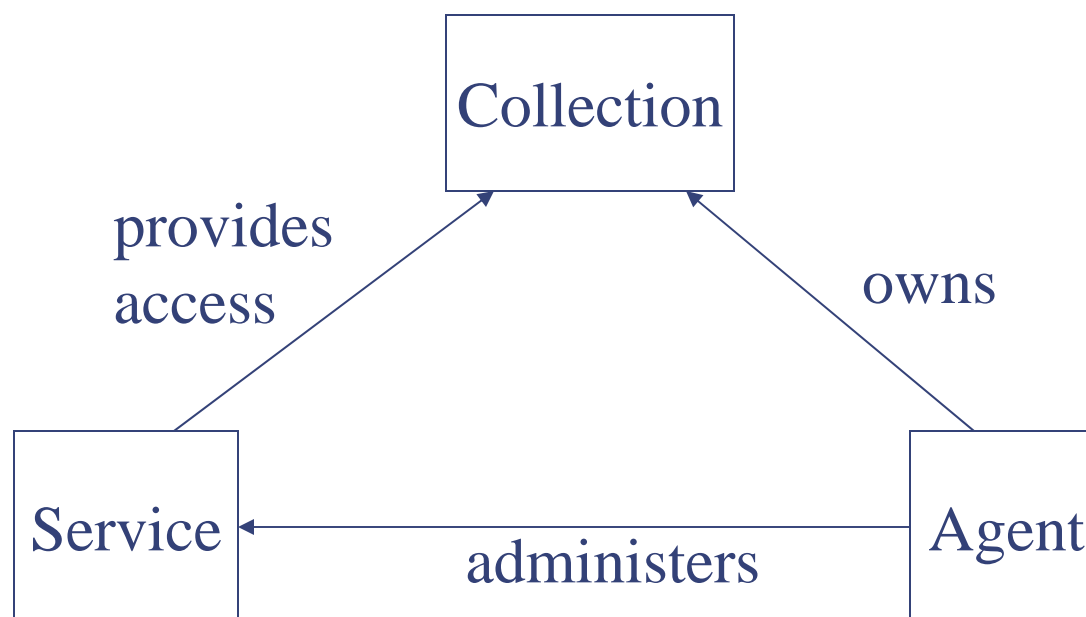
- JISC Information Environment:
 - Collections of resources for researchers, learners, teachers in UK
- Single central registry – m2m access
 - Improve awareness and access
- Funded by JISC:
 - MIMAS, UKOLN, University of Liverpool
 - Registry developed and hosted by MIMAS

IESR Content



- Descriptions of:
 - Collections of resources
 - Informational Services that provide access
 - Agents: Owners / Administrators
 - Transactional Services
- Supplied by resource providers
- Check by IESR content manager

IESR Entities



IESR Entity Description



- Entities identified with URI
- Described by metadata
- Based on open standards
- IESR terms defined in IESR namespace
- Metadata defined by Application Profile
 - Semantics
 - Occurrence
 - Searchable

IESR Collection Metadata

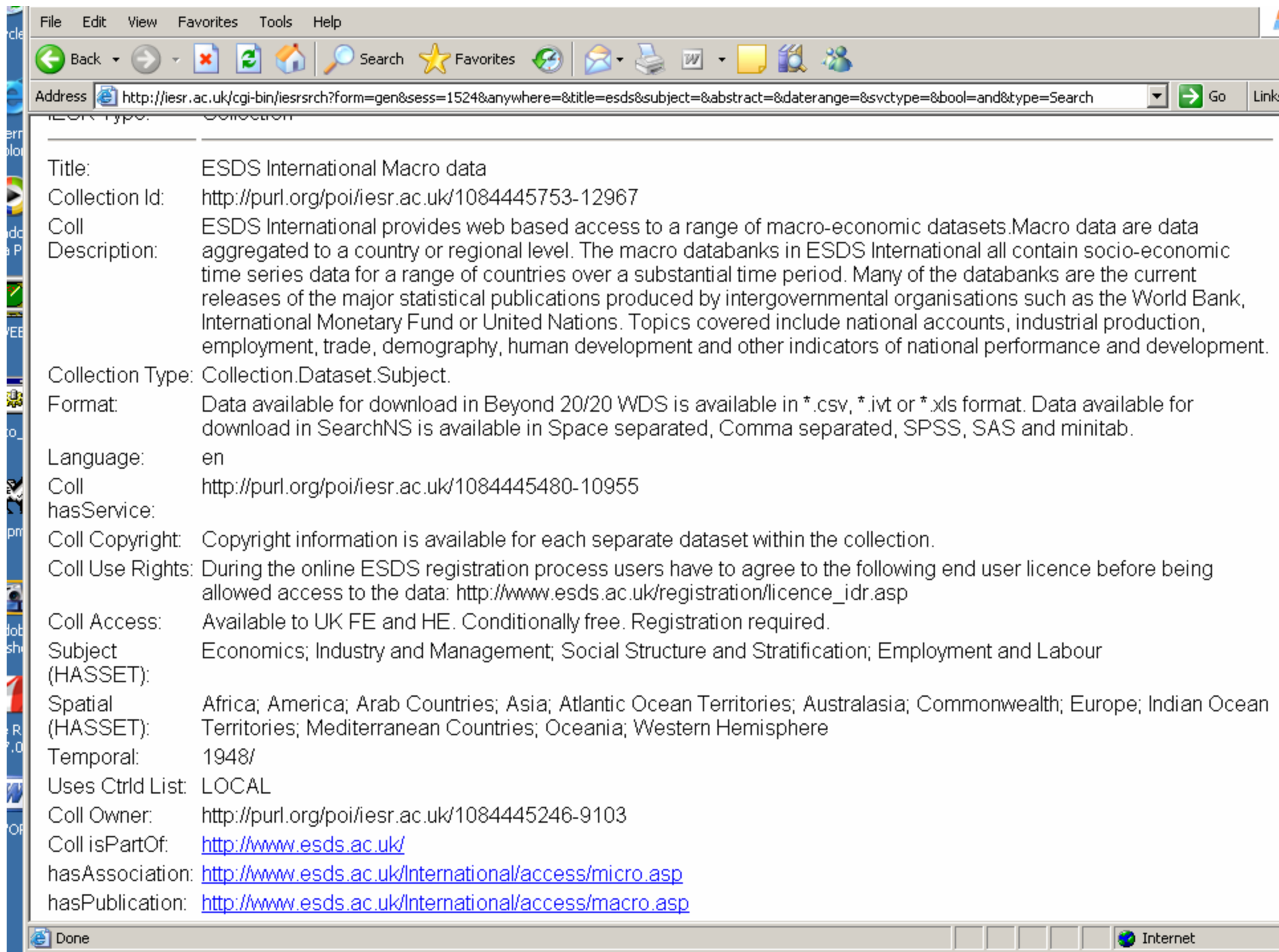


- Based on RSLP Collection Description
- Simplification for electronic resources
- Consistent with:
 - DCMI Collection Description Application Profile
 - NISO MI Collection Description

Vocabulary Encoding Schemes



- Defined in Application Profile
- Single backbone subject scheme
 - Dewey Decimal Classification System
- Other common vocabularies supported
- `iesr:usesControlledList`
 - IESR defined list (extensible)
 - terminology service; item level search



IESR Service Metadata



- More than RSLP CD 'locator'
- Bespoke IESR scheme to support discovery and registry application
- Single access method:
 - Z39.50, SOAP, OAI-PMH, Web/CGI
- Location URL
- Interface property for some service types using appropriate schema

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Reload Print Mail New Window Open Recent

Address <http://iesr.ac.uk/cgi-bin/iesrsrch?form=brief&type=frombrief&sess=1524&rec=+2+> Go Link

Rights: <http://creativecommons.org/licenses/by-nc-sa/2.0/uk/>
Rights: This IESR administrative metadata must always be retained with its associated entity description.

Service: 3
Service Title: SOSIG Internet Resource Catalogue Z39.50
Service Id: <http://purl.org/poi/iesr.ac.uk/1084526746-17952>
Service Location: [z3950s://sosig.ac.uk:2104/sosig](http://purl.org/poi/iesr.ac.uk/1084526746-17952)
Service Interface: <http://iesr.ac.uk/registry/intf/zeerex/1084526746-17952-z.xml>
Access Method: z3950
Access Control: None
Service Help: http://www.sosig.ac.uk/about_us/connect.html
Svc Administrator: <http://purl.org/poi/iesr.ac.uk/1084526500-15966>
Serves: <http://purl.org/poi/iesr.ac.uk/1084527323-22034>; <http://purl.org/poi/iesr.ac.uk/1084527337-22125>

About: <http://purl.org/poi/iesr.ac.uk/1084526746-17952>
Supplier: RDN: <http://purl.org/rdn/>
Publisher: JISC Information Environment Service Registry (IESR): <http://iesr.ac.uk>
Metadata Date: 2004-05-14
Rights: <http://creativecommons.org/licenses/by-nc-sa/2.0/uk/>
Rights: This IESR administrative metadata must always be retained with its associated entity description.

Service: 4
Service Title: SOSIG Internet Resource Catalogue Open Archive
Service Id: <http://purl.org/poi/iesr.ac.uk/1084526719-17787>
Service: <http://www.sosig.ac.uk/oaicat/servlet/OAIHandler?verb=Identify>

Internet

Other Service types



- SOAP:
 - Locator: access URL
 - Interface: WSDL
- OAI-PMH:
 - Locator: BaseURL
 - Interrogate service (Identify) for details
- OpenURL: Locator: BaseURL
- Web CGI: Interface: arguments
- Web page: Locator: URL

IESR Agent and Administrative Metadata



- Agent: contact details
- Administrative:
 - Included with every entity
- IESR includes:
 - creating organisation, publisher: IESR
 - latest modification date
 - rights to reuse descriptions:
Creative Commons

IESR Services



- Z39.50
 - Search via Bib-1 attributes
 - Results: text (SUTRS); XML
- OAI-PMH for harvesting
- OpenURL Link-To Resolver
 - Referent identifier
 - Dublin Core metadata format, e.g. type Collection
 - Implements IESR identifier resolution
- Web Search and Browse

Future Services



- Web Services SOAP / SRW (planned)
- RSS
- UDDI (under investigation)
 - Mapping IESR data to UDDI
 - Prototype registry
 - Is there a requirement?
- Data ingest

- Composite Collection record via Z39.50:
 - Collection
 - All services that provide access
 - All agents:
 - Owners of collection
 - Administrators of services
- Single entity record via OAI-PMH
- Simple Dublin Core for Interoperability

Using IESR



- Portal
 - amalgamated set of resources
- IESR provides:
 - Discovery of resource collections
 - Up-to-date details of access to collections
- Using IESR Portal builder can:
 - Add new services to portal
 - Provide metasearch

Portal Metasearch Example



- Social Science portal discovers collections with e.g. Z39.50 services
- Provides cross-search to end-user using e.g. Z39.50
- Portal builder doesn't need to know about all resources
- Users discover collections unaware of

Harvesting IESR



- OAI-PMH allows replication of IESR
- Portal harvests IESR records
- Caches locally for use by portal software, e.g.:
 - Local service registry
 - Knowledgebase after conversion to appropriate format
 - Conversion into local configuration file

Other Uses



- Portal Links to Web Search
 - General resource discovery
- Reuse collection description
 - Initially created by resource supplier
 - Shared by multiple registries and applications
- RSS Aggregator (news; data alerts)
 - Personal digital library portal
- Discover OpenURL Resolvers

Distributed Service Registries



- Scope of IESR
 - JISC, UK, international?
 - Data ownership
 - Scalability and maintenance
- Distributed model
 - Each node describes own resources
- IESR collaboration with OCKHAM in US
 - Searching is local
 - Replication by OAI-PMH harvest

Federated Service Registries



- Federated model
 - Each node describes own resources
 - Each node maintains own registry
- How to search federated registry?
 - Metasearch
 - UDDI
 - Aggregate by OAI-PMH harvest

Standard Metadata Schema



- Sharing collection descriptions
 - Need common metadata schema
 - Or a derivable schema
- NISO Metasearch Initiative Collection Description
 - Provides a common core
 - Basis of IESR and OCKHAM descriptions
- IESR a practical example application
 - Feedback to NISO MI and DCMI CD

IESR Future



- Current phase until July 2006
- More and updated content
- New IESR services
- Demonstrating viable IESR use
- Maintenance of metadata schema
- Persistence of content

IESR Details



Specifications: <http://iesr.ac.uk/metadata/>
Application Profile: <http://iesr.ac.uk/profile/>
XML Schema: <http://iesr.ac.uk/schemas/iesr.xsd>
Web Search IESR: <http://iesr.ac.uk/registry/>
Z39.50 service: <http://iesr.ac.uk/use/z3950/>
OAI-PMH service: <http://iesr.ac.uk/use/oaipmh/>
IESR Helpline service: iesr@mimas.ac.uk

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