Resource Description

Definition:
Resource Description concerns the definition of data elements describing a collection* for the purpose of Resource Discovery -- where Resource Discovery is the process of helping users discover the resources that may be appropriate for their area of research. A standard set of descriptive elements is required that describe the minimum features of a data resource but would include data type(s), subject, coverage, access protocols and other material of use for Resource Discovery. The set of data elements must be extensible and should also include elements for data format, language, content tagging, predefined taxonomies etc.

*The term 'collection' can be applied to any aggregation of physical or digital items. It is typically used to refer to collections of physical items, collections of digital surrogates of physical items, collections of 'born-digital' items and catalogues of such collections. Collections are exemplified in the following non-exhaustive list:

- collections of text, images, sounds, datasets, software, other material or combinations of these (this includes databases, CD-ROMs and collections of Web resources),
- library collections,
- museum collections,
- archives,
- library, museum and archival catalogues,
- digital archives,
- Internet directories and subject gateways,
- Web indexes,
- other collections of physical items.

The creation of resource or collection descriptions serves different stakeholders in the following ways:

i. Collection owner
   Allows the owner to disclose information about their existence and availability to interested parties. Resource Description is a way of exposing the collection so users can find and use the contents.

ii. Researcher
   Facilitates the discovery and location of collections of interest.
Resource Description

Much work has been done in this area to date – see section on related work below – and this work will be evaluated for its appropriateness to the MetaSearch arena.

List of issues for discussion
1. Setting boundaries for resource/collection types to be covered by this initiative (see also list above)
2. Resource Description metadata elements.
3. Mechanism for collecting Resource Descriptions?
   a. Harvest
   b. Distributed search
   c. Registry
   d. Other
4. Mechanisms for exchange of Resource Descriptions? (Note need first to identify the stakeholders – potentially:
   a. The collection owner
   b. The agency providing the metasearch tool
   c. The Library
   d. Provider of repository of Resource Descriptions
   e. Others
5. Interaction with other groups working in this area eg JISC in UK
6. Z39.50 Explain – why has this not been successful?

Related work to be drawn upon
1. UK Collection Description Focus
   http://www.ukoln.ac.uk/cd-focus/
   For more information see also:
   Collection Description Survey
   http://www.ukoln.ac.uk/metadata/cld/study/toc/

2. RSLP Collection Description
   http://www.ukoln.ac.uk/metadata/rslp/

3. DCMI Collection Description Working Group
   http://dublincore.org/groups/collections/

4. Articles of possible interest
   b. Collection Level Description - Spreading the gospel Bridget Robinson and Pete Johnston outline the work of the Collection Description Focus
   http://www.arladne.ac.uk/issue31/cld/
5. W3C – UDDI. The UDDI specification provides for a set of registries that function as a yellow-pages directory for web services. Some functionality of those registries would be similar to that of an Internet search engine. Unlike a search engine, UDDI registries would be open to all registrants and could be used to offer links to content other than that available through HTML web pages. It is unclear if the level of description provided would meet the requirements for a resource description and service function. The following paper provides a high-level business description.


6. Z39.50 Explain

http://www.loc.gov/z3950/agency/markup/07.html

Possible approaches and/or solutions

Possible approaches include:

1. A highly-distributed model in which each content provider maintains their own Resource Descriptions/list of services and provides a mechanism for the metasearch tools – or other agencies – to retrieve the descriptions.
   
   *Advantage:* simple infrastructure
   
   *Disadvantage:* redundancy

2. NISO to designate organizations as official registries of Resource Descriptions.
   
   *Advantage:*
   
   a. Reduces need for each metasearch agency to create the necessary infrastructure to support a distributed model.
   
   b. Content providers need only register once (Using UDDI model, for example, the registry information can be shared between registries)
   
   *Disadvantage:* more economic infrastructure needed.

In either of the models above the following initial steps will be needed:

3. Create object model/ER diagram in order to determine metadata elements for Resource Description.

4. Identify/specify the directories needed to support this environment and well-defined methods of exchange.

5. Detail possible use cases for Resource Description.