The Dublin Core Metadata Registry

DC-2004 Registry Working Group Meeting

Shanghai Library October 14, 2004

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Agenda

- Working group overview
- Project goals
- Current status
- Architecture Overview
- Technology stack
- Prior-year accomplishments
- Overview of activity at distributed sites
- Survey results
- Open discussion:
  - Functional requirements
  - Issues
  - Comments
Working Group Overview

- Established December 1999
- Chairs:
  - Harry Wagner, OCLC
  - Rachel Heery, UKOLN
- Consensus-driven activity involving the interests of a variety of participants, working groups and related activities.
- Mission:
  - Provide an authoritative, and trusted, source of in-depth information about metadata vocabularies and the relationship between registered terms.
  - Provide this information in a format suitable for both humans and applications.
- Activity managed via mailing lists, working group meetings.
- WG Home page: [http://dublincore.org/groups/registry/](http://dublincore.org/groups/registry/)
- Mailing list: [http://www.jiscmail.ac.uk/lists/DC-REGISTRY.html](http://www.jiscmail.ac.uk/lists/DC-REGISTRY.html)
Project Goals

- Simplify the discovery of terms and illustrate the relationship between terms.
- Promote the reuse of metadata terms
- Provide a trusted source of information about the DCMI element set and related vocabularies.
- Make the registry available to the metadata community as an open-source project, built entirely upon open-standards.
Current Status

- Current version: 3.3.2
- Web and Application interfaces supported
- Search & browse functions provided
- International support for 24 languages
- Support for SOAP and REST style Web services
- Administrative component
  - Inter-registry communication module
  - Collection management
  - Data import utility
  - User-interface property editor
- Full support for local extensions
- Support for viewing registry content in a variety of encodings
- Usage/encoding examples support
- Distributed as open source, built entirely on open source/open standards
- Deployed as a distributed architecture
Architecture Overview

The Dublin Core Metadata Registry

Registration Authority

Feedback & Registration Requests

Metadata Registry

Human Interface

Local Extensions

DCES Core Terms

Machine Interface

Web Services

Applications & Other Registries

People Seeking Information About Terms

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Registry Technology Stack

XML used for serialization & exchange
RDF / RDFS used to describe classes and associated properties
Ontology support for advanced inferencing
Prior-Year Accomplishments

- Published a new working group charter
- Added support for a REST (HTTP) style application interface
- Installed a registry at the Library of the Chinese Academy of Science, in Beijing, China
- Published an installation guide & administration guide (draft)
- Added metadata translations for Czech and Welsh
- Added a Ukrainian translation for the user interface
- An updated user interface
- Encoding examples in XML and RDF/XML
- Added support for RDF/XML, N-TRIPLE and N3 views of results from the detail screen
- Numerous updates to the administrative component to simplify installation & maintenance
- Ontology support for OWL and DAML/OIL (provided by upgrade to Jena 2.0)
Distributed Sites

- OCLC, Dublin Ohio
  - Version 3.3.2, all supported languages
  - Generic reference tool for core terms
- University of Tsukuba, Japan
  - Version 2.0.2 and version 3.0, CJK & E
  - Research activity
- The University of Goettingen, Germany
  - Version 2.0.2, German and English
  - Special subjects gateway (SSGFI) extension
  - Research / reference activity?
- The Library of the Chinese Academy of Sciences, China
  - Version 3.3.0, Chinese and English
  - No (current) local extensions
  - Part of a larger project to link Chinese digital libraries
Survey Results (1)

Which of the following metadata activities does your organization actively participate in?

<table>
<thead>
<tr>
<th>Activity</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance of large / multilingual vocabularies</td>
<td>3</td>
</tr>
<tr>
<td>Project management / knowledge organization</td>
<td>4</td>
</tr>
<tr>
<td>Ontology design</td>
<td>2</td>
</tr>
<tr>
<td>Metadata creation (instance data)</td>
<td>6</td>
</tr>
</tbody>
</table>
## Survey Results (2)

How would you rank the following metadata registry features, with regards to their importance to your organization? (1=most important, 2=second most important, etc.)

<table>
<thead>
<tr>
<th>Respondent #</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inter-registry cooperation</td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>3</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Authoritative &amp; trusted info source</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Term info in multiple formats &amp; languages</td>
<td>2</td>
<td>2</td>
<td>6</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Usage examples</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conceptual modeling based on local needs</td>
<td>6</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Application interface</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Other*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7</td>
<td>3</td>
</tr>
</tbody>
</table>

* Support for creation of application profiles (7)
  Mapping & relationship among terms (3)
  Extraction of customized standards, or portions of standards
  Features already provided (WS interoperability, statistics, etc.)
Most Important Features

- Inter-registry cooperation: 39
- Term info in multiple formats & languages: 24
- Conceptual modeling based on local needs: 18
- Authoritative & trusted info source: 14
- Usage examples: 22
- Application interface: 26
- Other: 6

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### Survey Results (3)

How would you rank the following barriers to installation & adoption of a metadata registry with regards to your organization? (1=most significant barrier, 2=second most significant, etc.)

<table>
<thead>
<tr>
<th>Respondent #</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational commitment</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Benefits insufficient to warrant cost/effort</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Lack of technical expertise</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Cost</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Other*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

* Uncertainty regarding who should manage activity (4)
  Installation procedure too complex
Barriers To Installation

- Organizational commitment: 17
- Lack of technical expertise: 16
- Benefits insufficient to warrant cost/effort: 16
- Cost: 26
- Other: 2

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Harry Wagner - October 2004
Which of the following do you consider to be an indispensable feature for a metadata registry? (mark all that apply)

<table>
<thead>
<tr>
<th>Respondent #</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automated crosswalks &amp; mappings</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Application profile generation</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Automated crawling of repositories</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Authority control</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Other*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

* Features already provided (Creation of new properties, WS interface)  
Non-proprietary DB  
Versioning
Indispensable Features

Automated crosswalks & mappings: 6
Automated crawling of repositories: 6
Application profile generation: 4
Authority control: 3
Other: 2
### Survey Results (5-7)

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you considered deploying a registry in the past year?</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Have you already deployed one, or plan to in the coming year?</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Will you have representation at this meeting?</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>
Open Discussion

- Functional Requirements
- Issues, suggestions, Comments, etc.

Contact information:
- DCMI Metadata registry: http://dublincore.org/dcregistry/
- WG home page: http://dublincore.org/groups/registry/
- Mailing list: http://www.jiscmail.ac.uk/lists/DC-REGISTRY.html

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