JISC Metadata Schema Registry

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H.4. Information Systems Applications

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1. INTRODUCTION

This poster will present work carried out over the last year on the UK Joint Information Systems Committee (JISC) funded Metadata Schema Registry [1]. The registry is being developed as a shared service within the JISC Information Environment (JISC IE) to provide access to information on metadata vocabularies and application profiles used for resource description in the UK learning, teaching & research communities. The Schema Registry will act as the primary source for authoritative information about metadata schemas recommended by the JISC IE Standards Framework. The Registry is targeted at the spectrum of education communities, aiming to provide a service that handles schema based on both the Dublin Core (DC) and IEEE Learning Object Metadata (LOM) formats. The project has as associated partners CETIS and Becta as representatives of user communities.

The JISC Metadata Schema Registry will build on previous work in the DESIRE, MEG and CORES projects that explored provision of information about metadata at the level of data elements, element sets or application profiles. The MEG Registry project, funded by JISC and Becta in 2002, developed RDF-based registry and schema creation tools. These tools were readily usable with Dublin Core but less so with the hierarchical model of IEEE LOM.

2. AIMS AND OBJECTIVES

The Registry will provide the JISC IE with a single point of referral for recommended schemas. It will allow initiatives within the JISC IE to publish application profiles [2] in a common registry, making them available to others. This provides a concrete way of encouraging sensible uniformity alongside necessary divergence. It helps avoid unnecessary duplication of effort, and supports sharing of common approaches. The registry aggregates and indexes schemas and supports navigation and query providing both Web based human-readable and API access.

Intended project outcomes are progressing consensus on data models for DC application profiles and LOM application profiles, as well as improved disclosure and discovery of metadata semantics. The benefits for user communities will be tools to assist with consistency in creating application profiles that in turn will support increased interoperability. Use of the registry should also lead to less duplication of developer effort through wider access to and re-use of existing solutions. The project also hopes to encourage better communication leading to wider collaboration between the DC and LOM communities.

3. PROGRESS SO FAR

User requirements have been gathered from the education and digital library communities, with the support of user organisations. The DC/RDF data model underlying the MEG registry and schema creation tool has been refined to support the IEEE LOM hierarchical model, taking into account user requirements. Usage scenarios and functional requirements have been drawn up and are available from the project Web site. Draft models for a DC application profile, based on the DCMI Abstract Model, and for a LOM application profile are also available.

The software components being developed by the project are the schema desktop client, the registry server, and the registry Web interface. The client and registry server software are based on the earlier open source development for the MEG project in 2002 but with the much updated data model. The client allows users to create new schemas and application profiles supported by browsing and searching (through the Web interface) existing application profiles. The client is written in Java and uses the Eclipse SWT+JFace library. This is an Open Source software development using SourceForge to provide the code CVS and release support within the 'schemas' project [3]. A development log is available from the project web site.

Future work will complete development of the demonstrator tools, seek user feedback, and develop a policy and guidance framework.

4. REFERENCES

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