Metadata Standardization
Status in Korea

W3C RDF Core WG Meeting
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NCA Introduction

☐ National Computerization Agency
  • NCA, established in 1987 is the leading agency for national informatization and has played an important role in development and deployment of information technology in Korean government and the public sector

☐ Mission of NCA
  • Provide expertise in preparing and implementing initiatives and plans for informatization promotion
  • Construct and promote Korea Information Infrastructure
  • Develop and establish IT standards
  • Evaluate and audit IT projects and systems, etc
Mission of IT standardization

- Develop standards that facilitates the efficient and effective operations of business processes, information flows, and systems integration in public sector.
- Developing IT architecture, standard profile and preparing the Standardization Master Plan.

Major Activities of IT standardization

- Domestic Standardization activity
  - Telecommunications Technology Association Standards (TC07)
- International Standardization activities and Cooperation
  - W3C, IETF, Open group, ISO/IEC JTC1, ...
- Seminars and Events relating to the standardization
Metadata standardization

☐ Background

  • The basic plan for the management of the knowledge and information resources
    – The urgent matter is to construct sharing system of nation’s knowledge & information, digitize and standardize of Metadata, XML DTD and others

☐ Working Group

  • Preparing the Matadata Implementation Guideline for the management of Knowledge and Information resources
    – University, Information Resource Centers, Research Centers, relating Companies and NCA are the members of the WG from January 2001
 Metadata Standardization Process

National Knowledge & Information Resource Management Committee

Standard Committee

Telecommunications Technology Association

Metadata Standardization Working Group

Other Working Group (XML schema, Classification...)

W3C, DCMI, and Others
### Data Dictionary of Metadata (example: Educational Domain)

<table>
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<tr>
<th>Element</th>
<th>Qualifier</th>
<th>Educational Domain’s Set</th>
<th>Encoding Scheme</th>
<th>Definition</th>
<th>Example</th>
<th>RDF Property</th>
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Metadata Registry (1st Draft)

One-stop Delivery System of Knowledge & Information Resource

1. Schema Request
2. Schema Retrieval
3. Schema
4. Schema
5. Schema
6. Repository Request
7. Repository (Editor, Converter)
8. Repository Request
9. Request for Schema Registry
10. Schema Registering

Meta-DB Search Agent

Repository (Editor, Converter, BPM..)

Meta data Registry

DB

Science

Education

Culture

History

IT

New Projects

Search Engine

DB

Meta-DB

Meta data

Editor

Converter

DB

Meta-DB

DB

Meta-DB

DB

Meta-DB

DB

Meta-DB

DB

Meta-DB

DB

Meta-DB

DB

Meta-DB
Situation and Problems

- There are several types of metadata schema already
  - Around 1999 to 2000 (before the metadata standardization), several Knowledge & Information Resources centers implemented their own metadata
    - Korean MARC, Simple Dublin Core, Dublin Core with self extended elements or their own standard format
      (Adopting simple Dublin Core is not the best solution in Korea)
    - However, Many of the Digital Resources have no metadata yet.
    - So, it is difficult to find the common element for metadata search

- There are many types of domains and resources
  - Cultural Heritages, Educational, Scientific, Historical, Information Technology Domains
  - Text, moving picture, still image, voice and other fact data
There are several projects relating to metadata in the world, but these are still testing stage.
- AGLS, e-GMF, UKLON, etc.
- DESIRE Project

Maybe RDF is the best solution but the RDF Schema Standard is not fixed yet
- RDF is very powerful but it is difficult to implement and understand at present
  – Parser, tools
Issues

- What is the best solution at present?
  - RDF, Metadata Registry, Others

- What we should consider to apply the RDF standards in the future?
  - Can Metadata Registry be a solution at present?
  - What we should prepare for the RDF at present?