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Clever Recordkeeping Metadata Project

Metadata registries for recordkeeping metadata interoperability

Dr Joanne Evans



Clever Recordkeeping Metadata Project

ARC Linkage Project 2003-2005 Chief Investigator

 Professor Sue McKemmish, Monash University

Partner Investigators

- Professor Anne Gilliland-Swetland, UCLA
- Mr Adrian Cunningham, National Archives of Australia

Industry Partners and Collaborators

- National Archives of Australia
- State Records Authority of New South Wales
- Australia Society of Archivists, Committee
 on Descriptive Standards



http://www.infotech.monash.edu.au/research/groups/rcrg/crkm



Imperatives for recordkeeping metadata interoperability

- Most organizations have serious operational problems regarding the processes by which they manage electronic records, one of their most important assets. ...
- ... Many of the findings are worse than they otherwise might be because the business functions required to successfully manage electronic records operate in an independent "silo" context. ...
- ... The number and magnitude of organizational and operational problems reflected in the survey findings collectively create stunning business risks.

Robert F. Williams and Lori J. Ashley, 2005 Electronic Records Management Survey 2005 – A Renewed Call to Action White Paper, Cohasset Associates Inc., 2005, 68 pp, <u>http://www.merresource.com/pdf/survey2005.pdf</u>



Traditional recordkeeping architectures





Metadata broker as middleware





Metadata broker as middleware (cont.)





First iteration outcomes

Observations

- Standards not as interoperable as assumed
- Complexity in recordkeeping metadata re-use
- Limitations of current recordkeeping metadata standards

Reflections on observations

- Sustainability requires moving beyond hand crafting crosswalks and hard wiring applications
- Constraints of records management and archival processes, technologies and tools developed for paper recordkeeping and in application-centric IT environments



Second iteration agenda

- Develop CRKM Broker as a cluster of web services
- Revise scenario processes in line with continuum and service oriented
- Test use of the CRKM Broker within such a framework
- Develop business case for recordkeeping metadata in such a framework



Second iteration CRKM Broker





Registry Evaluation

Registry Standards and Specifications

- ISO/IEC 11179 Metadata Registries standard (1994)
- ebXML Registry specification (1999)
- UDDI Registry specification (2000)

Registry Prototypes

- Dublin Core Metadata Registry (1999)
- DESIRE Metadata Registry Framework (1998 2000)
- SCHEMAS: Forum for Metadata Schema Designers and Implementers (2000 2001)
- CORES A Forum on Shared Metadata Vocabularies (2002 2003)
- MEG Registry Project (2002 2003)
- JISC IE Metadata Schema Registry (2004 2005)
- InterPARES 2 Metadata and Archival Description Registry and Analysis System (MADRAS) (2003 – 2006)

Translation Research Projects

- Harmony Project (1999 2002)
- OCLC Metadata Schema Transformation Services, Metadata Switch (2002 2004)



Registry Timeline





Types of registries

General

- Manage metadata and pointers to resource objects
- e.g. UDDI, ebXML, MADRAS

Metadata

- manage metadata about the semantics and syntax of metadata
- e.g. ISO/IEC 11179, Dublin Core Registry, DESIRE/SCHEMAS/CORES/MEG/JISC IE Registry Prototypes



Second iteration CRKM Broker





ebXML Registry

- Two part specification of requirements for object repository and associated registry
 - ebXML Registry Information Model
 - ebXML Registry Services and Protocols
- Availability of freeBXML Registry open source reference implementation of an ebXML Registry

- see http://ebxmlrr.sourceforge.net/



CRKM Registry Implementation Framework





Metadata broker as web services cluster





Metadata broker as web services cluster



Information Technology

CRKM Registry Information Model

Realising sustainable interoperability

Service oriented architectures

Recordkeeping services in SOA

www.monash.edu.au

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For more information

 See the Clever Recordkeeping Metadata Project web site at:-

http://www.infotech.monash.edu.au/ research/groups/rcrg/crkm

 Dr Joanne Evans Research Fellow, SIP Project Centre for Organisational and Social Informatics Faculty of IT, Monash University joanne.evans@infotech.monash.edu.au

