

Workshop on Metadata Interoperability for Electronic Records Management

November 15, 2001

Archives II, College Park, MD

ERM Standards Landscape

- **DoD 5015.2**

- “Design Criteria Standard for Electronic Records Management Software Applications”
- Detailed requirements that ERM systems must meet
- Joint Interoperability Test Command (JITC) performs compliance testing
- DoD policy is to only acquire 5015.2-compliant systems

- **ISO 15489**

- “Records Management”
- Rationale for records management
- High level requirements for ERM systems
- Compliance testing is difficult, if not impossible

ERM Standards Landscape (2)

- GILS
 - “Global Information Locator Service”
 - A profile of Z39.50 for government records
 - Z39.50 is a network protocol for searching bibliographic databases
 - Defines:
 - Standard metadata items
 - Search operators

ERM and Interoperability

- DoD 5015.2 is **not** an interoperability standard
 - It is a **requirements** standard
- Impact:
 - Tools **will not interoperate** with more than one 5015.2 compliant repository
 - **Metadata translation** is required when moving records across 5015.2 compliant repositories
 - No interoperability means **no network effects**
 - **No incentive to create tools** for 5015.2
 - Every tool must have a wrapper for **every** 5015.2 repository
 - **No possibility of open source support**
 - Data models of 5015.2 repositories are not generally available
- GILS **is** an interoperability standard for searching
 - But, 5015.2 lists support for GILS as “non-mandatory”

Goals for ERM Interoperability

- Two potential goals, in increasing order of difficulty:
- **Interchange:** the ability to replicate a file plan and its contents across records management systems such that the duplicate is perceived as identical by a human.
 - Includes file groups, files, disposition instructions, record categories, records, cutoffs & retention specifications
- **Functional interoperation:** Records management user agents should seamlessly work with a broad range of records management systems

Achieving Interchange

- A (UML?) data model based on 5015.2 entities showing relationships among:
 - File plan, file group, file, record category, disposition instruction, cutoff spec., retention spec., records
- Map metadata values into XML
 - Standard values for common metadata items
 - Media types, formats, vital records indicators
 - All future-proofed using XML
- A disposition instruction language
 - A language for specifying cutoff & retention policies suitable for cross-system interchange
- A language for linking related records (Xlink?)
- Packaging conventions for email & attachments
 - Just use MIME?
- Describing syntax of various code spaces
 - Record category code, file (group) code, etc.

One View of Functional Interoperation: WebDAV and ERM

- Map data model onto DAV concepts
 - Resources, collections, version histories
- Use WebDAV properties to store XMLified metadata items
- Develop server support for
 - Interpreting disposition instructions
 - Automatic archiving/disposal of records
 - Searching of 5015.2 properties (via DASL)
- Develop client support for management of:
 - File plans, file groups, files, disposition instructions, record categories
 - Assignment of codes to records
 - Linking of records

Benefits of WebDAV for ERM

- Widespread deployment of interoperable infrastructure for archiving electronic records
 - Extends who can benefit from ERM
 - Schools, small town governments, other under-resourced government functions
 - Better management of, and access to records
- Interoperability standard
 - Could be adopted by other 5015.2 compliant systems
 - Use of XML will help “future-proof” records metadata
 - Leverage existing base of DAV applications
 - Strong possibility of open source support
 - Could lead to a marketplace of 5015.2 supporting tools
 - Has utility far outside government realm
 - **Personal** records management

Benefits of WebDAV for ERM

- Integrated document authoring and records management
 - Manage records using the **same system** where the resource was initially authored
 - No artificial distinction between...
 - Where documents are created
 - Where documents become records
 - Where records are disposed of
 - Potentially even where records are archived for long-term
 - ERM is integrated into the entire document lifecycle from the moment a (future) record is created

Questions for the Workshop

- What is the scope of the effort?
 - Workshop is framed in terms of metadata interoperability, but this alone will not meet all 5015.2 requirements
- Which standards development organization should host the effort?
- Which technologies should be employed?
- Reuse of existing metadata standards?
- Coordination of the effort with Australia, UK, elsewhere?
- Interaction with existing technologies?
- Is the project open or closed? Who will participate? Who will lead it?