Experiences Implementing OAI Provider Services

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Our Observations & Generalizations

- Creation & Management of Metadata Much More Difficult than Implementation of OAI PMH
- Wide Range of Viable Implementation Options, But Some Workflow Accommodation Is Required
- Scalability & Value of Services That Can Be Built On Top of OAI PMH Remain To Be Proven
- Greatest Strength May Be Content & Format Flexibility for Metadata / Data shared via OAI

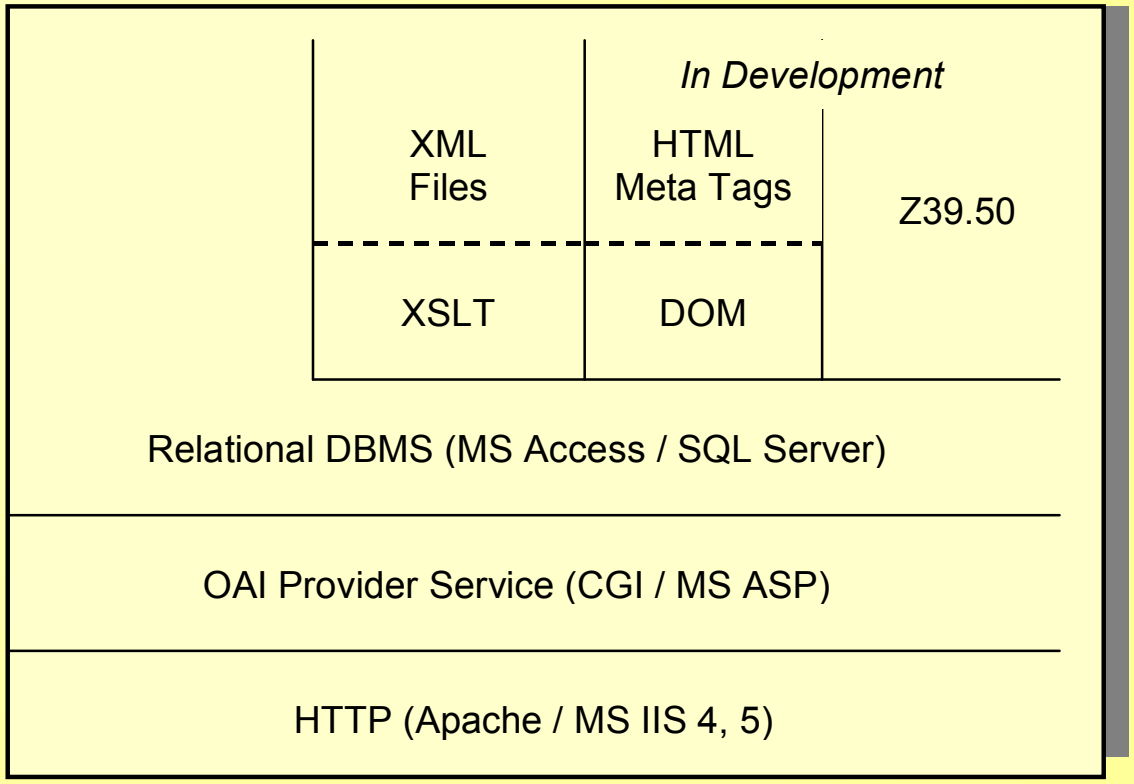
Our Architecture Approach

Descriptive & Structural Metadata

OAI Administrative Metadata

Application

Transport



Our Technical Choices

- Use of Sets:
  - Hierarchical, Non-Overlapping, Comprehensive
  - Set Name Reflected in Identifier (colon delimited)
- Repository Updates:
  - Scheduled Time of Day for Routine Updates
  - Repository Taken Offline During Update (Respond 503)
- Flow Control:
  - Use with ListRecords & ListIdentifiers Only
  - ResumptionTokens Expire with Repository Update

Additional Metadata Formats

- Other Metadata Formats of Interest:
  - Qualified DC in RDF *(More Structured)*
  - MARC *(Have Existing Data)*
  - EAD *(Have Existing Data)*
- Crosswalks to DC
  - Better Done by Provider or Harvester?
  - Complex Crosswalks (e.g., from EAD) a Concern
- Use of Multiple Namespaces with XSD
  - Canonical Namespaces, But No Canonical XSDs
  - XSD Import, ##any / ##other, lax Processing

Our List of Open Issues & Concerns

- IP Rights Management
  - Need Machine-Readable "<about>" Formats
  - Restricted Access Harvesting & Use Limitations
- Use of Sets
  - Consensus on Best Practices
  - Concept of Null Set or Set Information as Part of Record Header Element
- OAI Record Timestamp Granularity