Open Repositories 2007

Report by: Andrea Kosavic
Challenges for Digital Repositories

- Difficult to populate repositories
- Service-intensive
- Cost - staffing required...librarian(s) + programmer(s) + student help, these costs absorbed by institutions
- Appearance
- Interoperability
Metadata

- No general consensus
- Metadata is tailored to needs of collection/community
- MODS and METS seemed to be popular and were used to support preservation models
OAI-ORE

- OAI is now referred to as OAI-PMH or OAI-ORE.
- OAI-ORE will provide a way to describe a citable complex digital object, an aggregation of objects (i.e., Scholarly communication now also includes data sets, supplementary graphics, primary source material as well as references to previously publish objects).
- The relationships between resources are usually not well defined. ORE seeks to build a framework for the semantics of links between objects in a scholarly communication environment.

http://dltj.org/tag/oaiore/
Digital Preservation

- DSpace is used as the back end for digital preservation systems
- This is encouraging as institutions view DSpace as an enduring solution
- NYU is customizing DSpace to work with the OAIS model
Interoperability

- Very popular topic…theme of conference
- Australian National University showed a demo for moving objects between DSpace and Fedora
- ANU has created a DSpace Export Plugin that parses OJS to create DSpace XML
- Hewlett Packard is working on PF-DSpace (peer-federated) that will allow easy federation of DSpace as control will be shared equally among nodes
Interoperability continued…

**Builds on DM-DSpace…**

- **Modularizes** DM-DSpace implementation so that the basic capabilities are compatible with emerging releases of the DSpace standard distribution

- **Generalizes** DM-DSpace model of federation to include capabilities such as selective harvesting and metadata-only harvests

- **Introduces a “peer federation” approach** to DSpace node discovery that eliminates the need for special-purpose repository indexing services

http://lsal.memphis.edu/wfadl/cordra/calendar/events/event20061113/presentation/erickson.pdf
The Dark Archive

- Can be used to store master TIFFS
- Integrate as part of the scanning workflow
- Ideal for copyrighted works
- Benefits include full text indexing and preservation

- http://smartech.gatech.edu/handle/1853/13171
Manakin XML User Interface (UI)

- Developed by Texas A&M
- Allows for quick and easy customizations of DSpace user interface, without altering the underlying JSP code
- Very popular with presenters and conference delegates
- This is a very exciting opportunity for us to present our digital collections
Manakin allows for thumbnail display alternatives

Manakin allows for easy integration of impressive features, such as the Yahoo Maps API

http://labs.di.tamu.edu:8080/geofolios/handle/123456789/2
BibApp

- University of Wisconsin, Eric Larson
- Takes a professor’s citations from RefWorks, checks them against Sherpa/Romeo, packages them up for DSpace ingest
- This can rapidly populate Digital Repository
- Code will be released at Code4Lib, March 1, 2007
BibApp continued…

- BibApp UI shows a profile for each professor
- Displays the professor’s publishing network, popular research topics, and citation types.
BibApp continued…

- Sorts information by department
- Browse by professor’s name, popular research topics, popular journals
Semantic Web

- SIMIHEAD project at MIT
- Devised a way to harvest heterogeneous metadata
- The solution is RDF…use the RDFizer to convert metadata into RDF
- The tool can be pointed at websites, repositories, etc. (Special tool developed for DSpace)
- This scraped data can then be viewed through Longwell, which is a faceted browser, web application, and configurable UI

http://simile.mit.edu/
Semantic Web continued...

- DWell is a longwell configuration created especially for DSpace
- Dwell is embedded into DSpace as an advanced search UI
- DWELL can help put facet restrictions to help drill down by type of object, community, etc.
- DWELL's facets can be selectively displayed, can check off boxes to create disjunctive restrictions
- DWELL's data can be shown as a table, timeline, geospatial
- [http://simile.mit.edu/exhibit/examples/presidents/presidents.html](http://simile.mit.edu/exhibit/examples/presidents/presidents.html)
Digital Collections Possibilities

- Manakin as our user interface
- Dark archive
- Improve scanning workflow & preservation
- DWell for displaying select digital collections
- Use BibApp to populate DSpace with scholarly content
- Try out Yahoo Maps API for Geospatial Representation
- DM-DSpace for Synergies
Questions?