METAARCHIVE
NDIIPP Partnership

Robert H. McDonald
Associate Director of Libraries for Technology & Research
Florida State University
rmcdonal@mailer.fsu.edu

Tyler Walters
Associate Director for Technology & Resource Services
Georgia Institute of Technology Library & Information Center
Tyler@gatech.edu
MetaArchive Project Summary

• Six partner institutions:
  – Emory - Georgia Tech - Florida State
  – Virginia Tech – Auburn - Louisville

• Collaborate w/ LC/NDIIPP – $1.4M initial effort to develop cooperative for preservation of digital content, 2004-2010

• Origins/Precursors - MetaScholar.org:
  AmericanSouth.org
  • Harvest metadata from cultural memory insts. pulling into central location to aggregate, index, search, and discover. 50,000 records, +30 archives
MetaArchive Project Goals

1) Create a *conspectus* of digital content held by the partner sites

2) **Harvest** a body of most critical content to be preserved (3 terabytes, w/ capability to expand)

3) Develop **model cooperative charter** for collaboration and sustainability

4) LOCKSS-based distributed **preservation network infrastructure**
   Address geographic and institutional heterogeneity needed to safeguard each institution’s digital collections

   - **Distribution/Communication**: Internet2 Abilene network and local connections of the Southern Crossroads (SoX) network consortium and the Mid-Atlantic Crossroads (MAX) network consortium
MetaArchive Deliverables to Date

• 2004-2005
  – Create Collection Conspectus
  – LOCKSS Customization
  – Network Setup

• 2005-2006
  – Network Launch/Initial Harvest
  – Charter Cooperative Agreement

• 2006-2007 (projected)
  – Non-Profit Setup (Educopia Institute)
  – Extend partnership beyond original 7 partner institutions
  – Finish Current Collection Ingest
MetaArchive Technology

• LOCKSS Scalability
  – 2.2 Terabytes Storage Space Available
  – Proven Security (SE-Linux) Across Multiple Networks
  – Enterprise Installation
    • RedHat
    • CentOS

• Database Driven Conspectus
  – Manages Collections within LOCKSS
  – Network Administrative Management Tool

• Collaboration Tools
  – MediaWiki, VideoConference, Teleconference
MetaArchive Preservation Network

- FSU
- 21 U
- 1 U
- 2 U
- 2 U
- 2 U
- 2 U
- RedHat OS
- LOCKSS
- Switch to FSU Network
- Dell Poweredge 1850 - Gateway
- Brocade Fibre Channel Switch
- Dell/EMC AX 100 - SAN
- APC UPS – Power Supply
- Emory
- 1 U
- GaTech
- 1 U
- Auburn
- 1 U
- VaTech
- 1 U
- Louisville
- Internet2 Abilene Network
MetaArchive Conspectus Database

Conspectus Database – Ties in with LOCKSS Central Plugin Repository

Log In Here

Login: 
Password: 
Log In

If you've lost or forgotten your password, click Here

Login Attempt Failed

Actions

View All RDF Data
View By Institution
View All Valid RDF Data
View Selected Collections
View Conspectus Schema

View Existing Descriptions
Example Conspectus Entry – GaTech ETDs

Collection ID: 32
Alternate Title: Georgia Tech Electronic Thesis and Dissertation Collection
Description: The Electronic Thesis and Dissertation Collection at Georgia Tech covers Fall 2003 through the present. This program is jointly sponsored by the Graduate Studies and Research Office and the Library and Information Center. Georgia Tech is a member of the Networked Digital Library of Theses and Dissertations and participates in the Open Archives Initiative.

ESC Heading: Education
ESC Heading: Transportation
ESC Heading: Art and Architecture
ESC Heading: Law and Politics
ESC Heading: Geography
ESC Heading: Business, Agriculture, and Industry
ESC Heading: Social Class
ESC Heading: Environment
ESC Heading: Recreation
ESC Heading: History, Manners, and Myth

LCSH Heading: Dissertations, Academic -- Georgia -- Atlanta.
LCSH Heading: Electronic dissertations -- Georgia -- Atlanta.
### LOCKSS ADMIN INTERFACE for METAARCHIVE NETWORK

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<th>IP Address</th>
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</tbody>
</table>
EVO Web Collaboration Tools

[14:45:55] robert mcdonald: the cooperative agreement is in its 6th draft
Main Page

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  1.2 Cooperative Agreement Analysis Plan (CAAP)
  1.3 Technology Documents
  1.4 NEH Grant Rough Draft
  1.5 IMLS Technology Training Grant Rough Draft
  1.6 Security and Continuity Plan Rough Draft
2 Wiki Editing Help

MetaArchive of Southern Digital Culture Working Documents

Contents of the old wiki can be found here.

Conspectus

ScopeDocument
DescriptiveSchema
DescriptiveSchemaElements
MaterialsDocument
SubjectsDocument

Cooperative Agreement Analysis Plan (CAAP)

MediaWiki Portal – Document Collaboration
Organizational Issues

“Sustaining the Cooperative”

Advancing our models:
- Organizational
- Technology
- Service

Organizational Model of Sustainability:
- Individual institutions: Emory, etc.
- Consortia-building: Cooperative Charter
- Non-profit mgmt. entity: Educopia Institute
- National strategic partnerships: LC/NDIIPP
**MetaArchive Digital Sustainability Model**

### Economic
General Resource Inputs:
1) Financial
2) Infrastructure
3) Expertise

#### #4 Inputs: National/International Government Agencies & Organizations
- More Resources, Strategic Alignment
- High-Level Communication/Coordination
- New Economic Models
- International Collaboration
- NDIIPP Funding
- DPC Projects

#### #3 Inputs: Organizations, Projects, Technologies
- Overseer, Guide, Coordinate
- More Strategy / More Resources
- Sustain Innovation (Idea/Technologies)
- Mellon Funding

#### #2 Inputs: Add & Combine
- Resource inputs from six universities
- New Infrastructures
- New Ideas / Technologies begin and broaden NDIIPP Funding

#### #1 Base of Inputs:
- Universities' Infrastructure,
- People & Expertise,
- Initial Technology

### Organization
- LC / NDIIPP DPC
- Educoreia Institute
- MetaArchive Cooperative (GT, FSU, Auburn, VT, Louisville, with Emory)
- Emory University

### Technology
- LC / NDIIPP DPC
- Educoreia Institute (plus, expand MetaArchive membership)
- MetaArchive Cooperative, i.e. Georgia Tech, other developers
- Stanford / LOCKSS Development Group
- LOCKSS services

### Collections
- Sustain:
  - Content (Reliability)
  - Context (Provenance)
  - Structure
  - Authenticity
- Services:
  - Preservation (Content ingest / retrieval)
  - Format migration
  - Digital Collection
  - Disaster Recovery
  - Digital Preservation
  - Network Consulting
  - LOCKSS services

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**iPRES**
MetaArchive NDIIPP Partnership
International Conference on Preservation of Digital Objects
10.09.06
MetaArchive as Consortia: Cooperative Charter

- Cooperative Charter addresses four areas:
- A) Types of partnerships in the MetaArchive Cooperative:
  - Development Partners – responsible for developing and testing the preservation network technology and operating a preservation node
  - Preservation Partners – responsible for operating a preservation node, ingesting collections from partner institutions, and making the node available for testing
  - Contributing Partners – cultural memory institutions that possess digital content to preserve via the MetaArchive Preservation Network. They contribute fees for this service, do not operate a node
  - Sponsored Partners – cultural memory institutions that own or possess digital content they wish to preserve, but cannot contribute service fees. A Development Partner sponsors the preservation of their digital content
Cooperative Charter

B). How MetaArchive is organized, governed, and communications
   – Steering Cmte.
   – Content Cmte.
   – Preservation Cmte.
   – Technical Cmte.

• Partner institution reps can serve terms on the committees, ensuring a broad participation in governance and operations

C). Cooperative services to members
   – Digital preservation (network dev./maintenance, content ingest/retrieval)
   – Format migration
   – Digital collection disaster recovery
   – Digital preservation network consulting
   – LOCKSS services

D). 1. Technical specs for preservation network
   2. Copy of memo of understanding between the six universities
MetaArchive and Educopia Institute

• Non-profit management entity – Three issues:
  • 1) Continuing need for financial resources
  • 2) Expose MetaArchive to new digital projects to inform development
  • 3) Economically efficient, catalytic structure to bring these about

• Educopia Institute:
  – Provide oversight to MA Cooperative and other digital projects
  – Low-cost, low overhead conduit for digital library, scholarly communications technology projects
  – Advance cyberinfrastructure needed to drive research, teaching and learning in contemporary digital era

  – NSF (2003) and ACLS (2006) Cyberinfrastructure reports:
  – Scholarly activity – teaching, research, learning, knowledge transfer via scholarly communications – need rational, strategic cyberinfrastructure

EI: Generate DL technology projects to support mission and goals
Nat’l Strategic Partnership: LC/NDIIPP

- **Access to resources, context of a nat’l digital preservation agenda**
  - LC’s digital preservation partners and their approaches
  - Expertise within LC itself
  - Funding - $650,000, 2004-2007 - servers, project staff
  - Driver to develop MA models: Organizational, Technology, Services

- **Facilitate communication on dig. sustainability, gather know-how**

- **Economic models for digital library activity**
  - Consultant, Paul Courant – Univ. of Michigan, participates in meetings and projects regarding economic sustainability issues for digital pres.

- **Align programs and projects with Nat’l/Int’l initiatives**
  - Increasingly important to generating revenues

- **Emerging Nat'l/Int'l approaches to guide funding**
  - UK: JISC and DCC
  - Australian Partnership for Sustainable Repositories [APSR]
  - Netherlands KB E-Depot
  - U.S.: NDIIPP
MetaArchive: Organizational Issues

International Strategy?

• Membership in Digital Preservation Coalition
  – Further embed MA’s activities in Nat'l/Int'l strategic initiatives

Summary: In two years, much work has taken place to grow the MetaArchive Cooperative into a sustainable organization:

• Four levels of organization building:
  – Institution
  – Consortium
  – Non-profit Management Entity
  – National/International Strategic Partner

...should result in a dynamic and developing organization that productively addresses distributed digital preservation issues
Digital Preservation of Interest

- **LC NDIIPP**
- **MetaArchive**
  [http://www.metaarchive.org](http://www.metaarchive.org)
- **KB e-Depot**
  [http://eprints.rclis.org/archive/00005795](http://eprints.rclis.org/archive/00005795)
- **JISC UK LOCKSS Pilot**
  [http://www.jisc.ac.uk/index.cfm?name=programme_lockss](http://www.jisc.ac.uk/index.cfm?name=programme_lockss)
- **Australian Partnership for Sustainable Repositories**
- **SDSC/NARA Chronopolis Project**
Collaboration Tools of Interest

- **EVO**
  [http://evo.caltech.edu/](http://evo.caltech.edu/)
- **VRVS**
- **ConferenceXP**
  [http://research.microsoft.com/conferencexp/](http://research.microsoft.com/conferencexp/)
- **Jabber**
- **PHPCollab**
- **MediaWiki**
  [http://www.mediawiki.org](http://www.mediawiki.org)