The Alabama Digital Preservation Network (ADPNet)

A statewide Private LOCKSS Network

Aaron Trehub, Auburn University Libraries
Best Practices Exchange 2009
Albany, New York
September 3, 2009
“Digital preservation combines policies, strategies and actions that ensure access to digital content over time.” (Source: American Library Association, Association for Library Collections & Technical Services, Preservation and Reformatting Section, Working Group on Defining Digital Preservation)
Digital preservation is the flipside of digital collection-building. It’s unglamorous but necessary. Kind of like homeowners insurance, flossing, and the interstate highway system.
Alabama’s solution: ADPNet

In 2006, the Institute of Museum and Library Services (IMLS) awarded a two-year National Leadership Academic Libraries (NAAL) and seven Alabama institutions. These seven institutions are building a digital preservation network for the state of Alabama using open-source LOCKSS (Lots Of Copies Keep Stuff Safe). ADPNet will preserve locally created digital assets and will demonstrate a solution for academic institutions, state agencies, and community cultural heritage organizations. Aan Technology at Auburn University, is the project director. The participating institutions are the Alabama Department of Archives and History, Auburn University, Spring Hill College, Troy University, the University of Alabama, the University of Alabama at Birmingham, and the University of North Alabama.

By the end of the two-year project, institutions of higher education, libraries, state agencies, and other cultural heritage institutions in Alabama should have an increased awareness of the importance of preserving significant digital assets. The project will also show that a LOCKSS preservation network can support the digital preservation needs of different types of institutions: A representative body will govern the network and ensure the long-term operation of ADPNet.
ADPNet’s objective

To create a low-cost, low-maintenance, sustainable, geographically distributed digital preservation network for libraries, archives, and museums in Alabama
Background

- Inspired by Auburn’s experience with the NDIIPP MetaArchive Cooperative
- Began with a 2-year IMLS grant: September 2006 through September 2008
- Grant awarded to and administered by Network of Alabama Academic Libraries (NAAL) in Montgomery
- Project director at Auburn University Libraries
- Commitments from seven Alabama institutions
Member institutions

1. Alabama Department of Archives & History
2. Auburn University
3. Spring Hill College
4. Troy University
5. University of Alabama
6. University of Alabama at Birmingham
7. University of North Alabama
Basic info about ADPNet

- ADPNet is a “Private LOCKSS Network”, or PLN
- “Dark” archive: for preservation ONLY, not access or display
- Uses inexpensive, off-the-shelf equipment
- LOCKSS servers (“nodes”) at all seven member institutions
- Each institution maintains its own LOCKSS server
- Each institution contributes content for harvesting and archiving by the network
ADPNet currently contains 46 digital collections ("archival units") from all seven member institutions.

- Over 400 gigabytes harvested to date.
- Network capacity: currently 1.5 terabytes, in process of expanding to 8 terabytes.
- Plenty of room for more collections.
- More collections on the way, including audio and video files.
Membership

- Membership is open to all libraries, archives, and museums in Alabama that have publicly available digital content

- Three requirements:
  - Bring up and maintain a LOCKSS server in the network
  - Contribute content to the network
  - Join the LOCKSS Alliance…
    - …BUT possible exception for small, poorly resourced institutions

- No ADPNet membership fee
No
Membership
Fee
Governance

- ADPNet is part of NAAL
- Lightweight governance structure
- Two committees:
  - ADPNet Steering Committee (policy)
  - ADPNet Technical Committee (hardware/software)
- All member institutions are represented on the ADPNet Steering Committee
- All member institutions have a vote
- Governance policy and technical specs available on ADPNet Web site
Costs

As low as we can keep them:

- Servers: LOCKSS server and Web server (for making content available to the network)
- Storage upgrades (as network grows)
- Staff time: typically several hours per month
- Communication: e-mail listserv, monthly conference calls, annual business meeting
- Travel: mostly in-state

And then there’s the biggie…
The LOCKSS Alliance fee

- Annual fee
- Based on institution size and type—currently ranges from $1,080 to $10,800 per year
- Supports continued development of LOCKSS software
- Entitles members to technical support by LOCKSS staff
- One membership covers everything—no cap on number of LOCKSS boxes or networks
Guiding principles

- Keep it simple
- Keep it cheap
- Go with a lightweight governance structure
- Aim for low maintenance and low administrative overhead
- Take advantage of existing structures and relationships (e.g. NAAL in Alabama)
Challenges

- Scalability
- Different storage needs (large vs. small institutions)
- Differences in institutional resources
- Technical: move to new OS?
- Metadata: to PREMIS or not to PREMIS?
- Governance: sharing responsibilities
- Growth: attracting new members
The future

- Add more content to the network
- Recruit more member institutions in Alabama, including…
  - Public libraries
  - Museums
  - Other cultural heritage organizations
- Swap servers with other PLNs in other states (Arizona) and countries (COPPUL in Canada)
- Spread the word
A pretty good solution that can actually be implemented is better than a perfect solution that can’t be.
Closing thought #2

It costs a lot less to preserve digitized materials than to recreate them.
For more information…

ADPNet: http://adpn.org/
LOCKSS: http://www.lockss.org/

Aaron Trehub
Auburn University Libraries
trehuaj@auburn.edu
(334) 844-1716