Distributed Globally, Collected Locally: LOCKSS for Digital Government Information

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Introduction

Ever since the **Government Printing Office (GPO)** brought **GPO Access** online in 1993 in order to make government information accessible on the Web, some librarians and others have dreamt of a system that would extend the mostly successful, 150 year old geographically distributed **Federal Depository Library Program (FDLP)** model to the digital world.[1] Today, thanks to the efforts of **Carl Malamud**, the **Stanford-based Lots of Copies Keep Stuff Safe (LOCKSS)** team, and 15 libraries around the country, a successful model for the digital **FDLP** has been launched.[2]

This paper will describe the **LOCKSS** model of digital preservation and why that model is beneficial to apply to the realm of digital government information. Next, we will illuminate **Carl Malamud's** herculean efforts toward better access to government information. We will then discuss how we've built the **USDocs Private LOCKSS Network (USDocsPLN)** using those documents harvested by **Malamud**. The paper concludes with a call to action.

Benefits of a Distributed Collection

The subject of digital preservation is of vital concern to libraries and other cultural institutions; Organizations like the **Library of Congress**, **U.S. National Archives (NARA)**, **Internet Archive** and many others have been working on solutions to preservation and long-term access to digital information.[3] Within the government documents library community, there is one school of thought that local digital collections of government documents are wasteful duplication of resources.[4] In this view, **GPO's** assumption of storage and preservation duties has freed libraries from the burden of being documents store-houses to let them focus solely on public services. As the **LOCKSS** model demonstrates, this school of thought is mistaken and in fact will endanger long-term access to and preservation of government information.

The **LOCKSS** model[5] is a proven distributed preservation model based on a peer-to-peer (P2P) ar-

chitecture[6] in which each node in the **LOCKSS** network locally hosts an exact replica of the content being preserved. The open-source **LOCKSS** software then compares content on each host and repairs any differences, thus assuring preservation and authenticity. Approximately 200 libraries in the global public **LOCKSS** network have successfully preserved e-journals and publisher content for over ten years.[7] Fifteen **LOCKSS** libraries have now embarked on a project to apply this successful model to government documents.

There are myriad reasons why a distributed digital preservation system for government information is necessary. Among them are: protection from natural disaster, server outage, etc.; assurance of authenticity; prevention of surreptitious withdrawal or tampering of information; and building local services for local collections.

A system of geographically disbursed digital collections provides resiliency in the aftermath of a disaster. After Hurricane Rita, the **McNeese University Library** in Lake Charles, LA, lost a large amount of their physical collection, including many Louisiana state documents.[8] Imagine that instead of physical documents, **McNeese** had held the ONLY copy of digital documents and that other LA libraries had relied on **McNeese** rather than building their own digital collections. When the hurricane hit and washed away **McNeese's** servers, all libraries in Louisiana would have lost access. Even if **McNeese** followed best practices and kept an offsite backup of their materials, libraries might still be without access for weeks or months while waiting for **McNeese** to come back online.

While this imaginary wipeout of LA state documents did not happen, we face that very real situation with digital federal documents. **GPO** has been tasked since 2001 to provide a mirror server for **GPO Access**.[9] As of this writing, **GPO** has still not done so. If anything happens to **GPO's** servers, we'll lose access to hundreds of thousands of born-digital federal documents.

Local digital collections also insulate against Internet outages and server downtimes. According to the **FDLP-L** archives, **GPO** servers were taken offline seven times in 2007. During those periods, no one could access **GPO's** documents. With a **USDocsPLN** in place, users would not notice down times

because they would be automatically rerouted to their nearest collection.

Authenticity, a critical feature to have in any trusted government information infrastructure, is enhanced with a distributed collection. Digital government information has been altered without notice.[10] While there are no documented instances of this happening to **GPO** content, the potential is there as long as **GPO's** servers continue to be the exclusive source for government information. Multiple copies on geographically disparate servers allow possible alterations to be inspected and corrected, thus protecting against deliberate tampering. The **USDocsPLN** explicitly does this. Research suggests that only a large-scale network attack lasting months could successfully change content stored in a **LOCKSS** network.[11]

Related to the problem of alteration is that of outright withdrawal. In the **FDLP** world of distributed physical collections, there are processes in place to protect against this. In order to withdraw a publication from depository collections, **GPO** must notify the holding libraries of the item to be withdrawn and order them to either return the publication to **GPO** or destroy it. Sometimes withdrawal is appropriate and libraries comply.[12] But in some instances, publications are withdrawn needlessly or explicitly to protect the government's reputation. In these instances, depository librarians have been known to create a loud hue and cry that usually results in the withdrawal order being cancelled.[13] In the current centralized digital model, this protection does not exist. No public process need be followed. A simple delete command is all it takes. A cached copy can sometimes be found in **Google** or the **Internet Archive's Wayback Machine**, but often not.

Besides the preservation aspects, building local digital collections can serve to provide unique services for local communities. For instance, text mining is becoming a useful way of analyzing documents either one at a time or in large collections. It could be as simple as a tag cloud of a speech[14] or as complex as analyzing patent applications.[15] Local digital collections could provide researchers with a full or selected amount of **GPO Access** to analyze without requiring access to **GPO** servers that could potentially impact security or performance. Those collections could also be repurposed and remixed to facilitate new ways of analyzing information and creating new bodies of knowledge.

Libraries Need a Little Help From Their Friends

Libraries have traditionally taken an active role in collecting content to meet the needs of their local user base. This was a straightforward process in the print world, with vendors galore and, in the case of U.S. government documents, the **FDLP**. In the digital world, things are much murkier, the process a little more convoluted. The responsibility to collect and preserve content remains but the process is more challenging; on the open Web, there are no vendors to pull together disparate publishing streams or depository systems for easy inclusion into local library collections. On the Internet, libraries need to implement a more aggressive approach toward collecting Web-based materials as well as identifying new partners in their efforts — libraries must rely on the kindness of strangers and library fellow travelers.

One such fellow traveler to the government documents community is **Carl Malamud**.[16] **Malamud** is an Internet and open government activist who runs the Website, *public.resource. org*. Since the U.S. government has been producing digital public domain government information, **Malamud** has been successfully shaking it free from government control and onerous access fee structures and making it more accessible to citizens. **Malamud's** overarching goal is to release government information into the open so that others can build more advanced interfaces and facilitate better access to the workings of our governments.[17]

His first campaign led to the creation of the **Securities and Exchange Commission's EDGAR** database of **SEC** filings and corporate disclosure documents (which has recently had a name change to **IDEA**).[18] He has since, in his efforts to "open source America's operating system,"[19] set his sights on Federal and State Courts and case law, State and municipal codes, **U.S. Copyright Office**, **National Technical Information Service (NTIS)** videos, **Government Accountability Office (GAO)** legislative histories, and, of most interest to Government Documents Librarians participating in the **FDLP**, documents from the **GPO**.

The **GPO** is the official publisher of the U.S. Government and manages the **FDLP**. They publish and distribute to libraries publications from 21 federal agencies as well as such integral publications as the Federal Register, Congressional Record, Congressional Reports, Bills, documents and Hearings, Public Laws, Papers of U.S. Presidents and much more. **GPO Access** is built on an older technology called WAIS with a very primitive user interface and limited search capabilities. For that reason, **Malamud**, with the assistance and cooperation of the **GPO**, harvested **GPO Access** documents from **GPO** servers in late 2007 and made them accessible/downloadable via BitTorrent, Rsync, HTTP and FTP. Those documents comprise 200+ gigabytes of data from 1991-2007 amounting to 5,177,003 PDF

pages, 54,600 GAO Reports, 448,496 Congressional Reports and more. It's these **GPO** documents upon which the **USDocsPLN** has so far focused.

Current Status

The **USDocsPLN** is now up and running. The 200+ gigabytes of digital documents have been downloaded from **Malamud's** site (*http://bulk.resource.org/gpo.gov*) and distributed among the 15 partners in the project, where they will be preserved within the **LOCKSS** network. This was an extremely cost-effective project as 1 terabyte (which equals 1,000 gigabytes) of storage is now below $200, hardware is typically less than $1,000, and there is only minimal administrative cost once the **LOCKSS** box has been configured. The group will continue to evaluate and add to the network other

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BORN & LIVED: Born in Los Angeles, California. Lived in San Antonio, Texas and Panama City, Florida. For past ten years I've lived in Juneau, Alaska.

FAMILY: Wife, **Louise**, father in California, four brothers around the country and one sister in Canada.

PROFESSIONAL CAREER AND ACTIVITIES: Worked at **Alaska State Library** for ten years, promoted twice. Member of **Alaska Library Association** and **American Library Association**. Frequent presenter at state conferences. Heavy user and promoter of the **ALA** government documents wiki. Project coordinator for state agency databases across the 50 States. Co-blogger/administrator of free government information.

IN MY SPARE TIME I LIKE: I enjoy reading, blogging, hiking, cooking and outdoor astronomy when Juneau's weather permits it.

FAVORITE BOOKS: *The Mage Storms* series by **Mercedes Lackey**, *The Post-American World* by **Fareed Zakaria**, *A Vow of Conversation* by **Thomas Merton**, *Physics for Future Presidents* by **Richard A. Muller**.

PET PEEVES/WHAT MAKES ME MAD: Accusations without evidence (by governments), statements that suggest a lack of basic knowledge, lack of self-consistency, and yes, librarians who buy into the "travel agent" theory of librarianship w/o control of critical resources.

PHILOSOPHY: The less secrecy, the better for everyone. Do as you would have others do to you. Ask nothing of others that you are not prepared to do yourself.

MOST MEANINGFUL CAREER ACHIEVEMENT: Getting Alaska state agency monographs into the **LOCKSS** system back in 2005.

GOAL I HOPE TO ACHIEVE FIVE YEARS FROM NOW: Working with others in my state, I hope that most Alaskans will become aware of the rich feast of state and federal government information that is available for their taking.

HOW/WHERE DO I SEE THE INDUSTRY IN FIVE YEARS: I see librarianship as a thriving, user-centered profession. Librarians will learn how to bankroll the trust they are given by their brick and mortar patrons and become trusted online guides. They will also be curators of specialized local collections in all media for the education and convenience of their patrons. I also see public and special librarians following their academic cousins and giving much more instruction about resources and research than they do today. This instruction will be where the patron is, whether in-person or online. This will happen because libraries will gain funding as they are seen as transformational places. 🐾

collections of digital government documents, including, but not limited to, other collections on *public.resource.org*.[20]

Participating libraries in the **LOCKSS-USDocs** private network include:

- **Alaska State Library**
- **Amherst College**
- **Georgia Institute of Technology**
- **Library of Congress**
- **Michigan State University**
- **North Carolina State University**
- **Northeastern University**
- **Rice University**
- **Stanford University**
- **University of Alabama**
- **University of Illinois/Chicago**
- **University of Kentucky**
- **University of Wisconsin-Madison**
- **Virginia Tech**
- **Yale University**

While it's exciting to have this large group of research libraries participating in the **USDocsPLN**, we realize that the cost of being a **LOCKSS Alliance** member may be a barrier for some libraries — fees range from $1,000 to $10,800 per year, depending on institution size. We are working to increase the number of **LOCKSS Alliance** members in order to distribute software and other development costs across a larger network. More members mean less cost per institution.

How You Can Help

The preservation of federal documents is too important to be left to the federal government alone; we have the makings of a viable system to preserve digital government publications. There are several ways you can help.

- **Join our private LOCKSS Network.** Join the **LOCKSS Alliance**, get a server for under $1,000, and contact us. The more servers in the **USDocsPLN**, the merrier.

- **Notify us of collections of electronic federal documents. LOCKSS** staff can show you how easy it is to allow **LOCKSS** to ingest and preserve your materials.

- **Attack the root problem.** Demand members of **Congress** legislate and *fund* a system that will ensure that **GPO** proactively deposits publications and data through the **FDLP** and other interested partners. While the **USDocsPLN** project is a good start and an excellent ad-hoc effort, it should be the government's responsibility to put information in the hands of taxpayers. We should not have to be prying it out of the government's hands. A distributed digital **FDLP** benefits everyone. 🦃

against the grain

people profile

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BORN & LIVED: Englewood, NJ. See bio at *http://freegovinfo.info/about/jrjacobs* for more.

EARLY LIFE: Northeast states; lots of soccer, tennis, baseball etc.

FAMILY: Spouse, mother/father in PA, youngest of four siblings (brother in NYC, sister in Cleveland, OH, sister in Groton, NY).

PROFESSIONAL CAREER AND ACTIVITIES: I've worked in libraries since I was 15 when I worked in a small public library in Homer, NY. Professionally, I've been a Government Documents Librarian since 2002, first at **UC San Diego** and now at **Stanford University**. I'm active in **ALA's Government Documents Roundtable (GODORT)** and am a moderator for **govdoc-l**, the primary listserv of government information librarians.

IN MY SPARE TIME I LIKE: Spare time? Information activist/blogger with *http://freegovinfo.info*, *http://radicalreference* and *http://questioncopyright.org*. I also like to dabble in open-source software, hike (urban and rural), eat good food, and read.

FAVORITE BOOKS: *Sometimes a Great Notion*, *Lord of the Rings*, *Baroque Cycle*, *Leaves of Grass*, *Dharma Bums*, *Another Roadside Attraction*, *Tao Te Ching*, *Cat's Cradle*, *People's History of the United States*.

PET PEEVES/WHAT MAKES ME MAD: People who say, "it can't be done" instead of imagining the possibilities; people who act selfishly.

PHILOSOPHY: Information wants to be free; librarians to facilitate that process.

MOST MEANINGFUL CAREER ACHIEVEMENT: Writing "Government Information in the Digital Age: The Once and Future Federal Depository Library Program" which has had over 15,000 downloads; building Radical Reference and Free Government Information to give free reference to activists and independent journalists and advocate for access to and preservation of digital government information.

GOAL I HOPE TO ACHIEVE FIVE YEARS FROM NOW: That a large number of libraries have the technical and administrative wherewithal to be building local digital collections, sharing with each other and building services to increase access and shine light on government activities.

HOW/WHERE DO I SEE THE INDUSTRY IN FIVE YEARS: I'm an optimist. I see libraries continuing their vital work of preserving and giving free access to society's vital information in all formats. I also see them expanding their trusted position by leveraging the Web to make more information available to more people. 🦃

Endnotes for Distributed Globally ... *from page 44*

1. The **Federal Depository Library Program (FDLP)** was established by **Congress** in 1813 to ensure that the American public has access to its Government's information. Since then, depository libraries have been collecting, organizing, maintaining, preserving, and assisting users with information from the Federal Government. Today there are nearly 1,250 **FDLP** libraries across the U.S.

2. For a more complete discussion of the digital **FDLP**, please see: **James A. Jacobs**, **James R. Jacobs**, and **Shinjoung Yeo**, "Government Information in the Digital Age: The Once and Future Federal Depository Library Program" (2005). *Journal of Academic Librarianship.* 31 (3), pp. 198-208. doi:10.1016/j.acalib.2005.02.006. Postprint available free at: *http://repositories.cdlib.org/postprints/657.* Accessed December 26, 2008.

3. **Berman, Francine**. "Got data? A Guide to Data Preservation in the Information Age." *Communications of the Association for Computing Machinery (ACM).* 51, no. 12 (2008): 50-56. *http://portal.acm.org/citation.cfm?id=14093 60.1409376&coll=portal&dl=ACM&idx=J79&part=magazine&WantType=M agazines&title=Communications.* Accessed December 28, 2008.

4. **Durant, D.M.** (2004) The Federal Depository Library Program: Anachronism or Necessity? [Journal Article (Print/Paginated)] *http://eprints.rclis.org/2313/.* Accessed November 30, 2008.

5. Much has been written about the **LOCKSS** project and its successful model of long-term preservation of digital content: *http://lockss.org/lockss/Publications.* Accessed December 26, 2008.

6. Peer-to-peer File Sharing. Wikipedia. *http://en.wikipedia.org/wiki/Peer-to-peer_file_sharing.* Accessed December 26, 2008.

7. A full list of journals and publishers can be found on the **LOCKSS** site: *http://lockss.org/lockss/Publishers_and_Titles.* Accessed December 26, 2008.

8. **Blakeley, Rebecca** (2008, October). "What Was Lost, Now is Found: Using Digital Repositories to Rebuild What Hurricane Rita Destroyed." *http://www.slideshare.net/reblakeley/dlc-presentation-2008-presentation.* Accessed November 30, 2008.

9. **Tulis, S.** (2001) Fall Federal Depository Conference/Depository Library Council Meeting HighlightsGOVDOC-L archives at *http://lists.psu.edu/cgi-bin/wa?A2=ind01&L=GOVDOC-L&P=R173102.* Accessed November 30, 2008.

10. **Althaus, S.** & **Letaru, K.** (2008, November). Airbrushing History, American Style. *http://www.clinecenter.uiuc.edu/airbrushing_history/.* Accessed November 30, 2008.

11. **Giuli, P.**, et al. (2005) Attrition Defenses for a Peer-to-peer Digital Preservation System. *Proceedings of the 2005 USENIX Annual Technical Conference*, April, 2005. *http://www.eecs.harvard.edu/~mema/publications/hotel.pdf.* Accessed November 30, 2008.

12. An incomplete list of government documents withdrawn from the **FDLP** 1987-2000. *http://www.thememoryhole.org/foi/yanked_govt_docs.htm.* Accessed December 26, 2008.

13. Department of Justice Rescinds Order to Have Libraries Withdraw/Destroy Publications (2004, August) Posting on *Resource Shelf. http://www.resourceshelf.com/2004/08/02/dept-of-justice-rescinds-order-to-have-libraries-withdrawdestroy-publications/.* Accessed December 26, 2008.

14. Volunteers at **Free Government Information** have been testing out a Web service called **TagCrowd** (*http://tagcrowd.com*) to create tag clouds of text. Please see the following for examples: *http://freegovinfo.info/taxonomy/term/364.* Accessed December 26, 2008.

15. **March Jr., R.** (2008, February). Text Mining Patent Literature. *Searcher*, 16(2), 30-41. Accessed November 30, 2008, from **MasterFILE Premier** database.

16. For more on **Carl Malamud**, see: **Singel, Ryan**. "Online Rebel Publishes Millions of Dollars in U.S. Court Records for Free." *Wired Magazine.* December 12, 2008. *http://www.wired.com/politics/onlinerights/news/2008/12/open_pacer?currentPage=all.* Accessed December 14, 2008.

17. This is increasingly happening. **Witness OpenCongress** [*http://www.opencongress.org/*], **GovTrack.us** [*http://www.govtrack.us/*] and various projects from the **Sunlight Foundation** [*http://www.sunlightfoundation.com/projects/*]. These are but a few projects currently building Web2.0 mashups using government information.

18. **Interactive Data Electronic Applications (IDEA)** is the **SEC's** updated Web application of **SEC** data intended to replace **EDGAR**. *http://idea.sec.gov/.* Accessed December 26, 2008.

19. For more on **Malamud's** efforts to "open source America's operating system," please see *http://freegovinfo.info/taxonomy/term/530.* Accessed December 26, 2008.

20. See the gpo.gov harvest report for a complete listing of documents. *http://bulk.resource.org/gpo.gov/Harvest_Report.html.* Accessed December 26, 2008.

The Alabama Digital Preservation Network (ADPNet)

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The **Alabama Digital Preservation Network (ADPNet)** is a geographically distributed digital preservation network for the state of Alabama — the first working statewide **Private LOCKSS Network (PLN)** in the United States. Inspired by **Auburn University's** experience with another **LOCKSS**-based initiative, the **MetaArchive Cooperative**, **ADPNet** was designed from the outset to be a low-cost, low-maintenance digital preservation solution for libraries, archives, museums, and other cultural-heritage organizations in Alabama. It was also designed to be a model for other states and consortia that are interested in exploring a distributed digital preservation solution. Work on **ADPNet** began in late 2006 under a two-year **National Leadership Grant** from the **Institute of Museum and Library Services (IMLS)**. That grant ended in September 2008, and **ADPNet** is now a self-sustaining, member-managed program operating under the auspices of the **Network of Alabama Academic Libraries (NAAL)**, a department of the **Alabama Commission on Higher Education** in Montgomery. **ADPNet** currently has seven member institutions: the **Alabama Department of Archives & History (ADAH)**, **Auburn University**, **Spring Hill College**, **Troy University**, the **University of Alabama**, the **University of Alabama at Birmingham**, and the **University of North Alabama**. The network hopes to recruit new member institutions this year.

Why Alabama?

Alabama is an attractive candidate for a geographically distributed digital preservation network for several reasons. The first is the frequency of hurricanes, tornadoes, flooding, and other natural disasters, especially on and around Alabama's Gulf coast. In the past ten years, Alabama has been hit by at least four major hurricanes and many more tropical storms. In 2005, **Hurricane Katrina** devastated the coastal communities of Bayou la Batre and Coden and flooded downtown Mobile. The coastal communities are not the only parts of the state that have suffered from natural disasters, however. The interior of the state is vulnerable to tornadoes: in March 2007 a tornado swept through Enterprise, Alabama, destroying a high school and causing ten deaths. The second factor is Alabama's financial situation. Alabama is a relatively poor state, ranking 44th out of 50 in per capita real GDP in 2007. There isn't a lot of money to throw around, which means that technical solutions have to be simple, robust, and above all inexpensive to implement and maintain. Finally, Alabama is home to a rich and growing array of digital collections at libraries, archives, and museums. Many of these collections can be found in **AlabamaMosaic**, a statewide repository of digital materials on all aspects of Alabama's his-

tory, geography, and cultures. **AlabamaMosaic** currently contains over 20,000 digital objects from fifteen institutions around the state, and the number continues to grow. This combination of circumstances — extreme weather, meager state financial resources, and rich digital collections — made Alabama an ideal test-case for a simple, inexpensive, but effective digital-preservation solution like **LOCKSS**.

Although **ADPNet** was originally inspired by and has some similarities with the **MetaArchive Cooperative**, there are important differences between the two initiatives. First and most importantly, the Alabama network is a single-state solution. This has simplified governance and allowed the network to be absorbed into an existing legal and administrative entity, one with bylaws and a committee structure already in place. Second, the Alabama network was designed to be a practical solution to a pressing statewide problem, not a research-and-development project. In order to attract participants, **ADPNet** had to be simple, robust, and above all inexpensive. This, and the fact that only one or two institutions in Alabama had had any prior experience with **LOCKSS**, meant that the members opted for the simplest, least expensive hardware and software solutions available, in the hope that these would be easier to deploy and manage and more attractive to other institutions in the state. (It should be pointed out, however, that although **ADPNet's** focus is not research and development, it has contributed at least one important addition to the **LOCKSS** toolbox: a generic **LOCKSS** plugin for harvesting **CONTENTdm** collections). Finally, unlike the **MetaArchive**, **ADPNet** is not a fee-based service organization. Rather, the preservation network is intended to complement **Alabama-Mosaic**, another statewide initiative that has been kept going by in-kind contributions from its participating institutions. In other words, **ADPNet** was designed to run on relatively small expenditures and sweat equity, not on recurring infusions of grant money or annual membership fees. To some degree these differences reflect Alabama's expense-averse institutional culture. They also reflect a preference for self-sufficiency and informality where administrative arrangements are concerned.

Why LOCKSS?

LOCKSS was originally designed to harvest and archive e-journals. The **MetaArchive** project demonstrated that **LOCKSS** technology could also be used to harvest, archive, and preserve locally-created digital content. Our experience with **MetaArchive** showed us that **LOCKSS** was simple, robust, and easy to maintain. It also ran on inexpensive hardware — a crucial consideration in Alabama. And we were impressed with the level of technical support

provided by the **LOCKSS** staff. In a series of conversations in late 2005, **Auburn** and six other Alabama institutions agreed to pool resources to build a **LOCKSS**-based preservation network for the state if external start-up funding could be obtained. **NAAL** Director **Sue Medina** and I drafted and submitted a funding proposal to the **IMLS** in January 2006. The proposal was funded in September 2006; it provided support for equipment and travel to the seven participating institutions through September 2008. Crucially, it also covered those institutions' annual membership fees in the **LOCKSS Alliance** for the same period. For their part, the institutions split the equipment costs with **IMLS** and contributed staff time and other in-house resources to the project.

Accomplishments

At its inception, **ADPNet** identified four specific tasks. The first was to highlight the importance of preserving digital content among libraries, academic institutions, state agencies, and other cultural heritage institutions in Alabama. The second, to demonstrate the feasibility of state-based, low-cost models for digital preservation by creating a working example of such a network in Alabama. Third, to create an administrative structure to manage the network and assure its long-term sustainability. And fourth, to demonstrate that the network can support different types of digital content from different types of institutions, from public libraries and small colleges to large state agencies.

The network has achieved or is in the process of achieving all four tasks. On the technical side, **ADPNet** has been up and running since 2007. The network currently consists of seven **LOCKSS** nodes, each with a terabyte and a half of storage capacity. All seven member institutions have contributed content to the network, and almost 40 digital collections ("archival units," in **LOCKSS**-speak) have been harvested to date. They contain image, text, audio, and video files and include the 1867 Alabama voter registration volumes at **ADAH**; historical photographs from the **Alabama Cooperative Extension Service** collection at **Auburn University**; images of book bindings published in the *Confederate States of America* at the **University of Alabama**; and audio files of oral history interviews with civic leaders in Birmingham at the **University of Alabama at Birmingham** (for a partial list of harvested content, see "Collections" at *http://adpn.org/*). More digital content is on the way.

On the administrative side, the network drafted a governance policy that was adopted by **NAAL** at its annual business meeting in October 2008 (the policy is available on the **ADPNet** Website, under "Resources"). **ADPNet** has a lightweight governance structure consisting of two committees: the **Steering Committee** and the **Technical Policy Committee**. Every participating institution has the right to appoint a member to the **Steering Committee**, which in turn solicits nominations for the **Technical**

Policy Committee. Together, the two committees are responsible for the day-to-day management of **ADPNet**. In keeping with the network's guiding principles, the requirements for membership are as simple and affordable as we could make them. Participating institutions must agree to install and run a **LOCKSS** server in the network; contribute content to the network; and join the **LOCKSS Alliance** for an annual fee. There is no **ADPNet** membership fee.

Surveys have shown that **ADPNet** has succeeded in raising awareness of the importance of digital preservation among Alabama libraries, archives, and state agencies. The task now is to translate this increased awareness into participation in **ADPNet**.

Going Forward

ADPNet's main mission is to build and sustain a robust, inexpensive distributed digital preservation network for Alabama, but it also hopes to serve as a model for similar networks in other states and other countries who may think they can't afford to preserve their local digital heritage. **Private LOCKSS Networks** offer communities a low-cost, highly customizable alternative to more expensive digital preservation solutions. If **ADPNet** had a motto, it might be "keep it simple and keep it cheap." This basic approach appears to be working well for Alabama. It remains to be seen whether it will work for other states and consortia, but the signs so far are encouraging. 🌲

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against the grain people profile

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BORN AND LIVED: Born and raised in western Massachusetts. Lived in Canada, California, Washington, D.C., Germany, and Illinois. Currently living in Opelika, AL.

PROFESSIONAL CAREER AND ACTIVITIES: I'm the Assistant Dean for Library Technology at **Auburn University**, a land-grant university in east-central Alabama. I'm responsible for overseeing all aspects of library technology at Auburn, including the integrated library system and discovery tools, digital collections and initiatives, and the **Media and Digital Resource Laboratory (mDRL)**, a multimedia resource center for students and faculty. I came to Auburn from the **University of Illinois Library at Urbana-Champaign**, where I held the rank of associate professor of library administration and managed two Web-based, revenue-generating reference services. Before becoming a librarian, I was trained as a Slavist, and worked for some years as a Russian affairs analyst at **Radio Free Europe/Radio Liberty** in Munich, Germany. I have a BA from **McGill University**, an MA from the **Johns Hopkins University School of Advanced International Studies (SAIS)**, and an MLS from the **University of Illinois at Urbana-Champaign**.

FAVORITE BOOKS: **Philip Larkin**, *Collected Poems*. This one seems to make the trip from the night table into the suitcase more often than any other.

HOW/WHERE DO I SEE THE INDUSTRY IN FIVE YEARS: In my almost twenty years as a librarian, I have seen a shift in emphasis from content curation to content creation. In other words, I have seen libraries add the creation of new scholarly content, or the publishing of it, to their traditional role as organizers and stewards of content created by other agencies. I have also seen the boundaries between libraries, archives, museums, and other cultural heritage organizations begin to dissolve. I think these are positive developments, and hope they continue. How they will affect the industry and our field in five years, or even three, I don't pretend to know. Given the events of the past five or six months, long-term prognostication seems rather beside the point. I agree that librarianship is at a fateful juncture, and find the prospect invigorating rather than dismaying. Whatever the challenges ahead may be, I think that we can best preserve what is worth preserving about our profession by joining forces with our counterparts in other institutions and focusing on first principles, which include stewardship, discovery, open access, enrichment, and — the theme of this issue — preservation. That's our job, and I don't see it changing. 🌲

You Gotta Go to School for "This?" — A Rave Review

by **Jared A. Seay** (Reference Librarian and Head, Media Collections, Addlestone Library, College of Charleston, Charleston, SC 29424) <seayj@cofc.edu> *www.cofc.edu/~seay*

Oh for the days when the word "rave" merely referred to speaking or writing enthusiastically (or incoherently) about something. Yet, linguistic evolution marches on. The term "rave" now describes a wild dance party. Certainly this is not news to those among you (you know who you are) who are connoisseurs of modern party culture. But, the thought of such an event occurring in a library (one with real books in it) sends the mind reeling, especially if one's mind tends toward reeling as mine does. A rave in an academic library? Who knew?

I was introduced to this rave library thing when our staff recently received an urgent all points bulletin of a student rave which was to occur at 11pm in the green just outside the library. Learning that this would involve hundreds, if not thousands, of (potentially riot prone) students who would actually move INTO the library for the main event, I realized I had served my public dutifully for the previous eight hours. I thus selflessly considered that my presence would be unnecessary.

So, though I was not physically present during the event, by piecing together eyewitness accounts, police reports, pieces of shredded textbooks, and the extensive **YouTube** record of the event, I was able to conclude that my decision to leave on time after work was a wise one. Even so, it was a literally earthshaking and exciting event for the library.

Apparently it is a common thing these days for students to blow off steam during final exams. Why one would find it necessary to "blow off steam" during this time is beyond me, since during my student days I found exam times conducive to quiet reflection and relaxation. Of course, besides the fact that I may not be indicative of the norm, my memory is fading a bit, and I sometimes lie outright for dramatic effect especially when it involves my youth. In any case, this library rave thing is a growing phenomenon on campuses in which students are given access to turn the university library into a rocking, screaming, pounding, music thumping rave arena. Students fill the open spaces within the library and dance and scream (with total abandon) to unseen sources of loud music for ten minutes without pause.

For those used to the library as a place of study and sedate informational exchange, it is surreal to see the main floor packed with a seething mass of screaming, dancing, exhilarated students. I think the sight of students crowd surfing across the rotunda amid a blizzard of shredded textbooks (being precipitated from the second and third floors) was particularly memorable and striking. For those ancient ones among us who have never experienced such a thing (or don't remember it) the rave has all the noise, chaos, and mayhem of a street riot, but with much less tear gas and much happier people. It is also over as quickly as it begins, which tends to calm the police/security who just stand to the side and grin a lot.

Across the country there are also so called "silent raves" in which everyone listens and dances and wiggles (silently of course) to the same music on their iPods. It's a sort of a synchronized chaotic, silent dance thing. This removes the