



## Digital Library and Archives

<http://scholar.lib.vt.edu>

FY 2009 Annual Report: June 2008 – May 2009

### SCHOLARSHIP DOMAINS

based on the Virginia Tech Strategic Plan: <http://www.president.vt.edu/strategic-plan/strategic-plan.html>

#### *Learning*

*Increase and support a diverse student body*

**DLA employs a diverse student workforce** which gives them training and experience to become more technologically literate. This year DLA employed 15 students; 60% are international students and 53% are female. Their majors span the colleges: 27% humanities (art and architecture), 20 social sciences (business, political science, and psychology), and 53% sciences (computer science, environmental engineering, and food science). 53% are graduate students and 47% are undergraduates. Without them DLA could not complete the work and record the statistics documented throughout this report.

#### *eLearning and Information Systems*

*Strengthen library systems appropriate for the 21st century*

### Digital Preservation

Because DLA hosts entirely unique university resources, it is important that we have a strategic and sustainable preservation plan to prevent the loss of these resources. As a member of the MetaArchive Cooperative ([www.metaarchive.org](http://www.metaarchive.org)), DLA continued development of the highly successful distributed preservation network. Over 100,000 VT files in 70 collections (900GB) have fail-safe copies in the MetaArchive's dark archives of research libraries from Texas to the UK. DLA similarly hosts important digital resources of five other MetaArchive members on equipment replaced every three years at the expense of the Cooperative. See the collections' metadata at <http://www.metaarchive.org/conspectus/> DLA staff participated in new member orientation and documented policies, procedures, and best practices in *Guide to Distributed Digital Preservation*, currently out for peer review. We also shared our experiences and knowledge with the worldwide digital library and archives communities through a variety presentations listed below under Foundation Strategies.

### Information Systems

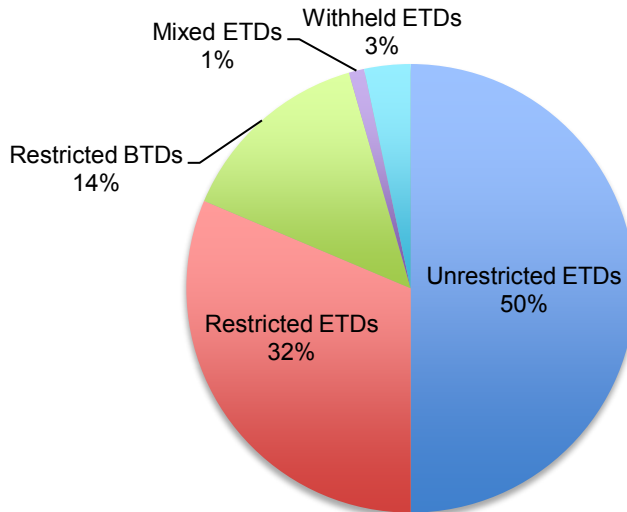
There are over 6 TB of data on DLA servers. Desktop hardware and software upgrades and maintenance this year improved user access to our web resources through staff web work and data wrangling. For example, more powerful programs and computers enabled staff to process scanned theses and dissertations (BTDs) and retrieve multimedia including that stored on 5-1/4" floppy discs and zip disks.

- Purchased and configured additional desktop PC for CONTENTdm batch loading.
- Replaced power hungry CRT monitors with LCD monitors.
- Upgraded two desktop Macs, rotating staff computers to student workstations,

ETDs: Electronic Theses and Dissertations

BTDs: Bound Theses and Dissertations scanned

### Availability of VT ETDs: July 1, 2009



- Processed and prepared for digitizing 2500 bound theses and dissertations in collaboration with other library units (e.g., Circulation, Cataloging). Digital Imaging scanned and created 1924 BTDs that DLA made available to the VT community through Addison and the ETD database.
- Removed restricted access to 138 BTDs after receiving permission from the authors who responded to an article in the *VT Magazine* or [scholar.lib.vt.edu/theses/btd\\_permission.html](http://scholar.lib.vt.edu/theses/btd_permission.html).
- Programmatically reviewed every ETD and BTD, over 13,000 at the time, for sensitive information such as social security numbers (SSNs). 681 had possible hits. DLA staff opened each file, searched for the SSNs, deleted them, and replaced the cleansed files for public access.
- Restored several 1990's ETDs created with LaTeX by using the open source software TexShop for Mac OS X. Sometimes text appears to have lost some alphabetic characters.
- Reviewed and updated [etd.vt.edu](http://etd.vt.edu), the web site that provides the information graduate students need to successfully format and submit their ETDs, following a series of weekly meetings with Graduate School personnel. Public access to updated pages will begin on August 1, 2009.
- Created new tools for ETD authors and others including
  - PDF/A (archival) guidelines including tutorials for PC and MAC users.
  - "Copyright and ETDs"
    - Compiled extensive examples of how to cite copyright resources.
    - <http://scholar.lib.vt.edu/theses/copyright/ETDCopyrightCitations2.pdf>
  - Fair Use
    - Developed Fair Use Analyzer Tool at request of Graduate School Dean DePauw <http://etd.vt.edu/fairuse/analyzer/>
    - Adapted the Fair Use Checklist <http://scholar.lib.vt.edu/copyright/FairUseChecklistVT.pdf>

### IAWA Biographical Database

[http://lumiere.lib.vt.edu/iawa\\_db/](http://lumiere.lib.vt.edu/iawa_db/)

Supported by the Beverly Willis Architecture Foundation, five web workers

- Added 651 records to the database and vetted 690.
- 1285 total entries in the International Archive of Women in Architecture Biographical Database

## South Atlantic Humanities Center

<http://sahctest.lib.vt.edu/>

Supported from CLAHS, student web workers continued developing the SAHC web site with content provided by Dr. Anita Puckett.

The screenshot shows the South Atlantic Humanities Center website. The header includes the SAHC logo and navigation links: ABOUT SAHC, EDUCATION, DIGITAL LIBRARY, RESEARCH & SCHOLARSHIP, and NEWS & NETWORKS. The main content area features a featured article titled "The Extraordinary Life of William Henry Sheppard" with a historical photograph and a "Learn More" link. To the right, there are "SAHC HAPPENINGS" including a call for papers for "THE ENCYCLOPEDIA OF AFRICA AND THE AMERICAS" and a scholarship announcement. Below this is a search bar, a "REGIONAL CALENDAR" section, and an "EXPLORING THE SOUTH ATLANTIC" section with a map. The footer includes logos for the University of Virginia, the Virginia Foundation for the Humanities and Public Policy, and Virginia Tech, along with copyright information and a Creative Commons license.

## *Discovery*

*Innovative Technologies and Complex Systems*

## Distributed Digital Preservation Network

<http://www.metaarchive.org/>

Digital preservation is not simply the process of keeping bytes of content technically alive and viable. Those bytes must also be understandable and renderable, making sense to humans. It is of no help if an organization “preserves” all of its collections without structuring them so that they can actually be used to repopulate that organization’s infrastructure in the event of data loss. *Archiving 2009, p. 86*

DLA continues to actively participate in the MetaArchive Cooperative, which began as a Library of Congress funded research initiative. Separating preservation from access with programmatic harvesting and ingest as well as content verification and replacement throughout the network has been such a successful strategy. It has resulted in the Cooperative’s membership doubling this year. Its success is also substantiated by (1) continued LoC funding, (2) National Archives and Records Administration’s NHPRC

grant for "MetaArchive: A Sustainable Digital Preservation Service to State and Local Institutions," and (3) invitation to apply for funding from NEH. DLA's contributions have, among other things, have resulted in a series of best practices for distributed digital preservation readiness, which we have shared these in a variety of venues. (See Foundation Strategies below.)

***Engagement***  
*Intellectual assets address social needs*

**The Digital Library and Archives** <http://scholar.lib.vt.edu/>

The DLA website is a gateway to nearly 100, 000 web pages.

- Began redesign to more closely match the VT templates
- Customizing templates provides optimal access to our extensive and varied holdings.

**Digitized Rare Books** [http://scholar.lib.vt.edu/digital\\_books/](http://scholar.lib.vt.edu/digital_books/)



Digital Imaging in Information Technology performs the library's quality scanning.

- DLA added 129 rare books largely from the Culinary History Collection
- These are linked from our new web site, Digitized Rare Books, [http://scholar.lib.vt.edu/digital\\_books/](http://scholar.lib.vt.edu/digital_books/) and next year Cataloging will link them to Addison and World Cat.

**EJournals** <http://scholar.lib.vt.edu/ejournals/>

- Added 1,871 articles in 36 issues
- Developed and tested procedures for editing PDF files for ADA compliance, improving web-accessibility for readers with sight impairments, meeting university requirements for accessibility, downloading, and accurate printing
- Improved documentation for ejournal markup procedures. Three students learned ejournal markup using these procedures; two more are learning this summer.
- Began posting the VT Transportation Institute reports <http://scholar.lib.vt.edu/VTTI/>

**VT ImageBase** <http://imagebase.lib.vt.edu/>

- Added 700 images with descriptive metadata, one-third of which were Civil War letters
- Copied 258 TIFF images onto 28 CDs for patrons, including (from left to right)



- Blacksburg calendar: LH0007, cows grazing in a residence on Main St.
- VT Foundation Board Room: 03UR0425, John Hancock and Cliff Cutchens in Pamplin atrium
- Documentary film titled “A Girl is a Fellow Here: 100 Women Architects in the Studio of Frank Lloyd Wright,” 05IA200501311424, Alford-Nixon Residence
- Book for children to be sold at Blue Ridge Parkway visitor centers, AGR2882, remodeled kitchen in a Fluvanna Co. home

### ***Foundation Strategies***

*Organizational Development: Recruit, retain, and develop an excellent and diverse workforce*

**Personnel** (organization chart attached)

<http://scholar.lib.vt.edu/DLAOrgChart.pdf>

DLA experienced remarkable staff turnover--two-thirds of the permanent staff, and the loss of Eve Trager, the Scholarly Communications Specialist. However, DLA continued important activities due to its conscientious and experienced wage and student workers. This report documents some of their activities.

Vacancies in continuing positions:

Vacancies filled with well-qualified staff:

- Carolyn Kletnieks (Tech. Dir.) Oct.'08
- Kimberli Weeks (Online Ed.) June'08

- Kimberli Weeks (Tech Dir) Jan.'09
- Anne Lawrence (Online Ed.) Dec.'08

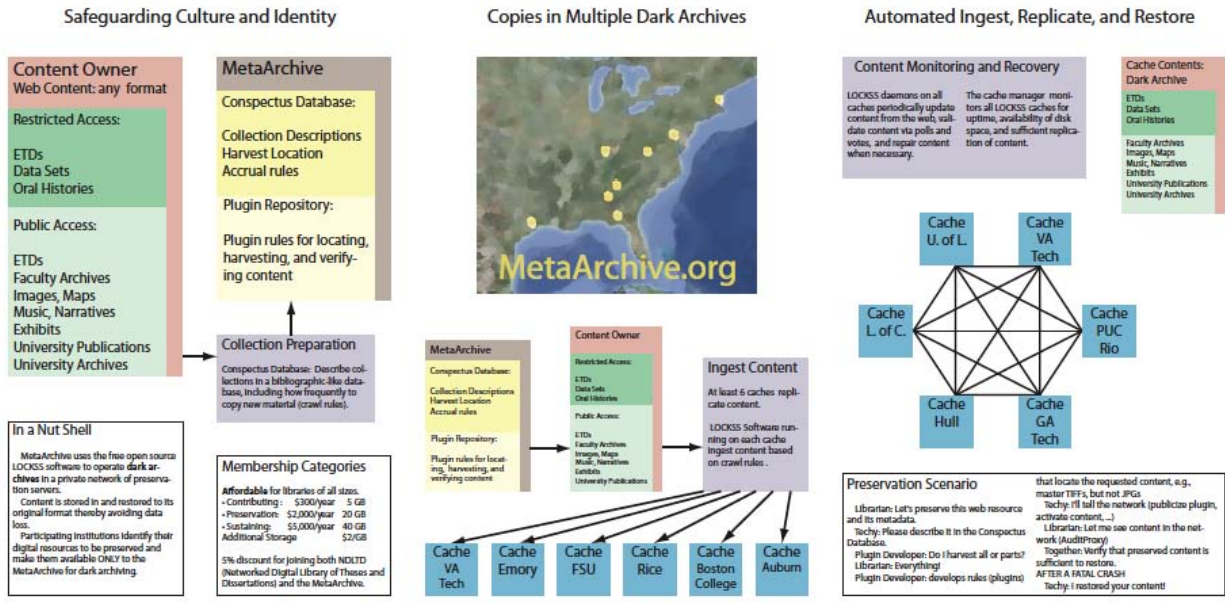
### ***Campus Infrastructure: Information Technology***

There are over 6 TB of data on DLA servers, which include 11 real hardware servers, 4 virtual servers, and 11 web server configurations. The Library Systems' server that provided centralized access to all DLA servers crashed on May 18. These problems, combined with the breakdown in the backup application for DLA's system, and prior sporadic, out of sync, virtual clock and subsequent outages of the statistics-logging server, precluded reliable web statistics. Once the servers were reconfigured with the early-May backups, this catastrophe had little impact on the public. However, it continues to effect DLA staff as they struggle to access server resources for internal applications.

*Interaction of personnel with the university community and the broader academic communities worldwide benefits the university organization as well as its students.*

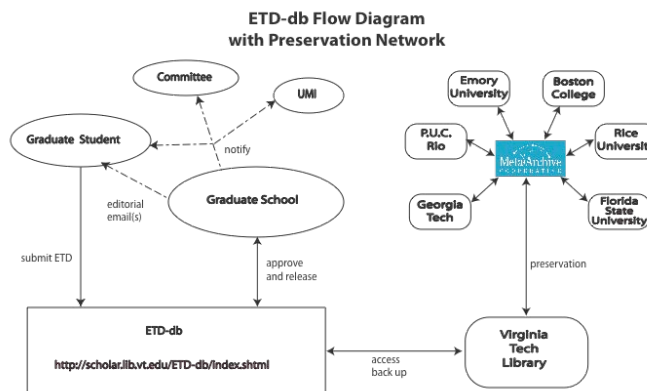
**Presentations** DLA staff contributed to and/or made:

- National Digital Information Infrastructure and Preservation Program (NDIIPP) Partners Meeting, Washington, DC. “Growing the MetaArchive: ETDs”  
<http://scholar.lib.vt.edu/presentations/MetaArchive4NDIIPP200807.ppt>
- Coalition for Networked Information (CNI) Fall Task Force Meeting, Washington, DC. “Partnerships for Distributed Digital Preservation: The MetaArchive Cooperative”  
<http://www.cni.org/tfms/2008b.fall/Abstracts/presentations/cni-partnerships-mcmillan.pdf>
- Association of College and Research Libraries (ACRL) Conference, Seattle, WA. “Distributed Digital Preservation: The MetaArchive Model”



<http://scholar.lib.vt.edu/MetaArchive/MetaArchivePoster4ACRL.pdf>

- MetaArchive Distributed Digital Preservation Network Workshop, Atlanta, Georgia, Oct. 24, 2008 (Plugins and Plugin Lifecycle)
- 11th International Symposium on Electronic Theses and Dissertations, Robert Gordon University, Aberdeen, Scotland
  - “Maintaining the Light: Distributed Digital Preservation of ETDs”  
<http://scholar.lib.vt.edu/theses/presentations/Drafts4Aberdeen/ETDpreservPaper20080520c.doc>
  - “ETD Preservation Survey Results” <http://www.rgu.ac.uk/files/ETDpreservSurveyPaper.ppt>
  - “ETD Preservation Workshop” <http://www.rgu.ac.uk/etd/programme/page.cfm?pge=45051>
  - “Ensuring Long-term Access to ETDs” for the Newcomers Workshop  
<http://www.rgu.ac.uk/files/RookiesDDPN4ETDs2008.ppt>





[Dwayne Buttler](#), J.D., fully engaged a packed audience yesterday with “Copyright Happens: How It Limits Choices and Increases Possibilities.” Filled to capacity, May 28<sup>th</sup> the Graduate Life Center hosted nearly 60 people who attended from Architecture, IT including Learning and Assistive Technologies, University Libraries, VTIP, CDDC, CATH, Office of Research, Graduate School, as well as many colleagues from Radford University Library, and others. Graduate students as well as their advisors took the opportunity to further their understanding of copyright as it relates to ETDs (electronic theses and dissertations). Due to his thorough knowledge of the law, his engaging presentation, and perhaps the delicious refreshments from Bollo’s, the interactions lasted nearly two hours and were captured in digital images by DLA’s Daniel Culpepper.

Dwayne K. Buttler also holds the [Evelyn J. Schneider Endowed Chair for Scholarly Communication](#) at the University of Louisville’s Ekstrom Library. Throughout the day various contingencies also had informal discussions about copyright law with Buttler, including 10 from University Libraries at a brown-bag lunch. This successful event was arranged by the [Digital Library and Archives](#) and sponsored by the Graduate School’s Dean Karen DePauw and the University Libraries’ Dean Eileen Hitchingham.

Gail McMillan  
Photograph by Daniel Culpepper, DLA Data Wrangler

