DLA Annual Report 2011/12

Personnel Highlights

Successful national search for Digital Repository Librarian—Nathan Hall, and two Digital Technologies Development Librarians—Zhiwu Xie and Keith Gilbertson.



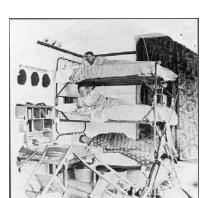
Partnering with the University Community

VTechWorks, the university's first digital repository was born.

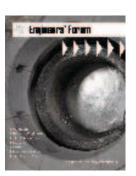
- Migrated 2400 records in time for arrival of the new Repositories Librarian in Aug.
 - o Created spreadsheets of metadata for batch loading.
 - Wrote Perl scripts to batch load initial collections.
 Scripts pulled the files from various locations on DLA servers and created XML SIP packages and content lists
 - Batch loaded images, ETDs, ejournals, and book collections
- Migrated 7,166 records from the <u>April 16, 2007, Condolence</u> Archives
 - o Discontinued use of CONTENTdm, saving the library \$6000/yr
 - Adopted Viewshare, hosted by Library of Congress, to display map and timeline
- Outreach led to 67 new users and ~300 new resources, such as
 - Nutrition, Obesity, and Health
 - o Sinfonia Sacra, Opus 56
 - o Engineers' Forum
 - O Blacksburg Topographical Map
 - o Test Videos- Flexural Strength Experiments
- Implemented BioMedCentral deposits
- Client for computer science class Multimedia, Hypertext, and Information Access, which developed:
 - o VTechWorks interface proposal and prototypes
 - o HTTP live streaming as a secure streaming method
- Hosting 9.842 information resources
 - The illustrations in this section are from an automatic thumbnail builder locally programmed.
 - o 225,097 items accessed
 - 445,596 files downloaded

Data Management Plans

- Advised and assisted PIs and graduate assistants in writing plans
- Introduced over 100 faculty, students, staff in three FDI sessions
- Created Data Policy Watch wiki for ASERL/SURA







R & D

- Prepared DLA resources for web discovery tools:
 - Wrote metadata extraction tools (e.g., COinS) and crawler/indexers (e.g., python), scripts to export content (e.g., CSV file, OAI/ORE via atom/xml).
 - o Journal of Technology Education successfully loaded into VTechWorks.
- Tested DSpace REST API, prototyped data and metadata APIs
- Finished migrating Fish Traits database from CNRE server to the IBM cloud
- Finished the first round of prototype to automatically discover geospatial data collections currently hosted at CGIT
- Coordinated with CGIT to store 14 GB of GARDEN project data

DLA's 'legacy collections' summary:

• Total number of files: 628,213

• Total disc usage: 2.8 TB

• 2,028 new files added, 8.1 GB of space.

• Total number of times collections accessed: 14,016,251

• Total queries conducted: 3,959,412

	Electronic Journals Online Access Data					
Year	Hits	Pages	HTML files	PDF files	Distinct pages	Unique visitors
2011	4,120,946	2,673,618	2,127,328	512,467	16,500	942,418
2010	4,373,538	2,709,748	2,195,296	470,417	16,070	932,694
2009	3,745,749	1,891,890	1,506,445	362,258	14,573	732,032
2008*	3,145,268	1,574,919	1,322,831	234,347	11,812	593,128

eJournals

- Posted 774 new articles in 44 issues
- Reformatted 275 articles in 25 issues as HTML to provide full accessibility and comply with Sect. 508 of the Federal Accessibility Standards of the US Rehabilitation Act, and Virginia Tech Accessibility Standards.
- Added qualified DC metatags and COinS to 774 new articles, and these back issues:

1	journals w/ metatags and COinS
143	issues w/ COinS
71	issues w/ metatags and COinS
84	index pages w/ metatags and COinS
482	article pages w/metatags
582	total pages w/ metatags

Metadata offers several enhancements

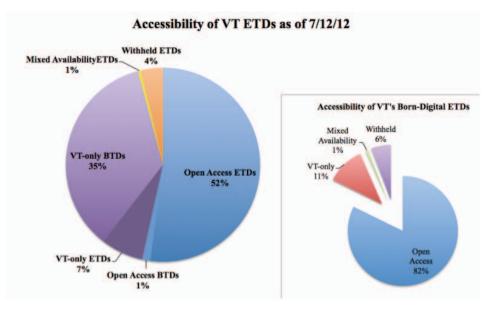
Facilitates access through Summon, Google Scholar, etc.

It improves our ability to manage our collection.

COinS is linked via LibX to our local OpenURL resolver

COinS is read by bibliographic management software, such as Zotero

ETDs: Electronic Theses and Dissertations



ID security testing

- Edited Web pages to improve access and prepare for migration to VTechWorks
- Improved <u>Resources for</u> <u>Developers of ETD</u> Databases
- ~400 BTDs (bound theses and dissertations) records upgraded with committee members
- >300 ETD restrictions removed--permissions and over due release dates
- ETD-db v.2: Continued progress, e.g., Worked through Randy Crockett to access Banner, passed ED-

VT ImageBase

- Bandaided successfully so the public was never without access
- Metadata improvements made as requested, e.g., 268 records for Pakistani architect, Yasmeen Lari
- 392 patron requests for images, e.g.,
 - VT Visitor Center
 - O History Museum of Western Virginia
 - o Grove Cookbook
 - o "Blacksburg Now and Then"
 - o Globe and Mail, Toronto newspaper

Preservation

• 63 collections in 245 GB are archived with the MetaArchive Cooperative

Security Breaches

• Just one and we caught it before VT IT Security did: car insurance headers had been added to http://spec.lib.vt.edu/bicent/sites/yss.htm

Grants

Amazon Teaching Grant. \$5000 worth of Amazon Web Services usage credit, 2012/13.

IBM Academic Skills Cloud. Free usage of up to 20 cloud instances on the IBM Smart Cloud.

IBM Academic Skills Cloud. Free usage of up to 20 cloud instances on the IBM Smart Cloud Enterprise, 2012/14.

IMLS. ETD Lifecycle Management. 2011/13. \$268,458. Led by University of North Texas Libraries with the NDLTD, Educopia Institute/MetaArchive Cooperative, and libraries at Virginia Tech, Rice, Boston College, Indiana State University, Pennsylvania State University, and the University of



- Arizona. Develop and share a toolkit of guidelines, educational materials, and software tools for life-cycle data management and ETD preservation.
- NEH. Chronicles in Preservation. 2011/13. \$300,000. Led by Educopia Institute with the libraries of University of North Texas, Boston College, Clemson, Georgia Tech, Penn State, San Diego Supercomputer Center, University of Utah, Virginia Tech. Study, document, and model the use of data preparation and DDP frameworks to preserve digital newspaper collections at MetaArchive-LOCKSS, Chronopolis-iRODS, and UNT-CODA.

Publications

- Hall, Nathan, Gail McMillan, Tyler Walters. Virginia Tech's response to the White House Office of Science and Technology Policy "Request for Information on Public Access to Scholarly Publications." Jan. 2012.
- Hall, Nathan, and Tyler Walters. Virginia Tech's response to the White House Office of Science and Technology Policy "Request for Information on Public Access to Digital Data." Jan. 2012.
- McMillan, Gail. <u>Digital Preservation</u>, with Matt Schultz and Katherine Skinner. Association of Research Libraries, (SPEC Kit 325) 2011.
- McMillan, Gail, Marisa Ramirez, Joan Dalton, Max Read, and Nancy Seamans. "An Investigation of ETDs as Prior Publications: Findings from the 2011 NDLTD Publishers' Survey." Proceedings of the 14th International Symposium on Electronic Theses and Dissertations. Cape Town, South Africa: NDLTD, 2011.
- Xie, Zhiwu; Liu, Jinyang; Van de Sompel, Herbert; van Reenen, Johann; Jordan, Ramiro. "Poor Man's Social Network: Consistently Trade Freshness For Scalability." USENIX WebApps '12, Boston, MA.

Presentations

Library In Service Day

- DLA was invited to present a session about the department. Everyone in DLA participated.
- Created a DLA Pecha Kucha
- Hall, Nathan, Moen, Bill, Moorefield-Lang, Heather, and Phillips, Mark. "Academic libraries as partners in research." Panel presented at ALA Midwinter Conference, Dallas, TX, Jan.
- Hall, Nathan, and Zhiwu Xie. "<u>Data Management Planning for Research Grants</u>." VT FDI April 2012 McMillan, Gail. <u>Copyright in Scholarship & Instruction and an Open Access Primer</u>. VT FDI, Feb. 7.
- McMillan, Gail, and Martin Halbert. "ETD Preservation Workshop," 14th International ETD Symposium, Sept. 16.
- McMillan, Gail. "PLN Members and the Association of Research Libraries' Digital Preservation Survey: Preliminary Findings." Vancouver, BC: Private LOCKSS Network Community Meeting, Oct. 23.
- McMillan, Gail. "ETDs as Prior Publications: The 2011 Publishers' Survey."
 - Texas ETD Conference: Dallas, Feb. 24.
 - <u>Coalition for Networked Information</u> Fall Membership Meeting: Arlington, VA, Dec. 12. 14th International ETD Symposium: Cape Town, South Africa, Sept. 15.
- Xie, Zhiwu. "Data Management @ Virginia Tech Libraries." Data Management Day at University of Virginia, April 12.