Texas Digital Library offers fix for electronic theses and dissertations

With more and more universities requiring electronic versions of theses or dissertations, graduate students find themselves at the forefront of the transition between print and digital. As a key part of its mission, the Texas Digital Library has been working on the issues surrounding electronic theses and dissertations (or ETDs) by creating technologies that ease the submission and management process and that make access to these documents – often young scholars’ first serious scholarly work – much wider than was previously possible.

From its inception, The Texas Digital Library has collected electronic theses and dissertations (ETDs) from its member institutions into a federated ETD repository. However, existing technologies for submitting and managing ETDs couldn’t support the growing number and variety of documents that schools were submitting. The question arose: how can the TDL make the process of ingesting, managing, and storing ETDs efficient and scalable across all of its member organizations?

Enter Vireo, the Texas Digital Library’s solution for electronic thesis and dissertation management. Developed by TDL developers at Texas A&M University, Vireo handles the submission, management, and publication of ETDs. With Vireo, students submit their digital theses and dissertations via a simple online interface, while graduate offices can manage the ETD submission and approval process behind the scenes. Institutions can then publish the ETDs in their Institutional Repositories and, subsequently, in the TDL Statewide ETD Repository, where they are readily available to other researchers.

Vireo was developed using DSpace Manakin, a user interface created by TDL developers that allows extensions to be built onto DSpace repositories. Adam Mikeal at Texas A&M University headed up development of the new ETD system, completing a prototype of Vireo early in 2007.

Mikeal says that the need for an ETD management system was evident: “It became quickly clear that as we added tools and documents, scaling was going to be a problem. We had manual processes for every school every semester. And we had differences in how metadata was collected and stored, which made providing tools across the collection very difficult.”

With these challenges in mind, the development team began contemplating what would be required of the new ETD technology. At the most basic level, it had to ingest ETDs online from students, allow for collaborative editing by graduate school offices, and let schools publish the documents within a storage space in an electronic format. Other specific goals for the project, like the look-and-feel of the system and what kinds of customization it would offer, were largely determined by feedback from graduate school personnel and other stakeholders.

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“In the end, we adopted a monolithic model that allowed for full control of the document over the entire workflow,” Mikeal said. “We concluded that if we gave up control at any point, it was going to be problematic to enforce the consistency we needed.” The use of uniform metadata by all participating universities was a key component in developing this consistency, and the TDL formed a Metadata Working Group to agree upon a common metadata standard, expressed as a MODS XML profile.

Texas A&M’s graduate school began beta testing the new ETD system, dubbed Vireo, in the spring of 2008 and deployed the system the following spring. Vireo is currently undergoing testing with four graduate programs at The University of Texas at Austin and with a pilot group at Texas Tech University.

The graduate schools at both Texas A&M and UT Austin are excited about the features Vireo offers compared to their legacy ETD systems. “Vireo manages the complete life-cycle of the ETD, from submission to publication, whereas there were multiple steps – several of which could be accomplished only through the expertise of a computer programmer – with our legacy system,” says Laura Hammons, Director of the Thesis Office at Texas A&M. “Through Vireo each step can be accomplished by the end-user with the touch of a button.”

Using Vireo also allows students to make their ETDs available on an open-access basis for free – something that UT Austin’s legacy system didn’t allow. “The fees associated with publishing with an outside entity were beyond our control and were growing,” says Michelle Broadway, Director Student Services in the Office of Graduate Studies at UT Austin. “We saw Vireo as being an option that would provide us with open access publishing of all documents submitted with no cost to the student.”

Additionally, Broadway says that the ability to customize Vireo to UT Austin’s existing workflows, as well as the access to training and technical support from TDL were big pluses. Hammons agrees, pointing out that “As part of the TDL consortium, we have access to expert computer support, to a state-of-the-art, intuitive, and secure application, and to a commitment from TDL to provide continuous maintenance and improvements.”

“Vireo has the potential to be the premier ETD management system in the US, perhaps the world.” Hammons says. “For those who are moving from a paper system to electronic submission through Vireo, it will be a revolutionary change – in the most positive sense of the word.”

Note: The Texas Digital Library is spearheading the development of the Texas ETD Association, a professional organization intended to provide support to ETD users throughout the state via training; networking and sharing of best practices; and forums for providing input to the further enhancement of Vireo. Laura Hammons of Texas A&M University is heading up the endeavor and is leading the upcoming ETD Forum in Austin on May 26, to be held in conjunction with the Texas Conference on Digital Libraries. For more information, please visit the TCDL 2009 section of the TDL Web site: http://www.tdl.org/about-tdl/events/texas-conference-on-digital-libraries-2009.
2009 Texas Conference on Digital Libraries to be held May 27-28 in Austin

The third annual Texas Conference on Digital Libraries is set to take place May 27-28 on the University of Texas at Austin campus. The conference, which is sponsored by the Texas Digital Library, continues its exploration of topics related to the creation and promotion of digital libraries at Texas institutions of higher learning. Conference sessions will take place in the Applied Computation Engineering & Sciences (A.C.E.S.) building.

This year’s theme is Linking Digital Libraries and Users and will focus on issues such as linked data, enhancing digital services by connecting libraries to other data sources, and creating services for a broad range of users. All presentations will be available on the TDL Web site following the conclusion of the conference.

One day prior to the main conference session, on May 26, the TDL is hosting two forums aimed at specialized audiences — the TCDL Developers Forum for digital library technical personnel and the TCDL Electronic Thesis and Dissertation Forum for graduate school personnel and other stakeholders in ETD submission and management. For more information about these special forums, as well as the TCDL main conference, please visit the TDL Web site at http://www.tdl.org/tcdl or contact TDL Program Coordinator Ryan Steans at rsteans@austin.utexas.edu.

Upcoming Training Opportunities with the Texas Digital Library

The Texas Digital Library has completed its training sessions for spring 2009, with the final session taking place on the Baylor University campus May 13. Thanks to Baylor University for hosting TDL spring training and to all the trainers and trainees for their participation. Feedback on training sessions, including suggestions for new classes, are welcome and should be directed to Program Coordinator Ryan Steans at rsteans@austin.utexas.edu or 512-495-4403.

If you missed out on spring sessions, don’t worry! Summer sessions are coming and will include a slate of full- and half-day courses that cover all TDL services and technologies. For more information about training, including course costs and descriptions, please visit the TDL Web site at http://www.tdl.org/about-tdl/training.

Once again, TDL training sessions will take place on the Baylor University campus in Waco and are open to staff from all TDL member institutions.
TDL and Baylor host meeting for prospective members

On March 24, 2009, the Texas Digital Library joined with Baylor University Libraries to host a meeting for prospective members of the TDL at the Armstrong-Browning Library at Baylor University. More than two dozen people from universities across Texas convened at the meeting to learn about the TDL, its services, and opportunities for joining the consortium.

Attending the meeting were representatives from Abilene Christian University, Sam Houston State University, Southern Methodist University, Tarleton State University, Texas A&M University - Kingsville, and the UT Health Science Center at San Antonio. TDL co-directors John Leggett and Mark McFarland led the meeting, which was also co-hosted by Pattie Orr of Baylor University Libraries.

In his introductory remarks, Mark McFarland challenged participants to consider the obstacles ahead regarding the preservation of digital materials, offering the TDL as “a partnership of higher education members who provide the solution to sustainability.”

“The goal of the TDL,” McFarland continued, “is to produce a skilled professional community that understands and can handle the establishment of a preservation environment.”

TDL Program Coordinator Ryan Steans followed McFarland with a comprehensive presentation on the TDL service offering and gave a more in-depth demonstration of TDL’s online journal service.

In the afternoon, representatives from Baylor University’s Electronic Library provided the meeting’s participants a concrete case of how the TDL partners with its members, offering its reasons for joining the consortium, information about its participation in training sessions and Working Groups, and its use of TDL data hosting services for backing up digital content.

Among those presenting were Billie Peterson-Lugo (Assistant Director of the Royce/Darden Gospel Music Collection), Amanda Harlan (Metadata Librarian), and Darryl Stuhr (Coordinator of Digitization Initiatives). Additionally, Director of the Baylor Electronic Library Tim Logan gave the audience a virtual tour of Baylor’s digital collections, including its Gospel Music Collection. Following the presentation, staff of the Baylor Electronic Library treated participants to a tour of their digitization facilities.*

Have an item for TDL Update? Please contact Kristi Park at kristi.park@austin.utexas.edu.

For more information about the Texas Digital Library, please visit our Web site at http://www.tdl.org, or contact the TDL program coordinator at info@tdl.org.