Directors’ Message: Shibboleth administration changes

Dear TDL Members,

While this issue of TDL Update describes a number of exciting projects using TDL technologies, we want to begin by highlighting a key technology that underlies all our services and which has undergone some recent changes.

The TDL uses Shibboleth, an Internet2 federated identity architecture, to manage authentication of users who access TDL services.

Because Shibboleth is a distributed architecture, some pieces of Shibboleth reside at TDL member institutions, while others reside at TDL. In order for Shibboleth to work, and for users to maintain access to services, all these pieces have to work together properly.

In the past few months, there have been two significant changes to the TDL Shibboleth architecture. One is that TDL and many member institutions have been upgrading their Shibboleth installations to Shibboleth 2.0, and the old version, Shibboleth 1.3, will no longer be supported. Another is that the TDL has been divesting the work of managing the Shibboleth Federation to which all its members belong to its partner, the Lonestar Education and Research Network (LEARN).

As TDL, its members, and its partners continue and complete this work, TDL encourages all members to communicate questions and concerns about the process and to communicate any changes they are making to their identity management systems to LEARN and to TDL.

TDL has created a Shibboleth Users Listserv, intended primarily for administrators of identity management systems and other technical personnel, to facilitate this communication. Anyone interested in joining the listserv can email us at info@tdl.org with a request to join.

Additionally, members can learn more about Shibboleth and get more details about the on-going changes with TDL’s Shibboleth setup by reading the accompanying article in this newsletter.

Sincerely,

Mark McFarland  
TDL Co-director

John Leggett  
TDL Co-director

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More about Shibboleth Federated Authentication and the TDL

Shibboleth is a distributed authentication software that enables federated identity management and cross-domain single sign-on, meaning that users within the Shibboleth Federation can log in to TDL services using their own university credentials.

How does Shibboleth work?

With Shibboleth, users of a TDL service log in through their university’s authentication website, and their university identity provider sends TDL enough information about that person (such as institutional affiliation and whether they are a student or faculty member) to enable authentication. For more details on how Shibboleth works, you can read the Authentication article in the TDL wiki.

Shibboleth and the Lonestar Education and Research Network

In October 2009 TDL announced a partnership with the Lonestar Education and Research Network (LEARN) to collaborate on networking projects in service of Texas researchers and academics. One key part of the collaboration has been the development of a statewide Shibboleth Federation, managed by LEARN.

In its early years, the Texas Digital Library managed its own Shibboleth Federation, which set the policies and managed the relationships among TDL service providers and its members’ identity providers. Since last year, TDL has been working with LEARN to transfer all its members from the legacy TDL Shibboleth Federation to the LEARN Federation. That process is nearing completion, with all but a small handful of member institutions having made the switch.

In the new LEARN Federation, LEARN mediates the relationships between TDL services on one side and member identity providers on the other, essentially “vouching” that the information provided by identity providers is trustworthy. Going forward, TDL members within the LEARN Federation will deal directly with LEARN regarding issues with Shibboleth, instead of with the Texas Digital Library. Paul Caskey, of the University of Texas System, is managing the Federation for LEARN and will be the contact person for these issues.

TDL continues to maintain its own attribute release policy for accessing TDL services. That is, member institutions must still release the same pieces of information (or “attributes”) about users, in order for the users to be authenticated and to access TDL services. That list of required attributes is available on the TDL website.

Communicating Changes About Shibboleth

Because of the distributed nature of Shibboleth, changes to any part can affect how the entire system works. As a result, it is important that any time identity provider managers at member institutions, or the service provider manager at TDL, makes a change to their Shibboleth instances, that they communicate these changes to the Federation. This includes changes to the attributes released by the identity provider or upgrades to a new version of Shibboleth.

To prevent problems, TDL encourages its members to communicate any changes they might make to Shibboleth to the LEARN Federation. To facilitate this communication, the TDL has set up an e-mail list for identity provider managers to post questions, announce changes, and discuss other Shibboleth-related issues. The Listserv will be monitored by Paul Caskey of LEARN, as well as by technical personnel at the TDL. Anyone interested in joining the TDL Shibboleth Users List can e-mail TDL at info@tdl.org.

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UT Southwestern Library to digitize History of Medicine photographs

- A photograph of tent facilities for sick soldiers during the 1918 influenza epidemic.
- A portrait of the first five African American doctors admitted to practice at St. Paul Hospital (or to any Dallas hospital staff) in 1943.
- An image of the first open-heart surgery performed in Dallas, at Parkland Hospital in 1956.

These images, and hundreds of others housed in the collections at UT Southwestern Medical Center Library, document the history of medicine in Dallas. Up to now, the images have only been available to researchers and patrons who visit the library’s physical facilities, but thanks to a grant from the National Network of Libraries of Medicine (NN/LM), the photographs will soon be available online.

TDL DSpace as Preservation Tool

The Library has received a $25,000 Historic Preservation and Digitization Award from the NN/LM South Central Region to create a digital photo repository entitled Dallas Medical Images, 1890-1975. While the images will be made publicly available through CONTENTdm, UT Southwestern Medical Center is using its Texas Digital Library DSpace repository as a preservation tool for the collection, fulfilling a key component of the grant application and the goals of the project.

According to Matt Zimmerman, principal investigator for the Dallas Medical History 1890-1975 project, the Library has several goals: (1) to make the images more widely accessible by getting them online, (2) to promote the wider holdings of the UT Southwestern Medical Center Library, and (3) to preserve the images digitally.

“CONTENTdm is the public face,” says Zimmerman, “but the other important goal is long-term storage and preservation. Without having the DSpace repository and the upcoming Preservation Network behind it, we wouldn’t be able to do the preservation part of the project.”

The DSpace repository, hosted by the Texas Digital Library, will serve as an archive for uncompressed master images that are digitized during the course of the project. Those images in turn will be preserved in the TDL Preservation Network, which will send all TDL-hosted digital contents to the Texas Advanced Computing Center at UT Austin. TACC, in turn, will replicate the files at its geographically dispersed partner institutions.

A Rich History in Photographs

The image repository will be available to the public via a CONTENTdm instance hosted by OCLC. It will contain some 500 photos that illustrate the history of medicine in Dallas between 1890 and 1975. UT Southwestern and its partner institutions have been key players in the development of medicine in the Metroplex: its St. Paul Hospital and affiliate Parkland Memorial are the two longest-operating hospitals in Dallas, and Parkland famously treated not only John F. Kennedy, but also Lee Harvey Oswald before they died. The UT Southwestern Library holds approximately 7,000 photos in its Historical Archives

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and its History of Medicine Collection, from which the digital repository collection will be drawn.

The grant project represented an opportunity for UT Southwestern to begin digitizing its collections, according to Zimmerman. Previously the library had digitized a small collection of apothecary jar photos but lacked the infrastructure to do large-scale digitization. The grant will cover the purchase of a scanner and other materials to undertake the project.

Additionally, UT Southwestern’s membership in the Texas Digital Library provided the institution with the ability to preserve their digital assets and to demonstrate as much in its grant application.

“It was great to be able to say that long-term preservation was being facilitated by being part of the TDL,” Zimmerman says.

Along with the digital repository, the grant-funded project will create a special Web exhibit of approximately 50 “high-interest” photos that will appear on the library’s website.

The project began in July 2010 and will conclude within nine months. For more about UT Southwestern Library, please visit the library’s website at http://www.utsouthwestern.edu/libraryinternal/.

This project has been funded in whole or in part with Federal funds from the National Library of Medicine, National Institutes of Health, Department of Health and Human Services, under Contract No. N01-LM-6-3505 with the Houston Academy of Medicine – Texas Medical Center Library.

TDL Development Update: TxLOR sprints 9 and 10, PresNet

On Tuesday, July 20, the TDL development team held a sprint review to demonstrate work completed during the tenth sprint focused on the Texas Learning Object Repository. The sprint, along with two previous sprints dating to June 14, were devoted to hardening the project in preparation for a Fall 2010 release.

Under a contract with the UT System, the TDL is developing software for a statewide learning object repository that will store and disseminate materials used in teaching and learning. The team uses scrum, a development methodology that breaks work into short iterations or “sprints,” each of which delivers a prioritized set of functional requirements.

Work done in sprints 8-10 included the following:

- Completed the setup of production hardware and prepared the system for staging.
- Developed a QA test plan.
- Upgraded the content dissemination side to the current version of DSpace.
- Added functionality for role-specific submissions (i.e. academic vs. medical contributors).
- Created functionality for adding individual assets as well as complex learning objects.
- Added the complete set of metadata fields to the TxLOR submission interface.

More information about TxLOR development can be found in the TDL Wiki at http://wikis.tdl.org/tdl/TxLOR_Development.

Internal infrastructure development

Following the TxLOR sprints, the team began work to implement an internal software development tool called JIRA Studio that will make future work more efficient. During the sprint, which concluded August 6, the team transferred all Preservation Network code and documentation into JIRA Studio.

Among other things, the software suite will facilitate collaboration among remote developers in Austin and College Station and help the production team track bugs and feature requests. Additionally, all TDL members will be able to view bugs and requests through a public interface within the tool.
TDL launches Technical Interest Group

The Texas Digital Library has announced the launch of the TDL Technical Interest Group (TDL-TIG), a users group that brings together web developers, programmers, system administrators and others involved in the implementation of TDL services at their institutions.

The goal of the TDL-TIG is to provide a forum for TDL members to:

- share technical problems and receive technical help and advice from other TDL members.
- help the TDL identify and prioritize outstanding technical issues.
- assist the TDL in developing a service model for hosted TDL services.
- update other members on the current status of their services, obstacles encountered, successes achieved, and lessons learned.

The TDL-TIG will be chaired by Matt Zimmerman, Manager of Digital Services and Technology Planning at UT Southwestern Medical Center Library. The initial format for the TDL-TIG will be a listserv open to any TDL member and a wiki that can be used for sharing information and collaboration.

You can join the listserv by emailing TDL-TIG chair Matt Zimmerman at tdltig@tdl.org. The TDL-TIG wiki is located at: http://wikis.tdl.org/tig.

The TDL Technical Interest Group is the latest to join a growing list of Users and Working Groups that TDL members have formed around particular TDL services, professional roles, and projects. These include the PresNet Users Group, the Metadata Working Group, and the Vireo Users Group.

To learn more about TDL Groups, please visit TDL.org/groups or email the TDL at info@tdl.org.

TTU Architecture Library to license digital photo collection

By Julie Toland, Texas Tech University Libraries

The Helen Jones Foundation has awarded a grant of $45,000 to the Texas Tech University Architecture Library to purchase the Inter-American Institute digital image collection of architecture, art and culture of non-Western origin.

This international collection will assist the University Libraries in targeting excellence in the instruction, research and study of architecture, art, design, history, landscape architecture and archaeology for the Texas Tech community by improving the coverage of Asian, African and Mesoamerican subjects.

Images are an essential part of architecture and visual arts education, said Melanie Clark, architecture image librarian and grant recipient.

“Professional quality image collections include coverage that is rarely found on the World Wide Web, such as extensive details, interiors not accessible to the general public, and photographs of archived items such as architectural drawings and other documents relevant to the study of architecture and culture,” she said. “This makes an extensive digital image collection paramount.”

In addition to architecture, the Inter-American Institute collection includes sculpture and other cultural artifacts which would be broadly applicable to other departments at Texas Tech, Clark said.

Funds will be used to purchase a permanent license for the Inter-American Institute digital image archive, a collection of 13,000 high-quality digital images of the architecture and culture of Spain, Mexico, Northern Africa, Middle America and Turkey with upcoming additions from Asia and the Middle East. The new image collection should be available in January 2011.
Texas A&M University Libraries Catalog More Than 2,300 ETDs

by Molly Painter, Texas A&M University Libraries

On the back of every Texas A&M University Libraries’ employee’s name badge is the mantra —

   Everything Safe and Secure.
   Everyone Matters.
   Everything Speaks.
   Everything Done Well.

Little did employees of the Libraries know how this mantra would come into play when they were tasked with the feat of moving more than 2,300 electronic theses and dissertations (ETDs) into the Libraries’ catalog in January.

The Libraries first snapped into action after being contacted by Laura Hammons, director of the Texas A&M University Thesis Office, when she presented them with several hurdles she was looking to conquer. A backlog of theses and dissertations, amassing more than 2,300, had been in a holding pattern for longer than she liked, and the public was demanding access.

The dilemma could be attributed to multiple factors, according to Hammons — along with the expected records from those recently graduated, some older records had been on hold for various reasons, like a period of embargo or patent holds, and were being released; there was no protocol in place to harvest the records into the Libraries’ online repository, where they were to live; the records were in a format not recognized by the Libraries’ online catalog (Voyager), which also prevented the records from being viewable by WorldCat, the largest database of library holdings in the world; and to top it all off, the Libraries’ staff didn’t have access to the files.

“We knew it was important to help Laura get these ETDs out there for the world to view,” Holly Mercer, head of Digital Services and Scholarly Communication, said. “Theses and dissertations are important for individuals and the communities that foster their research. Students need access for showing to potential employers, graduate schools or even just showing their family members. And we need a record of all the research that’s going on at Texas A&M, so the repository is a positive reflection of the academic programs and research of the University, and most importantly, it’s an accurate and trusted source.”

Mercer and her group along with Michael Bolton, director of Digital Initiatives, and his group first worked with Hammons to discuss the needs and the process. From there, programmers wrote code to convert the files to a format suitable for publishing in the repository and to automate the manual publishing process. This process also generated data essential for cataloging each ETD.

The actual publishing process took hours as thousands of documents, along with supporting metadata, were registered in the DSpace repository. For each document, a basic cataloging record was produced. Once these catalog records were in the hands of Jeannette Ho, coordinator of Cataloging, she discovered some data from the repository had not been converted correctly for use in the online catalog. With the help of Anne Highsmith, head of Consortia Systems, they went through several attempts at refining the records. Throughout the process, Digital Initiatives found ways to improve the data. Together, they succeeded at minimizing the need for individual catalogers to manually correct the records, enabling them to catalog the ETDs faster.

After lengthy trial and error procedures to correct errors in the data, the files were well on their way to being properly formatted MARC records. Once this hurdle was cleared, they landed in the lap of the Catalog Record Support unit, where Wyoma vanDunkerken, coordinator, and Jennifer Greene, library

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associate II copy cataloger, took over the reins. In April, vanDuinkerken dedicated most of the copy cataloging team to the request, and after five days, they had cataloged the more than 2,300 ETDs, snapping the last piece of the puzzle in place.

“The way the different units of the Libraries banded together in collaboration with each other and our office was amazing,” Hammons said. “It was a real convergence of people, and it is a testimony to the fact that they truly want to see our program succeed as much as we do.

“My philosophy of what we’re here to do has changed since our relationship with the Libraries. They were our knights on white horses, saving the day. At first, I didn’t know where our support would come from, but now I absolutely know where to turn.”

What might appear to some as a mere conversion of data or transferring of static files, vonDuinkerken of the Libraries sees as an impact on the people involved and how it affects the lives of those who authored the ETDs.

“We did it because, ‘Everyone Matters,’ ” she said as she pointed to the back of her name badge.

**TDL training courses for August**

The Texas Digital Library will offer two training courses in August 2010. All training sessions take place at Baylor University in Waco. For more information about location and cost, visit the [TDL training page](http://TDL.org/training).

The following courses will be offered:

- **Online Scholarly Journals Using OJS**
  - Date: Wednesday, August 25, 2010

- **Online Conference Management with OCS**
  - Date: Thursday, August 26, 2010

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**About the TDL**

The Texas Digital Library is a multi-university consortium providing the digital infrastructure to support a fully online scholarly community for institutions of higher education in Texas and to promote the widespread availability of their enormous intellectual capital.

Services provided by the TDL to its members include:

- Institutional repositories
- Electronic Journals
- ETD Submission and Management software
- Blogs and wikis
- Faculty homepages
- Online conference management

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