

SYSTEMS AND TECHNOLOGY SERVICES ANNUAL REPORT, 2005-2006

GOALS AND PRIORITIES

As technology continues to play an increasingly central role in the work of the MIT Libraries staff and in the way the MIT community accesses our collections and services, finding the best organizational structure to support these efforts becomes an increasingly urgent need. This year, a great deal of thought and discussion has been devoted to the Libraries' technology organization. STS's proximity to the DLRG has led to closer working relationships with these colleagues, and has given us the ability to benefit from their special expertise. The possibility of reorganizing the two groups along functional lines, rather than dividing the groups according to Sponsored Research or Administrative Staff categories, is still being considered. A series of discussions throughout the system has culminated in the decision to centralize desktop support, moving the LTE positions presently reporting to the local units to STS over the course of the year to come. Efficiencies gained by better use of the Windows environment and by standardizing desktop support across the system will allow us to repurpose one LTE line to support new initiatives. The Metadata and Reporting Analyst position was eliminated so we could create a Technology Project Manager position.

Library Council has expressed an interest in exploring a possible role for the Libraries in digital library development, with the Rotch image collection as a first step. In anticipation of the growing importance of our digital collections, our Senior Systems Analyst position was repurposed as an Enterprise Systems Manager line, with responsibility for developing and supporting the Rotch collection and others we anticipate adding in the next years.

Building and supporting e-services and digital library initiatives are resource-intensive activities, and much thought has gone into balancing the need to invest in improvements that will benefit our users during the next five years with the equally urgent need to invest in longer-term developments that will position us to meet MIT's information needs, and to preserve and provide access to MIT data, ten or more years from now. The SFX-Verde team has been considering the changing technology landscape and the information-seeking behavior of today's MIT students, and has presented a series of recommendations aimed at improving our users' experience in the short and medium term. For the long term, building better strategies for productionizing the fruits of the DLRG's research activities continues to be a very high priority.

ACCOMPLISHMENTS

Support for production systems

Barton:

- Completed upgrade to ALEPH version 16 in July 2005.
- Worked with IS&T to upgrade the hardware for production and test servers.
- Began working toward the next upgrade (to ALEPH version 18,) with a production target of fall, 2006.
- Successfully implemented loading of Yankee Book Peddler invoices for GOBI firm orders – the first ALEPH site to do so.

- In collaboration with Public Services staff, agreed upon a process for development and support of the OPAC, Barton's public face. STS staff will be responsible for editing the files and tables, with direction on the design and functionality coming from the User Interfaces Group. We hope that having this process in place will allow our department to develop and maintain deep expertise in the ALEPH OPAC, and will encourage closer and more appropriate collaboration with Public Service, resulting in better access to the Libraries' collection.

DSpace:

- Continued to work toward the integrating DSpace with the Libraries' other electronic services and collections. Internally, this has meant encouraging a sense of ownership and involvement with DSpace throughout STS, and establishing DSpace workflows and procedures that are in synch with our other production systems whenever appropriate.
- Filled the position of DSpace System Manager.
- Set up CVS tree to manage local modifications.
- Following the departure of Margret Branschofsky, DSpace User Support Manager, worked with Public Services staff to provide support to users of DSpace@MIT. STS staff is responsible for responding to bug reports or requests for system enhancements, and Public Services respond to questions about how to use DSpace.
- The 10,000 theses that were loaded last spring were re-processed and re-loaded in the summer of 2005, due to an error in the conversion of the PDF files. Batch loads of several hundred new, and newly scanned, theses are continuing on a monthly basis. URLs pointing the DSpace items are added to Barton.

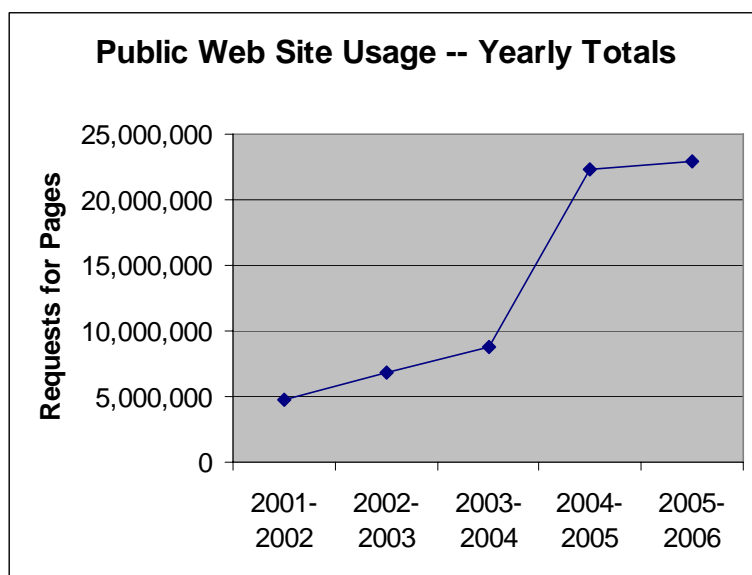
Public web site:

- New features implemented:
 - News blog
 - RSS feeds embedded on public desktops
 - RSS feeds embedded on individual library home pages
 - Added new SFX features, such as ability to create permanent links
 - Modified and installed the IEEE linking enhancements in SFX
- Launched Dewey Research Advisor
- Usage of our public site continues to increase. Table 1 shows the number of hits for the busiest month of the year for the past five years. Figure 2 shows the increase in total number of hits over the past five years.

Table 1

Busiest month	Requests for pages
April 2002	481,348
April 2003	684,800
April 2004	1,086,512
April 2005	2,217,458
May 2006	4,220,912

Figure 1



Support for new initiatives

- RVC Images Online / Stellar Images. Major progress was made in a very long-term project. A repository of digital images, using DSpace software but housed in an instance separate from DSpace@MIT, will be accessed for classroom teaching by Stellar, MIT's course management system.
 - Funding to support the creation of a repository of digital images has been added to the Libraries' budget, enabling us to formalize a partnership with AMPS to create the interface that will interoperate with the DSpace-based repository.
 - Jeff Lazarus and Lisa Kamisher were brought in to provide professional project planning; RVC staff are selecting images to be scanned by Boston Photo, and are responsible for the cataloging records from which metadata is created.

- Contributions by STS staff included creating, testing, and implementing a workflow for exporting metadata from IRIS, the cataloging system presently used for RVC's image collection, and batch loading it along with image content into the repository; configuring OCLC's open source SRW (search and retrieve web service) to work with newer versions of DSpace and to search additional DSpace indexes; and testing and implementing fixes aimed at creating a sustainable workflow for RVC staff.
- Initial trial involving two classes is scheduled for fall 2006.
- SFX-Verde Team. The SFX-Verde team planned and conducted a user needs study, described at <http://macfadden.mit.edu/webgroup/userneeds/>. The study has given us some exciting insights into the information-seeking behavior of MIT students, and offers us many opportunities to rethink our users' experience in accessing our online services and collections. Incorporating the results of the survey, the group submitted the final report for the portion of its charge related to the user interface for accessing e-resources. Their recommendations centered on providing simplified search and discovery by implementing Ex Libris's MetaLib and X-Server technology, along with a metadata aggregator tool. Task forces will be convened over the coming summer to begin the MetaLib implementation and to investigate aggregator tools presently available. The report is available at <http://macfadden.mit.edu/webgroup/userneeds/report.html>.
- Worked with Ex Libris and Google to make MIT's holdings available through Google Scholar.
- Worked with Lisa Horowitz to move Ask Us's problem tracking from the Request Tracker instance (originally set up as a pilot service and subsequently de-supported by IS&T) to IS&T's supported campus-wide RT server. Completed scripting required to run RT reports using Brio Query.
- Assisted Document Services and ILB staff in selecting and implementing the ILLiad service for interlibrary borrowing.
- Web Manager taught a series of five staff training sessions on Library 2.0 topics.

Support for staff and public computing

Service and infrastructure improvements:

- Improvements to Building 14 server room
 - In collaboration with Operations and Infrastructure Services from IS&T, a much-needed upgrade to the network in Building 14 is now underway. We expect this will improve network response to all our servers (as well as improved service for staff and users in Bldg. 14.) Work is scheduled to be completed in October 2006.
 - Installed new cooling system.
 - Planning is underway for an improved backup system. Again, we intend to work with IS&T to utilize their backup infrastructure, once sufficient network capacity is available.
- Installed Nagios monitoring system. The system monitors all our servers, including the Barton servers as well as those in our own server room, as well as environmental conditions in the Bldg. 14 facility.
- Worked to establish and/or formalize off-hours and emergency coverage of critical systems.

Windows environment:

- After a series of discussions with Kyle Pope, we have decided to contract with IS&T's Departmental IT Resources group to upgrade our Windows domain. Following the upgrade, STS staff will continue to support the domain.

Desktop computing:

- Concluded a year-long study and discussion of the LTE positions and the staffing pattern of desktop support by announcing a plan for restructuring desktop support across the system. While the actual implementation of the new support structure will happen next year, the discussions and exchanges leading up to the implementation have been both the biggest challenge and the greatest highlight in the desktop support realm this year. Details of the plan are discussed in the "Administrative initiatives" section below.
- Migration of our staff from Eudora and POP to Outlook and IMAP is almost complete.

Capital equipment:

- Reviewed a total of 97 requests for new computer-related equipment.\

Staff wikis:

- Installed local instance of Mediawiki for immediate departmental needs
- Began discussion with IS&T to evaluate the appropriateness of their planned wiki service to meet the growing demand of Libraries' departments and committees.

Administrative initiatives

- Restructuring desktop support, including:
 - More specialized roles for the two LTCs (Domain Manager and Support Manager)
 - All LTEs will report centrally, receiving direct supervision from the Support Manager
 - One LTE position will be eliminated, with the line to be repurposed in support of developing new services
 - The planned upgrade to the Windows domain will allow LTCs to provide more remote support to local units
- Elimination of the Reporting and Metadata Analyst position, and creation of the Technology Project Manager position.
- Reassigning the Senior Systems Analyst to focus on digital library efforts, with a new title of Enterprise Systems Manager.

PERSONNEL

Departures

- Joan Kolias went on permanent disability leave in December.
- Ruben Madrigal, whose term position as LTC was extended, subsequently decided to resign in order to return to school full-time. Happily for the Libraries, Ruben plans to continue to work for us on a part-time basis.
- Austin Kim, our Analyst Programmer, announced his resignation, effective in early July. Austin plans to attend law school in the fall.

Appointments

- Joanne Samuelson has joined our staff as Administrative Assistant to both STS and the Digital Libraries Research Group (part-time.)
- Alex Brennen was appointed to the newly-created Unix Systems Administrator position, supporting UNIX servers for both STS and the DLRG.
- Mark Diggory was appointed to the position of DSpace System Manager. Because of the special nature of DSpace@MIT, Mark is reporting to MacKenzie but functions as a member of STS, and is responsible for support and development for this important production system.

Professional activities

- Carl Jones co-authored and co-presented with Ben Brophy a paper on DSpace/Stellar Images, given a conference on “Small Tools Big Ideas,” held at the Fashion Institute of Technology (NYC.)
- Rich Wenger gave a presentation on the interaction of Google Scholar and SFX at a meeting of the New England Library Instruction Group.
- Nina Davis-Millis served as the chair of the Steering Committee of the Ex Libris Users of North America.

More information about Systems and Technology Services can be found on the web at <http://libraries.mit.edu/about/depts/sys.html>

Nina Davis-Millis
Head, Systems and Technology Services