

# Library and Information Services Update

## August 2013

This is the latest update from LIS which lays out recent accomplishments, upcoming priorities, and longer-range issues and opportunities. It is a long document, but we hope that the format will allow you to quickly skim through the items not relevant to you, and to identify those items which you may want to learn more about. As part of our annual goal-setting process, we've also established formal goals for the year. You can find those at <https://sites.google.com/a/middlebury.edu/lis-strategic-planning/directiongoals/goals-2014> . We also re-visited the broad strategic direction of LIS in our on-going efforts to align our work with the broader direction of the College. To that end, we have defined five major areas of focus. These areas will provide a shared framework for us to prioritize our efforts, and to connect our efforts to what the College needs from us in the coming months and years.

1. **Sourcing Strategy:** We will continue with our on-going, multi-year planning for identify the appropriate sourcing strategy for our various services. We have been working from our inventory of current services to regularly measure the costs and benefits for critical systems. Based on this analysis, when appropriate, we then develop plans for moving those services to the most appropriate environment.
2. **Access:** The manner in which people access our services and resources is changing. We need to look strategically at both the devices that attach to our network, and the network itself to ensure that our methods for providing secure access to resources are supporting the evolving needs of our community from wherever they are connecting.
3. **Quality and Reliability:** How do we define success? How do we measure success? How do we establish shared expectations around the various services we provide? For those services where it is appropriate, we want to establish benchmarks and metrics that will allow us to have a common understanding with our community about the quality, timeliness, reliability, and security of the services we provide.
4. **Innovation:** How do we support the College's efforts to innovate at all levels of the curriculum? How do we align ourselves with other parts of the College that also foster innovation? How do we assess pilot projects and scale them up to work across the College?
5. **Efficiency:** We have made great strides in using technology to automate manual processes, to create electronic workflows to replace paper-based processes, and to provide better access to data for decision-makers. And yet there remains a great deal of work to be done, as the College needs to do everything it can to stream-line back office operations, to promote collaboration amid and among offices, and to provide accurate and timely information to decision-makers at all levels of the organization.

# Enterprise Applications

## Recent Accomplishments

- **Banner Upgrades** - We completed a full round of Banner upgrades in HR/Payroll, Finance, SFS, Advancement, and Student/Faculty including updates to self service and all our customizations.
- **Electronic Student Onboarding** - We implemented the new Student Onboarding Process which converted an extensive paper based process into an electronic process via SSB. This project continues work on our goal towards going paperless, dramatically reduces data entry processes and associated data entry errors, and streamlines the process for incoming students.
- **Earlier Creation of Accounts** - We have started creating incoming student AD, SSB, and Email accounts as soon as a deposit is made on their accounts. The long term goal is to provide new incoming students access to college resources and to begin integrating them into the college community immediately after they have committed to attending Middlebury and a deposit has been registered.
- **Student Registration** - We completed what our Registrar described as our most successful student registration ever. It took months of work, a dozen late nights of load testing against Banner systems, several Banner and Oracle upgrades, and extensive tuning of our environment but we believe we have finally addressed the critical problems that plagued the student registration processes in Banner for years. Hooray!
- **Electronic Transcripts** - We implemented implemented Escripts for the delivery of electronic transcripts via the registrar's office. Electronic transcript delivery is a timesaving way to reduce workflow in the registrar's office, reduce our usage of paper on campus, and improve delivery of transcripts to our alumni.
- **New Snap Reporting Database** - We upgraded out SNAP reporting database so that is constantly updated as changes occur in Banner Production. Where the old reporting database was updated nightly at 2am, the new database is an exact copy of production generally accurate to within a few seconds.

## Priorities For the Next 3-6 months

- **AS400 Decomissioning** - Final retirement of the AS400 will remain a top priority until this project is completed. We've completed analysis of what data needs to be saved and provided to functional areas. We've also successfully documented relevant programs and moved associated data to a new database. We'll be providing users with a mixture of export reports in PDF and XLS formats along with some

Hyperion reports displaying legacy data required in their areas. We are currently estimating completion of this project the end of July 2013.

- **Identity Management: Phase One** - Members of my team have been prototyping Oracle views in the Banner database that will eventually feed data to the IDM system. We are evaluating different methods of capturing changes in Banner in real time. It is likely we will look at implementing the Banner Event Publisher feature of the Banner Enterprise Identity Services module in January 2014 to facilitate this process.
- **Purging and Archiving** - We are currently working with functional areas to begin testing of delivered Banner purging and archiving processes. These process have not been run regularly since Banner was implemented at Middlebury. We are working to update our retention policies and determine what data can be purged from the ERP system.
- **DBEU** - The Banner Database Extension Utility is current installed in our test environment and being tested by functional areas. DBEU adds 6 new columns to every table in the Oracle database. This utility is a critical prerequisite for deploying Banner XE functionality in the future.
- **New Common App format** - The format for the Common App will be changing this summer. Several custom processes will need to be reworked to accommodate these changes.
- **CASify Banner** -We want to make it possible to login to Banner via the username and password that most of our other services use, which is called CAS. We'll be working over the coming months to solve several problems associated with adding CAS authentication in Banner. We are currently anticipating implementation in test in September with a production go live to be schedule in January 2014.
- **Nolij Document Imaging**: We are developing a campus-wide plan for the implementation of the Nolij document imaging product that allows offices to reduce the amount of paper in their offices, and to share documents electronically within their offices and with other offices.

### **Long-Range Challenges and Opportunities**

- **CASify Banner** - As noted above, this will be a challenging project in that it will impact many areas and require reworking of several existing technical and business processes.
- **Banner XE Transition** The Banner application is moving to an entirely new platform that requires us to learn a new programming environment. This will be challenging both technically and functionally. My team will begin training in JAVA/Groovy/Grails in June 2013 however it will take a year or more to develop sufficient technical aptitude across team. This is made additionally complex in the functional areas are not currently interested in any Banner XE functionality so are having a difficult time understanding why my team is focused on this new technology. I have attempted to explain the necessity for my team to begin learning the new technologies early however functional areas are only interested in their current needs.

- **Banner Workflow** - We want to implement workflow technology within Banner that will allow offices to work through administrative processes more effectively. There is large interest in, but little understanding of, Banner Workflow in the functional areas. Several departments have expressed a desire to implement Banner Workflow however it will be a challenge to implement related to other high priority project in my area. I am hoping to implement a pilot project mid-2014.
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## Research and Collection Services

### **Research & Instruction Workgroup and Liaison Program (Includes Government Documents)**

#### **Recent accomplishments (from the last 3-6 months)**

- Participated in search for new Curricular Technologist. Hired Heather Stafford.
- Searched for and hired new Research and Instruction Librarian. Hired Stacy Reardon.
- Discussed outcomes of recent liaison meetings with faculty. Major take-away: We should tell people not only about new resources, but also about underutilized resources.
- Participated in training for Web HelpDesk and information security best practices.
- Prepared for Summer Language Schools. Developed, vetted and shared plan for library and curricular technology support. Consulted with HelpDesk regarding Welcome Center needs. Worked with Collections Management staff to develop display of language books and audiovisual materials.
- Prepared for fall 2013 first-year seminars. Presented at orientation for faculty and matched librarians to all 44 classes .
- Collection maintenance for Government Documents. Weeded 13 sections of Serial Set volumes for 1920-1978. Weeded documents in Armstrong Library to free up much needed space.
- Completed draft assessment of Government Documents Department.
- Shared progress reports with Honor Code Review Committee (HCRC). <http://go.middlebury.edu/citation> guide has been revised. Academic Integrity tutorial is in progress. See [go/honorcodereview](http://go/honorcodereview) for the Honor Code Review Committee report.
- In the area of Collection Development, we contributed to discussions about major purchases, and worked with interested departments on journal subscription reviews.
- Clarified and documented software and hardware request process.
- Reviewed Midd LIS social media practices and results, brainstormed new ideas for content.

- Invited students (through their advisors) to submit senior projects to the go/scholarship online repository.
- After reviewing statistics from last summer, set Research Desk hours for this summer.
- Lots of sharing from conferences and professional reading in the Liaisons Blog.
- Created one-page summary of fall 2013 baseline assessment and a longer report comparing results of pre-instruction and post-instruction assessments. Good news! Students did better on the assessment after library instruction.
- Worked with Joseph Watson and others on selection of new podium for LIB105.
- Language Schools are deliberating changing the mix of languages taught at Mills. Michael Geisler requested information from the library. Joy collaborated with Collection Management staff to determine circulation stats, average price, and shipping costs of Italian materials. Advocated purchase of ebooks.

### **Current priorities (for the next 3-6 months)**

- Contact fall 2013 FYSE faculty and begin planning for support.
- Welcome new faculty via email, group orientation session and one-on-one meetings.
- Attend Writing Retreat in August (2-3 librarians).
- Plan for fall 2013 administration of baseline information literacy assessment.
- Continue collection maintenance (aka weeding) at Armstrong Library.
- Continue work related to analog sunset (aka VHS weeding) and transfer to digital format.
- Web Help Desk for liaisons and librarians. Work with current configuration, train and tweak where possible.
- Assessment of Liaison Program Communication in order to determine the significance of identified communication gaps and plan for how to fix them.
- Redistribute liaison assignments to accommodate new liaisons.
- Convert SubjectsPlus guides to LibGuides platform. The top priority will be go/citation guide.
- Contribute to discussions regarding changes with the CTLR that are relevant to liaisons and librarians, and explore the ways in which we can provide support for those changes.
- Curricular Technology Team (R&I members: Joy and Steve): CTT has been continuing trials of Sansspace with academic-year and LS faculty, providing input into plans for growth in the College's videoconferencing services, and preparing to train LS bilinguals, faculty, and staff on our core curricular technologies
- middlab (R&I members: Richard and Wendy): Wendy - much research and headway in exploring best archival data management plans for the sciences & other fields.
- Richard - consulting with Matt (and others) on appropriate metadata for MiddMedia & other projects.

## **Future opportunities and challenges (longer range thinking about what is coming in the future)**

- Train new Research and Instruction Librarian. Contribute to training of new curricular technologist and new Special Collections Librarian.
  - (Gently) recruit new participants in information literacy pilots
  - How to assess information literacy efforts in the absence of resounding faculty support
  - Investigation of needs/possibilities for online streaming of visual materials.
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## **Preservation and Processing**

### **Recent Accomplishments**

- We have almost completed a redraft of the LIS emergency manual. The scope of the work broadened to include Armstrong Library because it didn't make sense to ask people to bring in their home copies of manuals and not do that portion at the same time. New sections of the printed manuals include maps to the buildings and all the College-wide ER protocols from the Office of Public Safety page.
- We have updated our end-processing documentation in the wiki.
- We have successfully managed the transfer of the oversight of end-processing from Joseph Watson to Marlena Evans.
- We investigated the option of sending our discarded books to Better World Books for resale, negotiated our terms of service with them, and commenced sending books to them.

### **Current Priorities**

- We are working with Danielle Rougeau, Terry Simpkins, and Rebekah Irwin to more fully integrate Joseph's work into the mainstream of work in Special Collections. Joseph will be moving into 101 in the coming weeks and will begin taking on more responsibility for the preservation of the collections there, as taking on some of the scheduled research room shifts.
- We're working on a condition assessment of the bound periodicals in Armstrong Library.
- We recently purchased an environmental monitoring system. We need to get that installed and learn how to use it.
- With the Space Team we'll be considering options for office assignments for current and new staff.

### **Future opportunities and challenges**

- With the Space Team and colleagues in RCS we'll begin to think about how we might reduce the size of the physical collections in DFL in order to provide more space for people.

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## **Inter-Library Loan**

### **Recent accomplishments (from the last 3-6 months)**

- Upgraded ILLiad from 3.4 to 3.5 including transition to new Server All local computers upgraded (with ILLiad) including MIO (MIIS).
- New Z39.50 search for periodicals up and running.
- Return of all Northeastern books as they end their membership with NExpress. Removal of NED from web and workflow of NExpress processing.
- Completing final UPS shipping reports for review of ILL Lending Media policy study.
- Uploading test documents to Internet Archive.
- Merging ILLiad login page with ILL Dept. webpage. (Go/ILL now leads to merged info. and login pages. Go/ILLiad still leads to traditional ILLiad login.)

### **Current priorities (for the next 3-6 months)**

- Cleanup of ILLiadData (including tracking/history, users and old ILL requests from the ILLiad database).
- Develop process or procedure, mission, and prioritization for uploading of ILL scanned items outside of copyright to Internet Archive.
- ILLiad upgrade to 4.0. Must be done in conjunction with OCLC upgrade/swap from OCLC FirstSearch ILL request module to OCLC Worldshare ILL. New accts with OCLC, Web services keys, and SSL Certificate needed.
- Staff training on new OCLC Worldshare ILL platform.

### **Future opportunities and challenges (longer range thinking about what is coming in the future)**

- How to direct patrons to ILL services.
- Understand what the increases in token programs and e-books and their effect on ILL services.
- Ensuring links to ILLiad from Journal Databases, not just purchase options.
- Planning for the NExpress consortium and Millennium's future at Middlebury.
- ILLiad potential uses as collection development tool, single stream requesting.

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## **User Services**

### **Telephone and Printer Services**

### **Recent accomplishments: (from last 3-6 months)**

- Configured telephone and printer asset databases for Web Help Desk and also created a building and room database for the system.
- Printer group met with SymQuest technical and sales management this spring to establish criteria for future printer purchases in lieu of PaperCut issues with Canons and driver problems with Macs and new printers.
- Tested small VoIP telephone system as a possible choice for the Center for Non-proliferation Studies in Washington, D.C. in the event they upgrade their network services. The system is relatively easy to use and provides more telephony options than their current system, at a lower price.
- Created a short survey for student printing satisfaction and placed at all public printers. Surveys were placed in early May and will run through December. The surveys are being collected each week while classes are in session. We are getting feedback. Complaints about printers being down or out of paper/toner will be cross-checked with tickets to identify and correct problem machines or processes.
- Surveyed current BlackBerry Enterprise Server users to find out how many were planning to purchase one of the new BlackBerry 10's in the next year. A few users will stay with BlackBerry and so we are maintaining the server until April 2014 by which time all existing users should have upgraded to a BlackBerry or another smartphone.

### **Current priorities - (for next 3-6 months)**

- Successfully implement Web Helpdesk and Service Level Agreements.
- Inventory current telephone service equipment and features in place.
- Meet regularly with the printer group staff from Service Requests and CSNS to review printer issues and improvement of processes.
- If budget allows, purchase 100 additional unified messaging licenses. The current 50 licenses are all in use.

### **Future opportunities and challenges**

Work with other LIS technology service groups to prepare an evaluation and recommendation for next generation voice and unified communication systems. Develop a plan for migrating our landline telephony infrastructure to voice over IP and mobile technologies as the life-cycle of the existing system expires.

## **Media Services**

### **Recent Accomplishments**

- Assisted with moving this year's commencement indoors, for the first time in many years. We used a setup that was very similar to the HHDL visit. All went well.



- Commencement, Reunion, as well as LS and Bread loaf startup all went well.
- Built four smart classrooms in Twilight: 110, 204, 206, 301. We were able to reduce the expenses by about 60% (!) by using LCD TVs with built in sound systems.
- The MCC Social Space received an upgrade. It now has a much brighter digital HD projector and a much easier to use touch panel.
- Started work on the videoconferencing project.
  - DC, Monterey classroom site visits complete.
  - Planning Middlebury classroom site visit.
  - Planning infrastructure/network portion.
- (Completed technology upgrades at 3 South.)
- Installed additional satellite TV locations for language schools: Italian, Portuguese and Chinese.
- Created ten additional classroom TV carts , which are now in use by the Language Schools.
- Created five additional classroom projector carts, which are also now in use by the Language Schools.
- Created a new media viewing station for Bread loaf.
- Continued to inform departments about the analog sunset ([go/analog](#)).
- Supporting the Foodworks internship program. Several successful videoconferences in a summer long series.
- Hired a new Media Services II Specialist – welcome David Wright!
- Migrated to Web Help Desk (from two filemaker databases, Alert Monitor and Heat.)
  - Transferred over 3000 assets from filemaker to WHD.
  - Transferred over 100 tickets from Heat to WHD.
- Scott Witt attended the East Coast streaming media conference. He obtained a lot of good information regarding the direction of the industry, and options for storing and streaming live and recorded video.

### **Current priorities**

- Start purchasing equipment for upgrading the twenty oldest smart classrooms on-campus (primarily MBH rooms). Work with facilities to schedule the installation (December/January, tentatively).
- Create four additional smart classrooms: AXN 001, Hepburn basement/Campus office, Hepburn seminar room, MBH 464 (tentatively scheduled for August)
- Complete the evaluation of new HD cameras and purchase (prior to September.)
  - Continue the evaluation of best methods for video storage and archiving.
- Discuss live and recorded video streaming options with other LIS departments.
  - Work towards identifying and proposing a solution by December/January.
- Continue work on the videoconferencing project.
- Continue supporting the Foodworks internship program.
- Evaluate changes to ADA legislation and requests from customers for improved audio systems.
- Assist with the technology additions that are part of the field house renovations.

- Planning certification exams for Stewart, Scott and David.

### **Future opportunities and challenges**

- Review recording practices, upgrade recording and classroom design guidelines to match HD requirements.
- Upgrading technology spaces to maintain a 5-year replacement cycle for multimedia technology. Ensuring that, as we plan these, we take into consideration new trends, new technologies, new legislation.
- Unified communications – the convergence of telephone, computer communications, audio and video conferencing
- IPTV – continue seeking options to affordably, legally deliver audio& video media across campus.

### **Stats for FY13:**

- 300 screenings
  - 150 recordings
  - 100 videoconferences
  - 743 other events
  - 207 other (non-event related requests) processed
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### **Helpdesk Service Requests**

#### **Recent accomplishments (from the last 3-6 months)**

- Purchased Kace Windows Management system and setup the virtual servers with the CSNS group.
- Hired a new Computing Specialist II who started on June 4th (Brett Wells)
- Tested, attended training and converted open tickets to the Web Helpdesk system
- Pulled data, edited and readied the asset inventory for import into Web Helpdesk
- Upgraded 3/4 of the Breadloaf computers prior to the start of the Young Writers Conference
- Compiled data for the upcoming Language Schools setups on campus and coordinated with facilities the equipment moves
- Took on the KeySurvey administration from Barbara Merz
- Closed 615 Heat tickets between 3/26-5/22
- Helped support the Student Symposium with computers and software, as well as staffing of the presentations
- Worked with Dan Frostman to develop a new set of policies for loaner laptops, with new imaging workflows to match

#### **Current priorities (for the next 3-6 months)**

- Upgrade the Axinn 105 Lab
- Setup the remaining Breadloaf computers for the Breadloaf School of English
- Configure/Setup the computers and printers for the remote Language Schools

locations

- Faculty upgrades
- Once we have a FY14 budget to work from, we will have lab upgrades.
- Training of our new hire
- Research and testing new operating systems with our campus environment
- Building a knowledgebase for the Web Help Desk (internal staff and campus users)
- Developing WHD work flow best practices
- We now have the ability to repair Dell and Apple Hardware in house and under warranty. This will allow for quicker and better service. We are still mapping out the policies and procedures for this aspect of our work.

### **Future opportunities and challenges (longer range thinking about what is coming in the future)**

- Ongoing Training for Service Requests staff.
- Our combined efforts for the solution to Virtual Environments and Bring your own devices (servers, security, budgets, and support)

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### **Helpdesk Call Center Walk-In**

#### **Recent**

- The new scheduling software for student workers, ShiftPlanning has been a great success. It has streamlined student scheduling and shift swaps. Having to clock-in has held students accountable as far as being on time for shifts. Punctuality has been an ongoing problem in the past, mainly after hours.
- WHD is going well with both Call Center staff and Student workers
- Summer student coverage is good this summer, three non-midd students were hired as many midd students are doing internships or research work

#### **Current**

- Working through the learning curve of WHD, less questions every day.
- Focusing on LS start up. Drupal classes for Bilinguals has come from Bryan Carson to Joe Durante.
- Working on Call Center staff moving towards other tasks as time is available with more student coverage.
- Student lead consultants will be updating the training module with WHD info and updating any out dated info.
- Working on goal setting for 2013
- Training new students workers.

### **Future plans at the moment**

- Short term, Summer intern to work with Linda Knutson over the summer to update/clean up documentation.
- Once LS are settled I'll be looking at the Fall to get the student workforce in line.
- Putting the plan in place to reach set goals.

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## **Circulation**

### **Recent accomplishments:**

- Successful end of term; all returned items reshelfed, carrels and lockers cleaned out, items not returned will be billed this week
- Successful launch of Web Helpdesk
- Summer student hiring, training, scheduling

### **Current priorities:**

- Coverage for staff vacations
- BL and LS reserves
- Gearing up for Language Schools
- Equipment clean up, inventory ; Laptop checklists, replacements, wiping of data
- Armstrong weeding project
- Goal setting

### **Future opportunities and challenges:**

- Ilsley leaving Millennium; clean up, change of policies, etc.
  - Review of loan rules, policies (in conjunction with the above)
  - On the horizon: possible replacement of Millennium as ILS
  - Carrels, 2013-14
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## **Central Systems and Network Services**

### **Recent accomplishments (from the last 3-6 months)**

- Provision new MySQL HA cluster (production servers in Voter, Library with observer in Carr) as database backend for production Drupal web sites (www.middlebury.edu, www.miis.edu, museum.middlebury.edu, go.middlebury.edu, go.miis.edu). This allows for read-write failover and roughly double the capacity.
- Implemented separate inside (on-campus) and outside (off-campus) DNS views for all domains we provide DNS authority for, including Middlebury.edu and MIIS.edu. This allows us to more precisely limit what fully qualified domain names resolve to

for off-campus and solves numerous IP addressing challenges with Network Access Translation (NAT) used extensively on the MIIS campus.

- Provisioned additional wired and wireless network services at the Snow Bowl in support of the NCAA tournament.
- Provisioned new wired and wireless network services at the renovated 3 South Street.
- Provisioned the new NAS "MiddCloud" file storage environment with real-time replication across data centers. Transitioned 3 production file services totaling approximately 15 TBs data. Completed change management plans for moving MiddFiles to this platform post summer programs.
- Provisioned redundant fiber paths and dual-homed aggregation (outer core) switches to enhance network reliability of numerous critical buildings on the Middlebury and Bread Loaf campuses.
- Relocated critical network fiber paths to new distribution across campus locations improving reliability and increase in bandwidth availability back to the network cores.
- Expanded network infrastructure related to Athletic complex on-going construction and renovation as well as and new outdoor locations (including baseball and softball fields).
- Working with CRAs and Residential Life, completed a comprehensive inventory of WAPs (more precise locations, types) to facilitate improving wireless services throughout the Middlebury campus.
- Retired a number of filemakerpro databases – working with individual departments have either replaced required functionality or determine it is no longer needed.
- Extended the College network to new location in the Marble Works in support of additional College Advancement presence.
- Created a plan for an upgraded IT infrastructure including network, (wired, wireless), security, internet connectivity, storage, telephony for the D.C. office for their new office space and the expected additional use by Middlebury and MIIS people.
- Completed the transition to 64-bit printing support throughout the Middlebury campus and from Banner/Hyperion.
- In partnership with UVM, provisioned several high-capacity parallel cluster computing applications for Middlebury faculty research on the Vermont Advanced Computing Core (<http://www.uvm.edu/~vacc/>).
- Provisioned new network monitoring and auditing system that pools each switch hourly and compares its configuration and if there are any changes, alerts network admins to those changes and logs them as well as health of the network devices include VC membership, power supplies, temperature, etc. This proactive auditing solution provides us with a significant advancement of visibility.
- Created a detailed contingency plan to host Banner and Hyperion at Middlebury.
- Doubled our bandwidth to Bread Loaf (now 2 gbps).
- Created a replacement application for NE Deans to allow us to retire an aging application.

- Provisioned wireless services in our test network and established a functional NAC (network access control) solution. Next steps require the build out of a security model, wireless SSIDs, registration and remediation components.
- Piloted a VOIP cloud telephony system appropriate for regional offices.
- Implemented Sender Policy Framework (SPF) to facilitate email spam filtering.
- Provisioned Eduroam for institution participating guests as well as Middlebury faculty, staff and students traveling to other academic institutions.
- Upgraded Inter-Library Loan (Illiad) system to latest release.
- Upgraded Airwave and the Aruba controllers to their latest recommended versions.
- Upgrade all Juniper switches to their latest recommended versions.
- Implemented an HA solution for our backup infrastructure as well as significantly upgraded the capacity and performance of backup infrastructure components.
- Provisioned or upgraded approximately 25 WAPs improving coverage and performance of wireless on the Middlebury and Bread Loaf campuses.

### **Current priorities (for the next 3-6 months)**

- Transition file serving including MiddFiles to new "MiddCloud" NAS environment. Change Management plan completed for MiddFiles transition, scheduled for post summer programs.
- Provision Network Access Control (NAC).
- Complete the transition to Facilities Commander from Diamond II for Card Access.
- Purchase and provision new next generation border firewalls/IPS.
- Deploy papercut client outside of LIS.
- Transition all printers to a common vlan(s).
- Expand disk storage (and improve storage performance) at MIIS.
- Update VMWARE to v5.1 at MIIS.
- Provision Eduroam at MIIS
- Transition DNS hosting for MIIS from AT&T to Midd/MIIS; establish authoritative name servers (publically accessible) on both Midd and MIIS campuses.
- Complete planning for network refresh project at MIIS, purchase and implement new network core for their campus.
- Improve process for pushing out updates to juniper switches and investigate automated network/server configuration tools such as puppet or chef.
- Transition authentication/authorization for CS servers and labs from separate NIS domain to Middlebury.edu active directory domain.
- Transition files storage for CS servers (at least haystack) to MiddCloud.
- Investigate log consolidation tools such as Logstash, Splunk to facilitate log analysis, problem visibility (monitoring) and troubleshooting.
- Support IT infrastructure requirements as part of the renovation of the Center for Non-proliferation Studies offices in D.C.
- Support network infrastructure at Middlebury, MIIS, D.C. for video conferencing initiative.

- Advance wireless survey and planning for addressing sub-optimal wireless services throughout the campus.
- Dual home Aruba controllers
- Transition some SAN storage to Raid 10 from Raid 5
- Identify, design and support network requirements for Athletic Facilities renovation and construction
- Provision network service extension to Athletic ball fields
- Provision network service for renovation of 1096 South Street

### **Future opportunities and challenges (longer range thinking about what is coming in the future)**

- Next generation backup / archiving. Data storage is growing very quickly, we need to implement new archiving processes in order to reduce what we need to actively backup and potentially better allocate data not often used to less expensive / lower performance storage and/or cloud services.
- Consider eliminating MiddUnplugged wireless in favor of a target and more regulated guest wireless solution.
- Complete detailed planning for Data Centers renovation.
- Complete comprehensive disaster recovery and risk mitigation plan for our most critical systems.
- Complete Identity Management (IDM) "identity vault" system (phase 1), enhance/replace identity related information flow/integration for College enterprise systems.
- Identify network critical buildings on campus with non-redundant fiber paths and address with alternative paths, automated failover.
- Untrusted (blue) network – enhance infrastructure for non-Middlebury network services, guest access (including wireless).
- Secure enclave and PCI compliance network segmentation, internal firewalling.

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## **Collections and Digital Initiatives**

### **Collections Management & MiddLab**

#### **Recent accomplishments (from the last 3-6 months)**

- Collaborated with Special Collections, Jewish Studies, and College Communications to sponsor an

exhibition celebrating the 25th anniversary of the Hannah Quint Lecture

- Participated in a meeting with the Green Mountain Higher Education Consortium to consider cost-savings in technology and library services.
- Participated in searches for Research & Instruction Librarian, Curricular Technologist, and Media Services staff positions.
- Incorporated the work of "end-processing," i.e. preparing library materials for circulation, into our unit (this work was previously done by another workgroup). Upgraded and re-banded a staff member in CM to oversee and integrate this work.
- Contributed to the College by way of Staff Council and the Distance Learning and Innovative Pedagogy Task Force.
- Collaborated with the Gifts office to improve Library processes around gifts and accessioned gift both large and small.
- Attended Middlebury training for Web HelpDesk, Information Security, Legal and Compliance Essentials for Managers, and others. Attended dozens of webinars on Electronic Resource Management, the Summon Discovery Service, the Overdrive Ebook platform, and NITLE seminars on digital humanities, research data, the RDA cataloging standard, among others. Attended Innovative Users Group conference in San Francisco.
- Collaborated on displays and posters promoting new books, services, and foreign language materials.
- Completed year one of a two-year survey to gather data on our print periodical usage.
- Collaborated with librarians to weed underused and outdated materials from Davis Library and Armstrong, including Government Documents and journals.
- Coordinated new library collection purchases by way of the "collections confab" and worked with faculty, students, librarians, and liaisons to acquire appropriate resources.
- Acquisitions worked intensively with language school directors to acquire DVDs and books for Middlebury and Mills.
- Shared new collections, trials, and system down-times on the LIS Blog.
- Collaborated with Michael Geisler and Joy Pile to determine circulation stats, average price, and shipping costs of Italian materials to Mills in anticipation of the move of the School next year.
- Collaborated with College Museum and Visual Resources Collection to integrate ArtStor into their operations.



- Collaborated with CTLR and Richard Jenkins to capture, catalog, and archive student posters from the Spring Symposium. [See just one of many here.](#)
- Assumed some duties of a retired systems colleague, including loading and exporting record batches, maintaining the Millennium load tables, and others.

### **Current priorities (for the next 3-6 months) JULY AUG SEPT**

- Seek grant-funding for the Green Mountain Archive, a statewide consortium of cultural heritage institutions and maintain momentum.
- Continue work related to VHS analog sunset project.
- Participate in long-term workflow changes related to the SubsPlus migration, particularly related to trials and maintaining accuracy of our electronic resources.
- Collaborate widely on digital asset management systems, for both still-image and dynamic media.
- Reduce the volume of incoming print books to better reflect the reading and research needs of the College.
- Begin a pilot systematic review of online library resources, ensuring all our subscribed resources support the current curriculum and goals and anticipate future needs
- Assist Ilsley Public Library as needed with their migration out of the Millennium system

### **Future opportunities and challenges**

- Assist in training of new Special Collections Librarian and Research & Instruction Librarian, as needed.
- Prepare for the start of our grant project to digitize the Helen Hartness Flanders wax cylinders.
- With MiddLab, support faculty research data requirements and digital humanities work.
- Participate, as needed, in the College and LIS planning processes around CTLR.

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## **SECURITY AND ADVANCED TECHNOLOGY**

### **Information Security**

**Recent Accomplishments:** Staff at both Middlebury and Monterey have participated in a

number of educational RoadShows on both general safe computing practices and data privacy considerations. An April, 2013 trip to Monterey resulted in a successful education outreach effort that raised awareness about key issues. Additionally multiple functional areas on the Middlebury campus, including Finance and Admissions have participated in this educational effort.

There have been improvements in both policy and auditing. With the introduction of the Data Classification Policy and the establishment of the Data Classification Working group, the College is on its way to cataloging and identifying the risk-related data that is managed by staff throughout the institution. This effort will go a long way to mitigating risk, as knowing where our data resides is critically important. In concert with the data classification effort the Information Security workgroup has begun an auditing effort of data stores clearly intended for institutional data. This effort has identified sensitive data assets which have been either secured or redacted from our data stores reducing risk in a tangible way.

Technically, the Information Security workgroup has worked with Central Systems and Network Services to re-introduce intrusion detection to the perimeter of our network. This process has both improved the security of the network and enhanced the prior security that was once present. Additionally, we have enhanced our vulnerability management efforts to offer more streamlined and effective reporting for effective mitigation of risk.

**Current Priorities:** Extending the information security RoadShows to as many functional areas as possible. These presentations are also being leveraged to introduce the Computer Based Training program in areas that would benefit from further information security education. Auditing efforts are now scheduled to be continued to look for additional risk and to re-check those items which have been mitigated to ensure they remain secured and to establish baselines and metrics, that in part, help to measure the success of the overall information security program. Additional auditing efforts will soon be implemented to validate vulnerability management efforts and other areas of risk management.

Auditing has become a large focus for the Information Security workgroup. The current efforts have allowed us to collaborate with other functional areas to produce a significant reduction in sensitive data at risk. Continued auditing efforts will target the identification of Personally Identifiable Information as well as the validation of vulnerability management efforts through carefully controlled penetration testing. Vulnerability management efforts will be expanded and enhanced to better support the efforts of patch management and risk mitigation that are being conducted across the College. Currently these efforts have been primarily in conjunction with the Central Systems and Network Services area. Encouraging the joint participation of User Services and MIIS technical staff will help to improve the efforts to mitigate vulnerabilities and risk.

Several collaborative efforts with other functional areas are progressing. The data

classification working group is actively flushing out the new data classification policy. The Central Systems and Network Services area is working to re-initiate Network Access Control for the campus network and the Information Security workgroup will be assisting in that effort. Additionally Central Systems and Network Services will be acquiring new Firewalls which will ultimately replace the Intrusion Detection/Prevention System which currently protects the edge of our network. This, along with the McAfee IPS and Nitro IPS hardware currently in house, provide opportunities to extend network inspection in dynamic ways, as appropriate. This effort will be a joint venture between Information Security and Central Systems and Network Services.

The Security Team is focusing on supporting the Computer Based Training effort, as well as the RoadShows. The Security Team will be working to implement a new version of the Security survey that is designed to require involvement of both vendors and functional areas. Finally, the Security Team will rally behind a broader publicity effort on information security as a whole.

**Future Opportunities:** Looking forward, there are a few long range projects for this working group. We have set an objective of identifying a methodology for enabling end users to reduce the amount of locally-stored data. Whether this is through a Virtual Desktop Infrastructure or via basic Terminal Services has yet to be determined. This work may relate to the cloud strategy initiative for LIS. We have identified a need for some of our critical services to be protected with stronger security. Two-factor authentication may be a viable solution to this need, especially if implemented in an opt-in or assigned model. Along with the idea of better security for critical services, we have also identified a need to audit or improve the security of our directory services and file structure. Expanding our audit efforts into this area will be a significant focus in the coming months and will further reduce our risks related to data security.

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## **Advanced Technology**

**Recent Accomplishments:** The Emergency Operations Center was recently upgraded to improve wireless network connectivity and make use of dedicated technology assets to aid in emergency management.

**Current Priorities:** Implement ALERTUS, an enhancement to our emergency notification systems capabilities.

Promote increased use of our Gartner subscription, which allows our community access to research on existing and emerging technologies from the world's leading technology analysts.

**Future Opportunities & Challenges:** There is an incredible array of new technology arriving online nearly every day. Making time to explore and understand these technologies

and the benefits and challenges that they represent is critically important. More time must be dedicated for careful exploratory and practical research to evaluate new technologies.

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## **Web Development**

### **Recent Accomplishments:**

- AS400 Data Migration to SQL Server, various tables from AS400 moved into Banner for reporting
- Identity Management System views (currently have 18 views are in progress or completed with about 80 remaining)
- 1 staff member completed a training on Groovy and Grails, the next Banner development platform
- Developed an AdaptiveQuiz module for Moodle in collaboration with Remote Learner
- CAS authentication for MIIS Moodle instance
- CourseHub integration with SANSSpace (digital language lab pilot)
- CourseHub integration with Middlebury Second Life island
- Kurogo version update
- Midd-theme for GO (not yet deployed)

### **Current Priorities:**

- Identity Management System Development
- AS400 Data Migration to Banner
- Launching a CourseHub for MIIS
- Updating the MIIS WordPress to use CAS authentication
- Drupal 7 upgrade
- Social Media Hub development
- MiddMedia 2.0
- Alumni portal page

### **Future Opportunities & Challenges:**

- Generating the IDM Vault utilizing the new Banner views
  - Working with CSNS on centralized log reporting to provide better insight on application health and performance
  - Sustainable upgrade strategy for Drupal & Kurogo
  - Future of mobile website
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## **CURRICULAR INNOVATIONS**

### ***recent accomplishments***

- Completed the spring online language lab pilot, collected data and made plans for the summer pilot

- Collected requests from faculty and started 60+ projects with the Digital Media Tutors

### **current priorities**

- Online language lab pilot with the Language Schools
- Completing the 60+ DMT projects

### **longer range issues & opportunities**

The college is making organizational changes in how it supports faculty development and the use of technology in the teaching and learning environment. We will need to have many conversations with the Jim Ralph, CTRLR, the Liaisons and others to align our activities with Middlebury's curricular initiatives.

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## **TEAMS**

### **Education and Training Team**

#### **Recent accomplishments**

- Mock site created for LIS Help gateway. Development is ongoing, with particular emphasis on broadening the scope of offerings available on the Ways to Learn page.
- Small working groups established to tackle goals relating to regular workshop offerings, workshop required elements, and skills needed by a successful trainer. Subgroups' initial recommendations completed; final revisions in progress.
- Goal setting for FY14.

#### **Current priorities**

- Wrapping up FY13 goals concerning: regular workshop offerings, workshop required elements, and skills needed by a successful trainer.
- Gathering feedback within LIS before launching an approved version of the new Help gateway site, sometime between end of Language Schools and before fall semester begins.
- Developing course content for proposed introductory workshops: Computing at Middlebury and Library Services at Middlebury.

#### **Future opportunities and challenges**

- Developments in "cloud" services and storage will impact how our community works, providing an opportunity to advise/inform concerning best practices. These same developments pose challenges as they tend to happen swiftly, disturbing the best laid plans.
- The College-wide web site re-design brings the same mix of opportunity-challenge. We are always seeking to improve the presentation of our educational materials but

challenges arise when trying to mesh efforts with those of others.

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## **Curricular Technology Team**

**Recent accomplishments:** things accomplished since the last update

Defined goals for 2014

Better communications between LIS and Language Schools

- Start of the LS Curricular Technology Team
- Multiple meetings with LS Coordinators
- Standard recommendations for technology orientations (Pij was a HUGE help)
- Standard outline for curricular technology orientation

**Current priorities:**

- Continue to support Language Schools- measure, monitor, adjust
- Define curricular technology for LIS
- Plan for database of curricular activities

**Longer range issues & opportunities:**

The college is making organizational changes in how it supports faculty development and the use of technology in the teaching and learning environment. We will need to have many conversations with the Jim Ralph, CTRLR, the Liaisons and others to align our activities with Middlebury's curricular initiatives.