

Update for President's Cabinet

Academic Technology & Infrastructure

12/1/2015

Dale Vickers

College Initiatives:

Computer Replacement - The College eliminated the faculty and staff computer replacement budget as part of past budget reductions. In the last few years that budget has been partially or fully restored.

- Fall 2015 - IT originally targeted the oldest and most troublesome systems for replacement. Once those were done a notice was sent to the campus informing them that they could request an upgrade. Response has been minimal but all requests have been met. We are continuing to replace systems based on age that are 5 or more years old, as time allows.

Help Desk Software Replacement - In 2010 when asked to reduce costs we switched to Microsoft's new Help Desk package because the majority of its cost was included in the campus agreement. It was an immature product with promise to develop into something more robust. That promise has not materialized and its limitations have become increasingly frustrating. IT plans to implement a new Help Desk software that includes online self-service ticket requests and a mobile application for technicians to use in the field. IT will fund the ongoing maintenance costs.

- Fall 2015 – Committee formed and evaluation of options is progressing

Network Infrastructure Hardware - Mt. SAC's network infrastructure was comprised of older CISCO hardware and newer HP hardware. HP is the network standard due to its lower cost and better feature set than CISCO. In 2013-14, IT implemented phase 1 and 2 of the CISCO replacement plan by upgrading most of the existing CISCO chassis to HP and some of the edge devices.

- Fall 2015 - This has been a multi-phased project. Originally we concentrated on the core distribution areas then to the sub distribution nodes. We're now in the final phase, the last of the Cisco edge devices.
- The remaining 20 or so switches will be replaced as time permits, while minimizing downtime to the areas impacted.

Wifi Improvements and Expansion - Begin wifi network expansion into other high demand areas of campus focusing primarily on student locations. Based on recent discussions at PAC and with Student Government, IT is proposing to continue wireless upgrades and expansion by focusing on outdoor areas and student gathering places.

- 2014/15 - IT added 63 Access Points around campus in addition to 44 added as part of Facilities projects.
- Fall 2015 - Projects budgeted to add wifi to several external areas of campus, the Rose Garden & coffee shop by buildings 4 & 61, the courtyards of building 26, 66 & 67, and the south side of 13.
- Have other plans in development and have spoken with student government leadership to solicit their thoughts on other priorities.

Software: Remove Desktop Control for MAC Computers - IT is able to remotely manage and load software on Windows machines. A new tool is available to perform these same functions for MAC computers. This tool saves technician time and provides uniform management of all desktop and laptop computers.

- Fall 2015 – Remote management of Apple devices is done.
- Originally considered a tool from JAMF but decided to use Apple's management solution.

Adobe Flash: Deploy Current and Minimize Impact of Vulnerabilities - Due to all the known and unresolvable security vulnerabilities in Adobe Flash IT announced the intent to eliminate it from Campus computers. Due to input from the campus community that task was postponed. Further investigation showed that Flash is still widely used and required across campus.

- Fall 2015 - Adobe Flash updated to version 19.0.0.245 on 11/10.
- ConfigMgr is now up-to-date, and new versions will be updated automatically for Windows computers.
- Google Chrome is now updated as well to include this latest version of Flash Player, and will update automatically for Windows computers.
- Firefox 42.0 is also updated.

Division/Department Initiatives:

Student Services

Student Services Technology Support – Maintain and update Student Services technology in Building 9B and Building 12.

- Fall 2015 - Currently working on updating 80 computers in the Assessment Center. Scheduling down time to complete the project has been problematic. Hence project will require some after-hours overtime to complete.
- Upcoming projects Regan Room and stairwell computer upgrades.

Instruction

Academic Technology Support – Maintain and update academic technology in various classrooms and labs.

- Fall 2015 - Instructional equipment dollars have funded a host of upgrades. Numerous classrooms and instructor workstations are the current top priorities. Several other similar projects have been identified and communicated to the respective Deans.

Administrative Services

Fiscal Services Technology Support – Maintain and update Fiscal Services technology in Building 4.

- Upgraded most Fiscal Services computers in Building 4.
- Laptops were encrypted for enhanced security.

Construction Project Support – participate in all phases of construction design, build, and implementation.

- Supporting multiple projects in various phases of the construction process.
- Preparing to bring Food Services and Student Success on line for winter/spring opening.

Human Resources

Human Resources Technology Support – Maintain and update HR technology in Building 4.

- Upgraded most Human Resources computers to laptops with docking stations.
- Laptops were encrypted for enhanced security.

Data Security & Infrastructure

12/1/2015

Chris Schroeder

College Initiatives:

Virtualization Management Tools (VMWare Software) - Mt. SAC's enterprise environment has moved away from physical servers and towards virtualization. This requires high end servers with management software. VMWare tools provide the software interface to manage the hundreds of virtual servers that are now in operation in the IT Data Center. The ongoing maintenance will be absorbed by the IT budget.

- Fall 2015 – Upgraded licenses for free as part of perpetual support contract with VMWare.

Hardware: Mirror Storage Array for Share Drives - The College's use of file share drives has increased exponentially over the last two years. A recent outage made clear the mission critical nature of these drives in multiple areas across campus. To provide increased reliability and redundancy, IT will purchase additional hardware to create real-time redundancy minimizing the potential for outages.

- Fall 2015 - Hardware installed and configured.
- Planning frontend deployment, testing, and migration of data.

Two Factor Authentication (2FA) - Two Factor Authentication adds a second layer of protection that mitigates vulnerabilities related to traditional username and passwords. IT's data security plan includes adding this requirement to systems that contain and store sensitive information.

- Fall 2015 – Currently testing the usability of a 2FA system.

Streaming Data for Backup and Recovery - Supplement to current TSM backup solution. VEEM provides recovery features that current TSM does not.

- Fall 2015 - Implemented free version of VEEM.
- Results of test have been good. Moving forward with quotes for acquiring licensing for the product.

Two Brocade Fiber Channel Switches - This is the long term solution to upgrade the high speed interface to integrate the College's storage area network (SAN) into the other campus systems.

- Fall 2015 – The HP SAN Proof of Concept test failed.
- Security Team is requesting a quote for the Brocade solution. Port count at last count was 46 FC ports, down from 96 at start of replacement test. This change was reflected in the original funding request. Amount funded will now meet the need.

Security Infrastructure Hardware, Software, and Training - Mt. SAC's network is continually scanned by hackers from all over the world including Russia and China. The College houses a treasure chest of personal data including social security numbers, payroll information, and student records. The financial penalty for a security breach of personal data is significant. IT is also planning to utilize some of the funding for training to ensure all tools are properly deployed and used as efficiently as possible.

- Fall 2015 - Completed upgrades of information security related software and hardware.
- Evaluating next round of risks and mitigation strategies. Planning has started to expand InfoSec User Awareness Training.

Enterprise Application Systems

12/01/2015

Bob Hughes

The Enterprise Applications Team has been very busy over the past six months. There have been a number of high-profile projects and initiatives that have been completed which will benefit the entire campus. The improved budget situation has also enabled several departments to purchase software packages for their unique needs, each of which requires IT help for authentication and data uploads. Although the campus community can view details of over 200 items completed since June 1 via the [Completed Projects List](#), an executive summary is provided below.

College Initiatives:

Electronic Document Management – the OnBase Electronic Document Management project has achieved several milestones since the project launched just a year ago with build-out of the local servers.

- February 2015 – Document taxonomy developed
- April 2015 – Train-the-Trainer sessions for OnBase completed
- June 2015 – Document conversion from legacy system to OnBase completed; Financial Aid, A&R, Counseling, Student Services in Production with OnBase; Business Analyst hired
- July 2015 – Application Enabler (link from Banner and APEX to OnBase) implemented
- August 2015 – Transcript Capture discovery sessions held; Honors Program begins using Document Imaging (first new office incorporated into system)
- September 2015 – Implementation of Office Business Applications (MS Office integration with OnBase which includes document revisioning and approval workflows)
- October 2015 – successful load of transcript data from OnBase into Banner articulation forms
- November 2015 – Development of forms, workflows and processes for Administrative Procedure / Board Policy updates and approvals in OnBase (conversion from Quicr).

Web Redesign – the Web and Portal team worked closely with Marketing to bring up a beautiful new Mt. SAC website, a project that launched with a project plan in October 2014. The team worked tirelessly on a campus-wide, collaborative approach.

- December 2014 – project presentations to PAC, Instruction, Management; hosting of a Summit with invited guest experts; Evaluation of Online Catalog system
- January 2015 – held several focus groups with students; meetings with Web Advisory Group
- February 2015 – presentation to Board of Trustees; usability testing
- March 2015 – environmental scan; extended team meeting to re-focus vision. scope
- April 2015 – wireframes developed; test servers built
- May 2015 – usability of new wireframes with high school students; validated approach and improved navigation
- June 2015 – meetings with OmniUpdate to develop templates from the newly developed responsive design HTML
- July 2015 – new design approved by Cabinet

- August 2015 – content populated into new templates by IT Staff and Content Owners; presentations at Flex and Classified Day
- September 2015 – held open office hours, web workshops (including the first *Writing for the Web* training session), on-site training by OmniUpdate
- October 2015 – New Website launched; held multiple workshops and open office hours
- November 2015 – Implementation of OU Search

New Portal Implementation – Ellucian (our ERP vendor) is dropping support for our current portal (my.mtsac.edu). The original de-support date was 12/31/15 and was recently extended to 6/30/16. Our current portal (Luminis 4) is based on the open-source uPortal system. The new portal (Luminis 5) is based on the Liferay enterprise portal system, requiring a completely new architecture.

- May 2015 – test servers built; Rick Nguyen to Portlet Development Training
- June 2015 – Academic Applications System Specialist hired; sent to Liferay developer training
- July – September 2015 – build out of content into Test system
- October 2015 – configuration of SSO; migration of users, courses into Luminis 5
- November 2015 – build of Production servers; Launch announcement to campus; end-to-end testing; Portal preview sessions held
- December 2015 – Administrator training held on-site; New Portal launch Dec. 16-17.

Division/Department Initiatives:

Student Services

- Implemented a new Online Orientation system (Cynosure) for Counseling; developed interface to update student checklists when orientation is complete
- Significantly improved productivity and reduced data entry requirements through automated upload processes, including:
 - Connect 4 Cohort / Attribute process for High School Outreach
 - Student Registration Groups
 - Priority Registration Control
 - New Computer Assessment Test results
 - In-Person Orientation
- Implemented the on-line Student Success Inventory (Multiple Measures)
- Modified MAP to enable Counselors to easily identify comprehensive vs abbreviated ed plans
- Senior Systems Analyst/Programmer hired (SSSP); improved tracking and reporting of contacts to generate the highest SSSP allocation in the state
- Implemented several new e-mail notifications to students
 - reminders to students who are on waitlists
 - reminders to students who have classes starting next week
 - reminders to students with registration appointments and no registration activity
- New APEX databases for DSPS (in production); CalWORKs (in production); Bridge (in development), EOPS (in development)
- Implemented and completed upgrades in Banner and data submissions for Gainful Employment compliance

Instruction

- Implementation of enhancements to the Faculty Feedback process for the Early Alert committee
 - Created mock-ups for Faculty Flex Day presentation
 - Automated e-mails to students for appropriate referrals on estimated grade entry
 - Automated e-mails alerting students if estimated grades were recently entered
 - Created a student view in the portal to see all feedback and estimated grades entered
 - Automated reminder e-mails to faculty encouraging them to use the feedback feature
- Implementation of WebCMS for non-credit curriculum review
- Pilot of on-line student evaluation of classes featuring automated launch of 575 surveys
- Email reminders to faculty to accept notice of assignments
- CourseLeaf – new online catalog system – completed web services integration
- Canvas (Online Education Initiative) – preparing for integration
- Statway – completed reporting of all student coursework to Carnegie Foundation

Administrative Services

- Implemented US Bank Purchasing Card with custom processes and interfaces
 - Daily uploads of accounting information to US Bank
 - Monthly downloads, updates of accounting information from US Bank to Banner
 - Download, updates of Cardholder information from US Bank to Banner
 - Creation of a purchase card food, promo supplies and catering expense report for VP approval
- Automated email notifications of students who have holds and past due balances
- Developed interfaces for the ConServe debt collection agency (file extract and data capture)
- Quarterly Interest Allocation report – three reports and custom database tables to calculate the specific quarter's average cash balance by fund and in total. Significant improvement in productivity as report was previously created manually
- Significantly improved productivity and reduced data entry requirements through automated upload processes, including:
 - Credit Card Transaction reports from Heartland to Banner for reconciliation of payments
 - Spreadsheet uploads for Payroll to improve PERS/STRS accuracy
- WorxTime – Created a process to upload data from Banner. Used to monitor ACA compliance

Human Resources

- Created a process to upload new salary tables in Banner for new contract – estimated 20 hours data entry saved
- LeaveSource – created a process to upload demographic data to LeaveSource for employee leave monitoring
- Campus Clarity / Lawroom – developed a single sign-on process for integration
- Created an APEX application to record employee work schedules