Enterprise Application Systems
9/13/2016
Bob Hughes

Banner, Argos, DegreeWorks:

- The requirements for the eTranscript California Mini Grant were completed, including the notation of course-level transferability and eligibility (CSU GE / IGETC), the notation of Associate Degree for Transfer on transcripts, and the ability to send and receive electronic transcripts. Total Grant Award = $17,500.

- A total of 10 significant upgrades to various Banner modules (General, Financial Aid, Student, CAL B, and Self-Service) were required in order to package and award financial aid in 2016-17. The upgrades were tested and completed over the weekends of May 21-22, May 28-29 and June 4-5. Functionality is now available that will allow us to verify enrollment in courses that count toward the degree or certificate for financial aid purposes by using the MAP degree audit (with DegreeWorks 4.1.5) in disbursement. This requirement is spelled on out pages 1-14 and 1-15 of the 15-16 Federal Student Aid Handbook.

- Information Technology sponsored on-site training for researchers in Argos report writing from Evisions March 28 – 30. This included a reporting environment dedicated to IRP and connected to our Operational Data Store (ODS). Evisions is currently developing a dashboard (informed by Instruction and IRP) of standard metrics to be used in Planning for Institutional Effectiveness and Student Equity reporting.

- Information Technology hosted a consulting visit from Mike Fox (the DegreeWorks expert from SIG) the week of July 11. The purpose of the visit was to evaluate our degree audit rules, help solve some issues we've encountered with properly counting repeat coursework, and train Evaluators from A&R on the latest version of DegreeWorks (4.1.5). The new version of DegreeWorks will enable us to introduce a more feature-rich educational planner and provide improved reporting capabilities.

- An interface was created to interact with our text messaging system which went live this summer. In collaboration with Marketing, we delivered text messages about registration appointments, financial aid, drop for non-payment and messages to students on waitlists.

Web, Portal:

- The implementation of the Online Course Catalog was completed in collaboration with the Instruction team. Key contributions included the configuration of an API to feed course data from Banner to CourseLeaf and construction of an attractive landing page and intuitive navigation to present the information.

- Staff completed a "Road to Success Career & Major Survey" in support of the Title V grant. This on-line tool (available through the portal) is intended to guide incoming students in selecting a major, identifying career goals, and help counselors identify students in need of additional advising in these areas.

- Templates for instructional department web pages were created, including 25 'snippets' and widgets for items like news feeds and calendars. These tools provide the ability for departments to easily create attractive and informative web pages in the new responsive format.

- A new page for the STEP (Summer Transition Enrichment Program) was created. http://www.mtsac.edu/counseling/step.html

- A page was created to assist students with accessing their MountieMail from their phones, with specific instructions for both Android and iPhone. http://www.mtsac.edu/gmail/instructions.html

- A pilot eBrochure has been developed for our CTE programs which outlines career opportunities, salary and market demand, and sample course plans. These can be viewed online, or downloaded in a printed format. A sample can be viewed at http://www.mtsac.edu/_sandbox/matt_b/air_conditioning_cte.html

- The new 3D Campus Map is now available. This exciting feature allows students and visitors to clearly see where buildings are located, see accurate renderings and photographs of buildings and generate walking directions. IT staff partnered with the vendor (Campus Bird), Marketing and Facilities to deliver this feature.

- A new page for the Dream Program was created. http://www.mtsac.edu/dream/

- A Faculty Toolkits site was created in collaboration with the Title V team. These pages provide a rich collection of resources for faculty and advisors. http://www.mtsac.edu/titlev/toolkits/.

- For the summer term we hired three part-time student assistants with proven web page design skills. We will have two student assistants this fall. These students have been helping staff in various departments with updating their web pages and migrating content to the new responsive format. Successes include pages for Accounting, Budget, Bursar's Office, Facilities, Fiscal Services, Payroll, Purchasing and Technical Services. An updated Public Safety page is in progress.

- An in-house free-text search utility called "Ask Joe Mountie" is in development.

- Eric Turner has been working closely with the Accreditation Steering Committee to ensure that all electronic documentation (websites, PDF, links, etc) are created in a functional and reliable manner.

Document Imaging:

- An online form has been developed to allow students to apply to the Honors Program. This form utilizes the OnBase document imaging system. Completed applications are stored in OnBase and are routed electronically for approval. http://www.mtsac.edu/honors/student-admission-application.html

- Document Imaging is in production in the Payroll department. Documents being scanned and stored electronically include Direct Deposit Authorizations, W4 forms and EDD DE-4 forms.

- Part Match for Transcripts has been placed into production. This add-on feature improves the processing of transcripts when transcripts are received prior to the student record creation in Banner. This was the final deliverable for the Hyland imaging implementation, and the project was closed on June 8.

- Meetings were held and document imaging plans are underway for Nursing, Veterans, Instruction, Accounts Payable, Purchasing and Library.

- A project to develop an online Ancillary form and workflow is underway with CalWORKs

- Paulo Madrigal and Bob Hughes met with Elijah Bisbee from Hyland to finalize the details for offering OnBase certification training through our Community Education program. Mt. SAC is just the second community college in the nation to offer these inexpensive, fee-based classes, taught by a Hyland instructor. At the conclusion of the class, hiring managers from local industries using OnBase would attend a mixer to meet and potentially employ these students. The first class begins Saturday, November 5 and meets for 6 sessions.

- A new instance of the OnBase system is being brought up to provide us with a "sandbox" so that we can distribute development of online forms and workflows to the rest of the team. We will also be using this to test our first upgrade of OnBase from version 14 to version 16.

- A new system was implemented to grade surveys and tests. Our legacy system dated back to 1990 and was quite costly to maintain. The new system does not require special NCR forms since scoring sheets can be printed on demand. See more at http://www.mtsac.edu/it/teaching-learning/scoring-services.html

Staff Development and Training:

- March 18 – The Web Team held a day-long workshop for users of OmniUpdate at Founders Hall, including hands-on sessions in 17-1.

- April 12 – Enterprise Application Systems held their annual retreat at Cal Poly Pomona. Staff learned about the upcoming Banner XE system from the University of Illinois, enjoyed a presentation on work-life satisfaction from Dr. Lisa Rodriguez, reviewed and discussed the Educause Top 10 issues for 2016, and heard from President Scroggins on technology issues and needs both at Mt. SAC and system-wide.

- May 2 -4 – Bob Hughes attended the Educause Enterprise IT Summit in New Orleans. This event focused on the transition from managing technology and infrastructure to managing services, vendors and contracts due to the increasing adoption of cloud services.

- May 12 – Two IT staff members attended the Common Assessment Initiative Professional Development regional meeting in San Diego to learn about IT requirements to support the CAI.

- April 18 – 20 – Six IT staff members attended the Ellucian Live conference in Denver. Hot topics included Banner XE and new features in the Luminis Portal and DegreeWorks.

- June 10 – Eric Turner was invited to present a session on Mt. SAC's website redesign at the regional HiEdWeb West 2016 conference in Riverside. See the session summary at http://west16.highedweb.org/schedule/from-mundane-to-responsive/

- July 19 – 21 – Three IT staff members attended Photoshop World in Las Vegas, NV.

- August 12 – Classified Professional Development Day: Dave Dieckmeyer presented "Where's What on my Mt. SAC Portal" and Bev Heasley presented "CalPERS and You"

- August 26 – Faculty Flex Day: Bev Heasley presented "Guiding Students to Success Using Early Progress Reports" and Dave Dieckmeyer and Evelyn Ojeda presented "How to Improve Your Class Through the Use of Course Sites"

- September 8 – Nine IT staff members attended the Ellucian Roadshow at the North Orange Community College District. This free workshop provided attendees with hands-on experience with the new version of Banner (Banner XE).

- September 13 – 15 – Hector Garcia is attending OnBase Community Live in Orlando, FL.

- September 13 – 16 – IT is hosting a SIG consultant to provide training and assessment for Financial Aid technical staff.

- Between March 1 and September 7, Evelyn Ojeda conducted 50 scheduled training classes and numerous ad-hoc one-on-one training sessions. Topics included AP/BP Revision and Retrieval using OnBase, Argos Report Viewer, Banner Navigation, Course Site, Lotus Notes, OmniUpdate, Smartsheet and OnBase Unity Client.

- Between April 1 and June 28, Kate Morales conducted 16 training workshops on TracDat 5 – Entering Outcomes and Assessment Results.

- Antonio Bangloy is coordinating a series of twice-weekly Java training classes for our programmers beginning February 7, 2017 and continuing for 12 weeks. These classes will be provided by a Mt. SAC instructor and prepare our team for the coming Banner XE upgrade.

Academic Technology & Infrastructure
9/13/2016
Dale Vickers

Computer Replacement
- Spring 2016 – We're down to double digits in terms of XP based computers on campus. Most of those are in the Bookstore or supporting instructional applications that don't run on more modern systems. We still have 600 Dell systems (at least 7yrs old). Many will be updated with instructional equipment dollars recently released to IT.
- Summer 2016 – Thanks to Irene's instructional equipment dollars we will be installing about 260 computers, which are now in the warehouse, this summer. Most will positively impact the Dell system counts.
- Fall 2016 – The Summer rollout is almost complete. We are down to only 320 Dell Systems on campus. Student Services is replacing some in the Regan Room and Instruction has allocated some additional instructional equipment money this year to continue the process.

Help Desk Software Replacement
- Spring 2016 – Evaluation approaching completion will soon be setting up demos of the finalists
- Summer 2016 – The original finalists were rejected so more evaluations and demos, a total of 15 so far, were performed. The discovery phase is continuing with a 60-day trial of the current finalist.
- Fall 2016 – The test implementation revealed several deficiencies in the chosen product. We are continuing to evaluate other options.

Wifi Improvements and Expansion
- Spring 2016 – See attached chart of installed exterior Access Points – interesting side note as this project proceeds our number of simultaneous connections on the firewall has markedly increased. About a year ago we were capped at 25,000 which caused major performance issues. Removing that cap took us almost immediately to 50,000 average with peaks to about 75,000. Completing the recent WiFi projects and making some firewall changes catapulted us to the point where our average is 75-80,000 and last week our peak was closer to 150,000.
- Summer 2016 – External WiFi projects on the south side of 9B (covering the student life courtyard), 9C (covering the grassy area North of Founder Hall), & 1B/C courtyard should be completed next week. Student input suggested better coverage near Kerrs Corner and the student fountain so those are the next areas we're looking at. We're also investigating coverage for the new park like area north of Food Services.
- Fall 2016 – Above projects all completed and operational – Now focusing on getting coverage for the following areas – The grassy area North of the library and East of the music building, the new park area East of 1a, by the planters West of 9a, and in the courtyard between the HVAC and Welding buildings. Also looking to enhance coverage around the Performing Arts Center.

Construction Project Support
- Summer 2016 – Participating on the Student Center planning committee.
- Fall 2016 – Reviewing the BCT plans. Looking at updating/revising the IT building standards to incorporate all the new AV equipment and Alertus.

Data Security & Infrastructure

9/13/2016
Chris Schroeder

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.

Spring 2016 – Testing usability of a 2FA system depends on completion of SSO (single sign-on) components implementation completion first.

Summer 2016 – SSO components being finalized before 2FA can start. Will look into Duo as provider. May need to look at possible need for keyfobs if there is opposition to using smart phone apps.

Fall 2016 - SSO components still being finalized before 2FA project can start. Testing Duo as 2FA provider for internal IT apps. Testing FIDO with Duo app and Yubikey FOBs for second authentication factor.

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

Spring 2016 – Completed VEEM configuration and licensing. Engaging in proof of concept with cloud storage and disaster recovery provider.

Summer 2016 – Seed disk to upload baseline backups with provider in process. Will start use of online backups by end of June 2016.

Fall 2016 – Cancelled agreement with NewCloud Networks. Running POC with Microsoft Azure backup client and testing 8tb of Veeam backup data with it. Cost estimates for 10tb of backup data are approximately $452.00 with Azure compared to $1,024.00 with NewCloud. Will need time to see actual consumption for better cost estimation going forward.

Upgrade Fiber Channel Switches

Spring 2016 – Engaging solution provider for POC (proof of concept) and product demo. Awaiting contract before POC start.

Summer 2016 – Still developing the bid spec for the POC. Working on verbiage for bid document with Purchasing. Target completion is end of August 2016.

Fall 2016 – Bid completed and hardware purchased. Awaiting shipment of hardware. Planning upgrade method and schedule.

Upgrade BGP Routers – Aging BGP routers need to be replaced before they reach end of life

Spring 2016 - Engaging solution provider for POC and product demo. Demo units preconfigured and delivered. Testing will start week of 3/14/16.

Summer 2016 – Test very successful. Product in production and purchased working units at end of March 2016.

Fall 2016 – Project Complete

Update Network Monitoring

Spring 2016 - Updated internal monitoring system (ongoing). Looking at cloud hosted monitoring to integrate into existing systems from off campus and on campus perspectives. Looking into other campus projects with messaging systems to use for out of band messaging of system outages for IT staff.

Summer 2016 – Solution and product identified for bid spec. Working on verbiage for bid document with Purchasing. Target completion is end of August 2016?

Fall 2016 - Implementation Complete. Configured off campus monitoring solution to alert on campus public websites and statuses. Licensed new internal network monitoring solution from Passler and migrated systems into it. Working with Facilities to research possible use of internal monitoring solution for other additional use cases.

Implement centralized logging and event correlation – After viewing demo of Elastic Search and Kibana from the ISAC group led by Jeff Holden from the CCC Tech Center, installation and testing will be done to use this solution as opposed to commercial vendors in this space.

Spring 2016 – Installing, testing, and configuring ELK instance on existing resources.

Summer 2016 – Implementing "Security Onion". Installing campus monitoring system in 4 key areas. Tested log correlation and will be moving toward production installation in early July 2016

Fall 2016 – Deployed 4 internal network sensors in buildings 23 and 9b. Solution needs more tuning, but is functional and providing data.

Implement CIS Top 20 Security Controls – After discussion with other community college IT teams, will start moving to the Center for Internet Security (CIS) Critical Security Controls (CSC).

Fall 2016 - Application of the top 20 CIS controls increases risk reduction to about 94% ("CIS Controls," n.d.). The campus has systems in place that address the top 5 or more controls from prior framework applications. Currently working on controls matrices to document present security posture. - CIS Controls. (n.d.). Retrieved September 12, 2016, from https://www.cisecurity.org/critical-controls.cfm

MT SAC CAMPUS
Exterior WiFi Implementations

Existing

Future