

Youngstown State University Information Technology Master Plan

June 2014 Update

Computer Services – R. Marsico

Project highlights include the following:

- Efforts remain focused on the Business Intelligence (BI) proof of concept deliverable as defined by executive management. The solution provided will facilitate the financial planning and budget development processes through the aggregation of various instructional costs. The product of this effort will be applied to a request recently submitted by the Dean of the Beeghly College of Education allowing for the identification and analysis of instructional costs at the departmental level. The BI team is in the process of delivering the requested solutions utilizing the recently acquired IBI Active Reports and Visual Discovery online analytical processing tools.
- Files are being migrated from a Microsoft Access database to Oracle tables facilitating the data needs of the Higher Education Information (HEI) system. The initial production run utilizing the Oracle environment is scheduled for the HEI Fall Term 2014 data submission cycle.
- IT staff contributed to the implementation of Web Leave Reporting which was successfully introduced to non-faculty semi-monthly pay employees this past April. In addition to addressing Banner system and database configuration requirements, a number of custom reports were developed in support of this initiative.
- The student application process was enhanced through the introduction of a hierarchical response structure to the browser-based interface. Via a sequence of questions and responses, the applicant is guided to the admissions application appropriate to their need. This has significantly reduced the complexity of what was previously an error prone process given the sheer number of options from which the applicant was required to choose.

ITS Operations – T. Cross

- Password Self-Service (PSS) implementation was delayed. Beginning mid-April, PSS will be delivered with a phased approach using ITS staff as its first candidate. The plan is to start the six (6) month rolling password expiration process for all directory accounts for mid-September.
- Brocade fabric was implemented in the Meshel Hall datacenter to provide a more stable and redundant network foundation. The process of moving datacenter servers to Brocade fabric is underway.

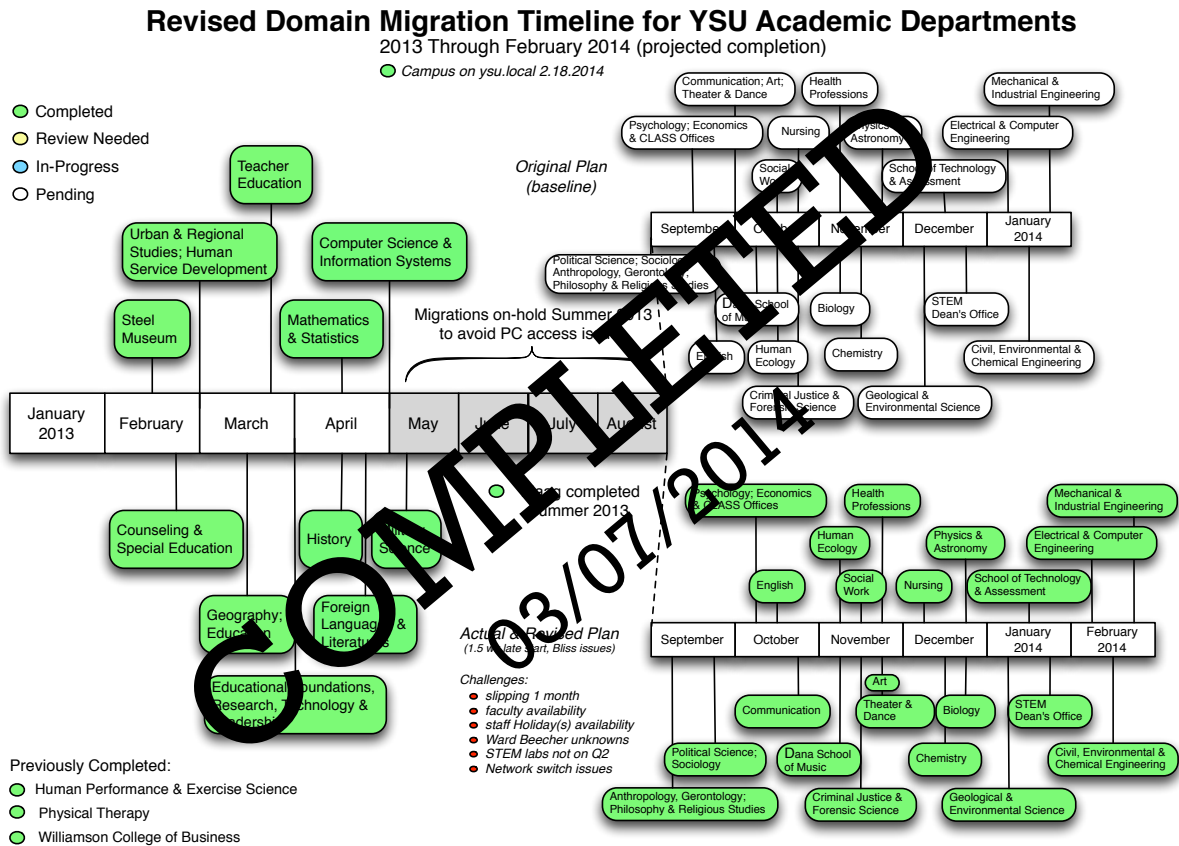
- VMware Consolidation Project is continuing now that Brocade fabric is in place. This initiative will provide a more robust virtualization environment for our server needs.
- Plans continue to be developed to reduce floor space requirements to accommodate our computer hardware which will reduce our future energy, cooling and fire suppression requirements.
- A quote was received from Grunau for the replacement of an obsolete (30 year old) Halon panel for our fire suppression system in the Meshel Hall datacenter.
- After determining that the Tod Hall basement lacked emergency power requirements for our backup datacenter needs, we have found space in Williamson Hall to house our backup server, automated tape library and networking hardware. This will separate the location of the backup media (Williamson Hall) from the location of the actual data (Meshel Hall).
- Testing cPanel, on-site web hosting software, to publish unofficial web pages authored by YSU students, faculty, and staff.
- Investigating and patching code exposed to Heartbleed vulnerability.
- Continue to work with the desktop support group on the Domain rollup and Q2 network upgrades which are both coming close to an end.
- Working with Facilities on data and voice networking needs for both the Veterans Center and DeBartolo Hall Renovations Phase II projects.
- Advertised, interviewed, and selected a candidate for the Associate Director of ITS Operations. An offer has been extended to the candidate.
- Printed and distributed 8,437 parking permits to Parking Services and 38,330 faculty evaluation scan sheets to Human Resources for spring term.
- A Computer Operator 2 working in ITOS was reassigned as a Network Technician 1 working at the Tech Desk from April 20th through August 9th replacing a Tech Desk staff member assigned to the XP Upgrade project.

Media & Academic Computing – M. Hrishenko

During the first quarter of calendar year 2014, units within Media & Academic Computing (M&AC) resolved over 6,000 service requests from students, faculty, and staff to assist with technology issues. Complimenting these efforts are the following achievements:

- Enterprise domain (four year) project completed 03/07/2014 (see diagram below). *Major achievements of this project include:*
 - *A standardized, consistently managed campus computer environment (Domain)*

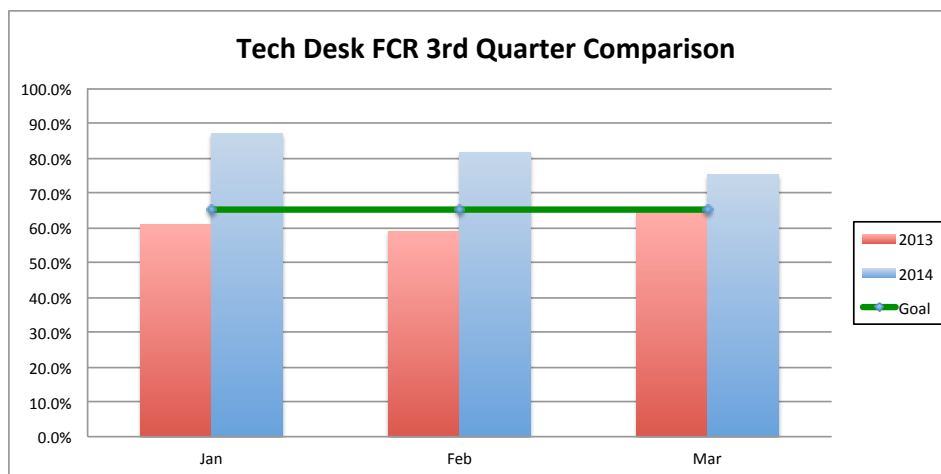
- On-site assessment, clean up and migration of over 4,000 campus computers
- Reconfiguration of all networked printers including print limits in computer labs
- Installation of Symantec Management Agent permitting automated maintenance
- Moving over 4,500 devices from the legacy to the upgraded YSU Q2 network
- Improved security through better, more responsive computer account permissions
- Consolidation and virtualization (better reliability, security and support) of servers
- Standardization and deployment of network storage to staff and departments
- Enhanced Active Directory services benefitting this and other projects (e.g., O365)
- Creation of an enterprise focused infrastructure team (ITIE)
- Project leadership experience for multiple M&AC staff members



- Windows XP migration project. Work began the first week of March to upgrade over 1,000 campus computers from the Windows XP operating system to Windows 7. For each XP computer, the work involved includes:
 - Assessing computer hardware to determine if minimum Windows 7 standards are met
 - Installation of the Windows 7 operating system on a separate computer
 - Installation of user specific applications
 - Migration of data (i.e., files, emails, etc.)
 - Quarantine of the replaced computer for two to three weeks to ensure no data loss
 - Redeploy or removal from service of displaced PC-based hardware

Upgrades are occurring in priority order by department. The priority determination is made based upon potential risks to an area through continued use of the outdated Windows XP operating system. As of April 22, 2014, the project is 20% complete.

- **Tech Desk First Contact Resolution.** *Last calendar year, Tech Desk staff began measuring and working to improve an industry standard performance measure known as First Contact Resolution (FCR). The associated goal for the Tech Desk was to resolve as many questions/concerns/problems as possible at the time of initial contact from the student, faculty, or staff member requesting assistance. As the chart below illustrates, within a year of beginning to track this performance measure, Tech Desk staff exceeded their goal of achieving 65%. FCR increased from 61% in the 3rd quarter of FY13 to 80% in the 3rd quarter of FY14. That this was achieved at the same time 3rd quarter requests for assistance increased from 2,484 to 3,027 (22%) is especially significant.*



- **eBulletin and Drupal.** *The Media & Academic Computing Media Design team is working with the Web Design team to create a completely online version of the YSU undergraduate catalog. To date, web page mockups for three colleges have been completed, sent out for proof, and returned for final edits. Pages for the STEM College are out for proof and web page design is in-progress for CLASS and the general information sections. Work on WCBA pages will begin the last week of April 2014. This initiative makes catalog information more accessible and will help to reduce print costs and paper consumption/waste. For this initiative, the Media Design team learned and developed web page content using Drupal. As an open source alternative to the paid content management system at YSU, Drupal use for this project is another step toward potential savings through open source software utilization.*
- **Moka5.** *Work continues on the Moka5 desktop virtualization solution. Recapped briefly, Moka5 deploys a standardized, secure, consistently maintained but customizable YSU desktop that runs in a virtual mode on another computer. No persistent network connection is required and major infrastructure costs are avoided. Currently the solution is available to individual users for an annual subscription cost. Beyond individual use, Moka5 can also be used in a kiosk or lab mode. The lab mode solution currently in test is anticipated to permit multiple operating systems to be preinstalled and user selected on a*

lab machine. All such machines are then managed and updated through a single console (i.e., when the console is updated, the updates are automatically received by all associated PCs).

- M&AC staff is participating in other projects including:
 - *Master Control Suite upgrades for Interactive Distance Learning*
 - *Enterprise anti-virus replacement*
 - *Assessments for additional multimedia classrooms*
 - *Password expiration and change initiative*
 - *Replacement solutions assessment for YSU portal groups*

Network Security – F. Betsa

- Remote removal of the McAfee Host Intrusion Prevention Service (HIPS) is completed leaving 44 machines on campus needing manual removal. The MS Windows firewall has been configured through domain policy as a replacement. The new Symantec anti-virus solution will be managed through the Altiris system by the Classroom Technology Services group and is scheduled for completion August 2014.
- The PCI compliancy certificate has been successfully renewed in conjunction with the Director of Student Accounts and University Receivables.
- The necessary updates were successfully installed to our Palo Alto malware prevention appliance in response to the “Heartbleed” SSL vulnerability.
- Fifteen instances of sophisticated “phishing” attempts against University email accounts have been successfully remediated. “Phishing” is an attempt to gain user credentials through malicious means so that accounts can be used without authorization.

Open Source Systems & Web Programming – K. Schindler

Project highlights include the following:

- eBulletin – The updates for the FY15 ebulletin are progressing slightly ahead of schedule. Next year will be the first year a hard copy bulletin will not be published.
- Drupal Website Conversion – IT staff are qualifying consultants to aid in the layout and underlying technical design of the new website. Conversion and training time lines are still being defined.
- Quali Modules – IT staff are working with a consultant to install the FAR and eDossier modules of the Quali system. These modules were developed at Indiana University to reduce faculty paperwork associated with the Faculty Annual Reporting (FAR) and the Tenure and Promotion (eDossier) processes that are paper intensive processes. We will be piloting these systems in three departments in FY15.

- Sakai – An evaluation committee has recommended that YSU pilot the Sakai Learning Management System in SP-15 or SU-15. If the pilot is successful, YSU will transition to Sakai and stop using Blackboard on July 1, 2017.