Information Technology Services

Strategic Priorities

FACULTY DRIVEN INNOVATION & RESEARCH

BUSINESS INTELLIGENCE & ANALYTICS

STUDENT SUCCESS

BEST of CLASS SUPPORT
Executive Summary

Introduction

2013-14 was the start of a transformational year for the Information Technology Services (ITS) Division at California State University, San Bernardino (CSUSB). Based on recommendations from a comprehensive evaluation of the Information Technology Division, commissioned by President Morales in 2012, a new Vice President for Information Technology Services & CIO was brought on board in August 2013. Under the guidance of the President and the executive leadership of the University, the new Vice President began moving ITS to a customer-focused, data-driven, and innovative organizational unit.

Progress

In November of 2013, the name of the Information Technology Division was changed to Information Technology Services, repositioning the IT Division (formerly IRT Division) to provide best of class technology support services to our students, faculty and staff, to support faculty-driven innovation and research, and to improve operational efficiency through business intelligence and analytics.

Initiatives

- Defining Strategic Priorities for Information Technology Services
- Formation of the Information Technology (IT) Governance Committee and Subcommittees
- Formation of the Institutional Data Team
- Establishment of the One-Stop Technology Support Center
- Construction of the Faculty Sandbox
- Formulation of a Three-Year Information Technology Services Roadmap
- Blackboard Upgrade
- Consolidation of Library and Student Services IT Departments into the Central Information Technology Services Division
- Migration of the Office of Distributed Learning into the Academic Technologies and Innovations Department within ITS
- Successfully administered the Vital Technology Initiative (VTI) grant process and distributed $564,000 for Student Success Initiative (SSI) projects.
- Completed recommendation for technology services at the Palm Desert Campus (PDC)
- Cell phone managed plan recommendation
- Successfully brought on board:
  - AVP for Technology Operations and Customer Support
  - Director of Project Management and Assessment
• Director of Academic Technologies and Innovation

• Launched the following projects:
  o New content management system - Drupal
  o Website redesign and migration to the Cloud
  o Lynda.com Professional Development for Faculty and Staff
  o Identity Management System
  o Campus EAI Portal
  o Comprehensive Campus Network Upgrade (Wired and Wireless) – CNI
  o Office 365 Migration
  o Blackboard Migration to the Cloud
  o EAB Student Success Collaborative
  o Enterprise Data Warehouse
  o NBC Learn Higher Ed
  o Faculty/Staff Work at Home licenses for Microsoft, TechSmith and Mathematica Software products
  o Telecommunications Systems Upgrade
  o Implemented the Microsoft Student Advantage program

Going Forward

As we move into the next academic year, the ITS Team is poised to take support to the next level and bring transformational services to the Campus community under the “Technology as a Utility” model. Under this new model, ITS will proactively bring innovative services to the Campus community in support of the academic mission and student success.

Technology as a Utility (TAAU)

• ITS Staff serve as consultants to foster, identify and support technologies that enhance the teaching/learning process and improvement of operational efficiency throughout the University
• Provide Predictive Analytic Data to the University community to enhance business intelligence-driven decision making
• Foster and support the use of Bring Your Own Technologies (BYOT)
• Strategically move systems to the Cloud, thereby reducing the Data Center footprint and achieving more efficiency in processes and support
• Take advantage of Chancellor’s Office resources to reduce the time and funds required to identify and implement services for the Campus community
• Use Analytics to define, measure, analyze, improve and control processes that support the academic mission of the University
Information Technology Services Divisional Mission and Vision

The goal of Information Technology Services is to provide best of class technology support services to our students, faculty and staff, to foster and support faculty driven innovation and research, and to improve operational efficiency through business intelligence and analytics.

The ITS Division is guided by the following principles:

- Be responsive to the changing information technology needs of a highly diverse student, faculty, and staff community.
- Offer support and leadership through collaborative efforts with faculty, students, and staff.
- In a participative manner, perpetuate information technology integration as a part of the academic and administrative fabric covering all programs.
- Aggressively respond to the tactical objectives set forth by the campus strategic plan.
- Advance CSUSB as one of the foremost teaching/learning environments in higher education by applying, as appropriate, technology solutions.

Strategic Priorities

Supporting the Academic Mission of CSUSB

1. World Class Customer Support (Students, Faculty and Staff)
2. Centralization and Standardization
3. End User Empowerment
4. Innovation
5. Operational Sustainability and Excellence
6. Information Security & Privacy
7. Accessibility
The Information Technology Services Division is organized into eight departments, strategically staffed to provide best of class customer support and services to the University community. The departments are organized as follows:

<table>
<thead>
<tr>
<th>Old Name</th>
<th>New Name</th>
<th>Administrator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Center and Help Desk Services (DCHS)</td>
<td>Technology Operations &amp; Customer Support</td>
<td>Mr. Gerard Au, Associate Vice President</td>
</tr>
<tr>
<td></td>
<td>- Technology Support Center (TSC)</td>
<td><a href="mailto:gau@csusb.edu">gau@csusb.edu</a></td>
</tr>
<tr>
<td></td>
<td>- Data Center (DC)</td>
<td>909-537-5987</td>
</tr>
<tr>
<td></td>
<td>- Telecommunications and Network Services (TNS)</td>
<td>Mr. Jim O’Linger, Director,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Enterprise Applications &amp; Customer Support</td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="mailto:jolinger@csusb.edu">jolinger@csusb.edu</a></td>
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<tr>
<td></td>
<td></td>
<td>909-537-5470</td>
</tr>
<tr>
<td>Office of Distributed Learning (ODL)</td>
<td>Academic Technologies &amp; Innovation (ATI)</td>
<td>Dr. Michael Chen, Director</td>
</tr>
<tr>
<td></td>
<td>Instructional Design, Classroom and Student Engagement Technologies,</td>
<td><a href="mailto:daxingchen@csusb.edu">daxingchen@csusb.edu</a></td>
</tr>
<tr>
<td></td>
<td>Faculty Training and Support, Faculty Sandbox, Research Networks,</td>
<td>909-537-5069</td>
</tr>
<tr>
<td></td>
<td>High Performance Computing, Assistive Computing Resource Center (ACRC),</td>
<td></td>
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<tr>
<td></td>
<td>and Special Events</td>
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<td></td>
<td></td>
<td>Mr. Steve Waldman,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assistant Director</td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="mailto:swaldman@csusb.edu">swaldman@csusb.edu</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>909-537-7168</td>
</tr>
<tr>
<td>Administrative Computing Services(ACS)/Common</td>
<td>Administrative Computing and Business Intelligence (ACBI)</td>
<td>Mrs. Lenora Rodgers, Director</td>
</tr>
<tr>
<td>Management Systems (CMS)</td>
<td>PeopleSoft and Administrative Software Systems</td>
<td><a href="mailto:lenora@csusb.edu">lenora@csusb.edu</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>909-537-7264</td>
</tr>
<tr>
<td>Department</td>
<td>Services Provided</td>
<td>Contact Information</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------</td>
</tr>
<tr>
<td>Academic Computing and Media (ACM)</td>
<td>Creative Media Services (CMS) – Photography, Graphic Design, Videography, Web Development, Coyote Radio, &amp; Coyote Advertising</td>
<td>Mr. Steve Waldman, Interim Director&lt;br&gt;<a href="mailto:swaldman@csusb.edu">swaldman@csusb.edu</a>&lt;br&gt;909-537-7168</td>
</tr>
<tr>
<td>Information Security Office (ISO)</td>
<td>Information Security &amp; Emerging Technologies (ISET) – Emerging Technologies Research and Implementation, Compliance and Accessibility</td>
<td>Dr. Javier Torner, Director&lt;br&gt;<a href="mailto:jtorner@csusb.edu">jtorner@csusb.edu</a>&lt;br&gt;909-537-7720</td>
</tr>
<tr>
<td>Project Management and Assessment Office (New)</td>
<td>Project Management and Assessment of all Institutional IT Projects</td>
<td>Mr. Felix Zuniga, Director&lt;br&gt;<a href="mailto:fzuniga@csusb.edu">fzuniga@csusb.edu</a>&lt;br&gt;909-537-3234</td>
</tr>
</tbody>
</table>
**Vital Technology Initiative**

The Vital Technology Initiative (VTI) provides Student Success Initiative (SSI) funds to Campus departments and Colleges to purchase and implement technology products and services that positively impact student success. Allocation of funds is determined through a competitive grant process which is open to all Campus units and Associated Students Incorporated (ASI) recognized student organizations. The VTI committee, comprised of six students and five employees review the grant proposals and deliberate funding. For the Fiscal Year 2015, the process was streamlined to include reporting and assessment metrics that measure and report the effectiveness of the funded projects in contributing to student success.

The Vital Technology Initiative (VTI) grant proposals for FY 2015, were due on March 21st. We received a total of 31 grant proposals totaling $1.4 Million. Funds allocated for FY 2015 was $564,000. The VTI Committee reviewed these proposals and deliberated on funding recommendations. Following are the projects that were funded by the committee:

<table>
<thead>
<tr>
<th>VITAL TECHNOLOGY INITIATIVE FUNDED GRANTS 2014-2015</th>
<th>AMOUNT</th>
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<tbody>
<tr>
<td>Advanced Advising for Student Success</td>
<td>$ 7,927.00</td>
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<td>Expansion of Library Laptop Lending</td>
<td>$ 66,250.00</td>
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<tr>
<td>Enhancing Access and Promoting Success of students with disabilities</td>
<td>$ 80,162.00</td>
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<tr>
<td>PDC Health Science Computer Lab</td>
<td>$ 32,329.00</td>
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<tr>
<td>Coyotes Helping Others</td>
<td>$ 35,555.00</td>
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<tr>
<td>Graduate Student Formatting</td>
<td>$ 6,060.00</td>
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<tr>
<td>S4 Database</td>
<td>$ 2,070.00</td>
</tr>
<tr>
<td>JB Open Lab Computer Refresh</td>
<td>$ 66,702.00</td>
</tr>
<tr>
<td>Learning Center Computer Lap Upgrade</td>
<td>$ 10,208.00</td>
</tr>
<tr>
<td>Enhancing International Competency</td>
<td>$ 69,462.00</td>
</tr>
<tr>
<td>Software Development of Mobile Applications</td>
<td>$ 82,500.00 Fund $42,500</td>
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<tr>
<td>Operation Let's Get Smart</td>
<td>$ 15,678.00</td>
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<tr>
<td>Distance Learning Career Development</td>
<td>$ 60,454.00</td>
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<tr>
<td>3D Morphology</td>
<td>$ 73,902.00 Fund $66084</td>
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<tr>
<td>Clinical &amp; Assistive Technology</td>
<td>$ 37,559.00</td>
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</table>

**Deadline Dates:**

1. Purchase all hardware and software by December 01, 2014
2. Submit a progress report that includes appropriate assessment metrics by Feb 01, 2015
3. Submit a full report of progress and assessment by April 01, 2016

For more information on the Vital Technology Initiative, please visit:

[http://its.csusb.edu/vitalTechnology.html](http://its.csusb.edu/vitalTechnology.html)
Academic Technologies & Innovation

ATI’s Mission

Academic Technologies and Innovation, a division of ITS, is focused on fostering and supporting faculty led innovation, student engagement technologies and growth in hybrid, online learning courses, classroom and assistive technologies. The ATI Department works closely with the Division of Academic Affairs, the Teaching Resource Center (TRC) and the College Deans and Department Chairs in identifying and setting priorities and standards on academic technology initiatives. The ATI department consists of instructional designers, technologists and classroom/student technology technicians who support online instruction and classroom technologies, distance learning systems and assistive technology for individuals with disabilities. The ATI department also provides technical support for special events held on campus. The department also works with the Academic Technologies and Innovation subcommittee of the IT Governance Executive Committee in prioritizing and pursuing various academic technology initiatives.

Online Design Support

The Academic Technologies and Innovation design team provide support in varied ways related to on-campus and distance learning courses/programs. This support included strategies for best practices in online and distance learning, professional learning communities, designing and using online assessments, redesigning course delivery to increase student engagement and participation, as well as support for accessibility and copyright, among others.

Online Design highlights and accomplishments during the academic year 2013-2014:

- For the AY 2013/14, ATI designers provided support for 5 programs, more than 300 faculty members (out of which 135 were non-duplicated faculty members), as well as more than 110 courses. Program support includes: MATL, MBA, CJUS, and TESOL online programs, as well as on-campus support of Social Work and the Nursing program being offered at the Palm Desert Campus.
- The ATI design team had the privilege to attend and present at several high profile conferences during this past year. Among these, designers presented and attended the American Educational Research Association (AERA) conference, the SLOAN-C conference, both BBWorld 2013 and BBWorld 2014 conferences, TEDex at CSUSB, the Western Cooperative for Educational Technologies (WCET), and the CSU-Blackboard Day at San Diego State University.
- The ATI design team provided support in different functional areas of our campus, including participation on the Accessible Technology Initiative, Instructional Materials initiative, the upgrade of our Blackboard LMS, and the newly instituted Faculty e-learning center. Furthermore, designers supported many on-campus programs such as Student Assistance In Learning (SAIL), the Child Care Access Means Parents In School
The ATI design team participated in the Integrated Postsecondary Education Data System (IPEDS) report, provided data on distance learning programs to the Western Association of Schools and Colleges (WASC), and played an important role in completing the American Association of Colleges for Teacher Education (AACTE) report.

- The 9th **Outstanding Originators in Distance Learning** award ceremony where five outstanding faculty members, one from each college, were honored for their innovation in instruction in distance learning.
- The ATI design team collaborated in the development and delivery of 16 hands-on workshops, attended 13 other workshops, and provided additional class presentations as per faculty request.

**Upcoming Initiatives for Online Design**

- The ATI design team will provide support in the Blackboard Learning Management System (LMS) managed hosting through Blackboard. The hosted environment will ensure that Blackboard runs optimally, is at the current version and is always available for the Campus Community.
- Proposal to increase the ATI design team with two additional instructional designers.

**Classroom Technology Support**

- The Media Services team of Academic Technologies and Innovation is responsible for over 210 enhanced technologies (SMART) classrooms on in the maintenance, upgrade and training of the equipment.

**Classroom support highlights and accomplishments during the academic year 2013-2014:**

- For the AY 2013/14, the Student Success Vital Technology Initiative provided additional funding to support the SMART Classroom Refresh project. During the academic year, the team was able to upgrade University Hall classrooms (24) with new computers, AV Control systems and new 16:10 aspect ratio screens to support high definition viewing.

- In collaboration with the Teaching Resource Center (TRC), the team provided technical consultation for the TRC “Sandbox”, an area in the TRC center where faculty can innovate with various technology tools. When the TRC “Sandbox” opens in Fall 2014, the center will have multimedia facilities for faculty to collaborate on the use of new technology.

- The request for Bring Your Own Device (BYOD) support this year has increased. Faculty submitted work orders requesting to use their Apple iPads in the classrooms. Four rooms received Apple TV devices, connecting iPads wirelessly to the classroom projection system.
The College of Arts and Letters Dean’s conference room was designed and installed by the group. A new multimedia presentation system was installed, including Apple TV and other wireless devices. The goal was to minimize cabling in the room.

Provided technical support for Teaching Resource Center student response system pilot program. Two different student response systems were tested by faculty: The Media Services team familiarized themselves with the different software to support faculty with issues in the classroom.

Upcoming Initiatives for Classroom Technology Support

- Twenty-four HD projection systems will be installed in University Hall classrooms during the summer of 2014.
- Re-evaluate the process of funding classroom technology. Propose baseline funding for SMART Classroom Refresh program.

Distance Learning

- In addition to hybrid and online course offerings, Academic Technologies and Innovation has three rooms designed for real-time interactive video conferencing to support course broadcast between CSUSB main campus and Palm Desert campus.

Distance Learning highlights and accomplishments during the academic year 2013-2014:

- In Spring 2014, two new video conferencing systems were installed in the College of Education, bringing video conferencing to the colleges.

- At the Palm Desert Campus, the ATI team re-configured and upgraded the videoconference system in the Rogers Gateway building during spring break. The re-configuration of the room was the result of working with faculty in determining the best way to seamlessly integrate the technology into the classroom.

- For academic year 2013/14, there were 29 video conferencing courses:

Distance Learning Interactive Courses

- **Summer 2013**
  - 5 Classes: 1 COMM, 1 ACCT, 2 PSYC, 1 FIN

- **Fall 2013**
  - 8 Classes: 1 ECTS, 2 CJUS, 3 COMM, 1 IST, 1 PSYC

- **Winter 2014**
- **Spring 2014**
  - 7 Classes: 1 COMM, 2 ACCT, 1 SCM, 1 FIN, 1 MATH,
  - 1 Teaching Performance Assessment
  - Video Conferences/Webcasts: 18
  - 6 Video Conferences within CSU System
  - 12 Web Conferences

*Upcoming Initiatives in Distance Learning*

- For Summer 2014, the ATI team and PDC IT team will upgrade two distance learning classrooms in the Rogers Gateway building at the Palm Desert campus.
- The Media Services team is also in the design stage of a distance learning classroom in the Social and Behavioral Sciences building. The room will be available for distance learning courses for Fall 2014.
- The CSU Chancellor’s Office is conducting a Request for Proposal (RFP) to identify a new videoconferencing service for use by CSU campuses. The ATI team is involved in this RFP process. A new videoconferencing service will be available for academic 2014-15.

**Assistive Computing Resource Center (ACRC)**

The Assistive Computing Resource Center (ACRC), part of the Academic Technologies and Innovation group, provides assistive technologies to individuals with various disabilities to help obtain equal access to information. ACRC continues to collaborate and strengthen assistive technology services to the campus as well as our local community through innovative programs with State and Federal agencies.

*ACRC Highlights and accomplishments during the academic year 2013-2014:*

**Campus Operations**

- A pilot program to loan accessible iPad Air’s and SmartPens to ACRC students was developed this year. The program will enable students to record audio during lectures, convert handwritten notes to text instantly, and allow access to a variety of accessible apps in the classroom. Palm Desert Campus has three accessible workstations maintained by ACRC, these will be replaced with brand new fully mobile, electrically adjustable carts so that resources can be easily relocated among buildings.

- Annual Assistive Technology Showcase @ Disability Sports Festival
• A partnership with the annual CSUSB DisAbility Sports Festival, the AT Showcase is held in the Coussoulis Arena foyer to demonstrate essential assistive technologies to participants and their families. This was the second year in which the AT Showcase was part of the festival. Although the event was re-scheduled due to severe high winds it was still a success and attracted over a thousand participants.

Department of Veterans Affairs

• Our partnership continues with three regional Veteran's Affairs V.I.S.T. programs (Visual Impairment Services Team): Loma Linda, West Los Angeles, and Long Beach VA Medical Centers.
• Services include assistive technology assessment and training to visually impaired veterans who rely on assistive technology to enrich their lives.
• Client referrals from the V.I.S.T. program have been impacted due to two of the regional V.I.S.T coordinators leaving their positions. Loma Linda is still waiting to fill the position at the time of writing this report, however referrals are trending upwards.

California Department of Rehabilitation

• Services to clients of DOR focus on the use of adaptive equipment to increase employability.
• ACRC works with a wide range of individuals, who, through the use of assistive technology, can overcome both cognitive and physical disabilities to level the playing field in the pursuit of employment.
• ACRC is a certified Community Service Provider (CRP) by the state Department of Rehabilitation.

Upcoming Initiatives for ACRC

• Pilot iPad program will launch in Fall 2014. Ten iPads will be available to collected metrics to evaluate program's impact.
• Three new accessible workstations will be operational for Fall 2014 at PDC.

Special Events

• The Media Services group supported many special events for 2013-14 ranging from small workshop meetings to large venues requiring a large sound system and presentation projection. The group worked in collaboration with the Creative Media Services group on many of these events to support web streaming and video production.
Special Event highlights and accomplishments during the academic year 2013-2014:

- President’s Academic Excellence Scholars Banquet annual event hosted 700 attendees both students and parents this year. Live projection for family to see their son/daughter receive an award.
- June and December Commencements: Dual projection screens for viewing of the ceremonies and the setup of classrooms to support overflow capacity.
- Black and Latino Graduation ceremonies were held in the Coussoulis Arena. Sound and video projection was supported for the various activities.
- Latino Education and Advocacy Days (LEAD) Summit was held this year in the Santos Manuel Student Union Event Center. The team provided audio and video technical support. The event was web streamed to audiences around the world.
- Community support was provided to the San Bernardino School District. Their State of Union Address was held in the Coussoulis Arena. Sound, projection and web streaming was provided for this event.
- Other smaller events include ASI and Library movie nights, or the Intensive Language Program banquet on the Pfau Library lawn. Various events held in the Upper Commons to include CSUSB Retiree Luncheon, Fraternity/Sorority banquets and other administrative functions.
Technology Operations & Customer Support
Technology Operations & Customer Support

Introduction

The department of technology operations and customer support was formed in the 2013-14 academic year by realigning several units within IT Services. The Associate Vice President for Technology Operations and Customer Support was brought on board in February 2014, overseeing Technology Support Center and Enterprise Applications, Telecommunications and Network Services, and the Data Center. Several IT units also merged with the ITS team including Library IT, and Student Health Center IT as part of the campus IT centralization effort. The department of technology operations and customer support strives to provide world-class customer service to our users, maintain reliable infrastructure and enterprise systems that serve the entire campus community.

Technology Support Center and Enterprise Applications

The Technology Support Center (TSC) was relocated to the current location in October 2013, signaling the new era of world-class customer support to CSUSB. After extensive renovation, the TSC opened its doors to the campus in February 2014. Under the leadership of the Director of Enterprise Application and Technology Support, the TSC provides desktop support for administrative divisions at CSUSB and the enterprise application team maintains the campus’ enterprise application platforms including: Blackboard, Exchange e-mail, Enterprise Active Directory, and Mailman listserv. In May 2014, the Coyote OneCard operation was moved to the Technology Support Center, to align with the Technology Support Center’s mission of a one-stop shop for all technology needs. In June 2014, the campus phone operator function also moved under the Technology Support Center.

Significant accomplishments for the Technology Support Center and Enterprise Application team include: successful migration of the legacy Sun e-mail to Microsoft Exchange; migration of legacy Sun mailing list to Mailman; decommission of Sun e-mail server and Meeting Maker server; conversion from HEAT to Kayako ticketing system; and cloud migration projects such as the Blackboard cloud migration and Office 365 migration.

Kayako ticketing system

In January 2014, IT Services launched a new ticketing system, Kayako, to replace the outdated HEAT ticketing system. The new system provides users with enhanced features such as online ticket submission, knowledge base, news articles, online chat support, and it allows ITS to transfer tickets between departments seamlessly. With the new system in place, the division saw a significant year-over-year increase (average 32%) of service requests submitted online.

<table>
<thead>
<tr>
<th>Phone Support</th>
<th>Online</th>
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</thead>
<tbody>
<tr>
<td>2012-2013</td>
<td>2013-2014</td>
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</tbody>
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14
Email and listserv migration

Between December 2013 and March 2014, IT Services transitioned all email accounts from the legacy Sun platform onto Microsoft Exchange. Mailing lists were transitioned in April 2014 from Sun to Mailman. A total of 2,626 e-mail accounts and 953 mailing lists were transitioned. The new Exchange e-mail platform offers many new features such as enterprise calendaring. It replaced two legacy systems – Sun email and the Meeting Maker. In March 2014, ITS also implemented mailbox quotas, aligning with Office 365 quotas and preparing the campus towards the Office 365 cloud migration. The Enterprise Application team worked in conjunction with the Information Security Office to enhance spam controls to campus. The following chart displays the amount of spam mail that the campus processes and block on a monthly basis:
Blackboard

In December 2013, Blackboard Learn, the CSUSB learning management system, was upgraded from service pack 9 to service pack 13 in order to provide substantial improvements to the stability of the campus’ learning management platform. The usage of blackboard has risen consistently over the last several years. In the past academic year, the campus saw an average of about 12% increase in the number of courses on Blackboard. Thirty-one new building blocks were added to the Blackboard in the 2013-14 academic year.

Building blocks added this year

<table>
<thead>
<tr>
<th>Achievements</th>
<th>Content Editor</th>
<th>Partner Cloud</th>
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<tbody>
<tr>
<td>Alerts</td>
<td>Content Model</td>
<td>Pearson’s MyLab and Mastering</td>
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<tr>
<td>Assessments</td>
<td>Date Management</td>
<td>Poll Everywhere</td>
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<td>Assignment</td>
<td>I&gt;clicker</td>
<td>QA Fit Fixtures</td>
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<td>Blogs and Journals</td>
<td>Impersonate</td>
<td>Self and Peer Assessment</td>
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<td>CafeScribe Integration</td>
<td>Inline Grading</td>
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<td>SoftChalk Publish</td>
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<td>Cengage Learning Mindlinks Building Block</td>
<td>Item Analysis</td>
<td>Software Updates</td>
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<td>Cloud Profiles</td>
<td>McGraw-Hill Connect and Create</td>
<td>Wikis</td>
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<td>NBC Content Integration</td>
<td>WileyPLUS Integration</td>
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Blackboard Statistics

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<td>Spring</td>
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<tr>
<td>Summer</td>
<td>218</td>
<td>In Progress</td>
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Telecommunication and Network Services

There has been significant increase in demands for voice and network services year over year due to the growth of the campus. IT Services saw significant growth in the amount of wireless devices connected on campus, as well as and increase of network bandwidth in order to
support the mission of the University. The telecommunications and network services group is committed to providing reliable network access to the campus.

The single largest project for the network services group is the complete upgrade of the campus network. As part of the system wide Common Network Infrastructure (CNI) upgrade, over 300 network equipment will be replaced at the San Bernardino and the Palm Desert Campus and over 12,000 network ports will be upgraded to the gigabit Ethernet standard. The campuses’ wireless network infrastructure will also be upgraded beginning Summer 2014 and over the next academic year.

Other significant accomplishment for Telecommunication and Network Services includes: complete replacement of wired and wireless network for the Office of Housing and Residential Life buildings; upgrade of the Telesoft call accounting system; installation and upgrade of campus code-blue phones; installation of indoor and outdoor IP security cameras; standardization on cellular phone administration.

**Network traffic**

Over the past academic year, CSUSB saw an approximate increase of 20% in network traffic. The campus is reaching a saturation point for our 1GB CENIC network circuit to the internet. Plans have been put in place to upgrade the campus internet connection to a 10GB circuit by Summer 2014. The following figure shows the network bandwidth utilization for the campus on a monthly basis from March 2013 through June 2014.
As with other higher education institutions and the trends in information technology, CSUSB saw a drastic year-over-year increase in wireless devices connection to the campus wireless infrastructure. Number of unique devices grew by 55% and the number of concurrent devices connected to our network grew by 181%. With the significant increase in the amount of traffic and with aging wireless infrastructure, plans are put in place to completely upgrade the campus wireless infrastructure as part of the system wide Common Network Initiative (CNI) project.

<table>
<thead>
<tr>
<th></th>
<th>Spring 2013</th>
<th>Spring 2014</th>
<th>% Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unique Devices</td>
<td>39,207</td>
<td>61,050</td>
<td>55.71%</td>
</tr>
<tr>
<td>Concurrent Devices</td>
<td>4,406</td>
<td>8,018</td>
<td>81.97%</td>
</tr>
</tbody>
</table>

Phone and voice services

While the total number of campus phone lines have decreased slightly (-2.85%) from 2013-14, the total campus call volume as well as TNS work orders increased year-to-year by 22.77% and 23.92% respectively. The current VoIP platform for campus is three versions behind, and many newer features such as visual voicemail, unified communication, are not available with our current version. Plans have been put in place to replace our VoIP calling platform in the 2014-15 academic year.

<table>
<thead>
<tr>
<th></th>
<th>2012-13*</th>
<th>2013-14**</th>
<th>% Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campus Call Volume</td>
<td>590,103</td>
<td>724,476</td>
<td>22.77%</td>
</tr>
<tr>
<td>Campus Phone Lines</td>
<td>3,683</td>
<td>3,578</td>
<td>-2.85%</td>
</tr>
<tr>
<td>Work Orders</td>
<td>1,392</td>
<td>1,725</td>
<td>23.92%</td>
</tr>
</tbody>
</table>

*June 2012 – May 2013
**June 2013 – May 2014

Data Center

With the separation of helpdesk service from the data center, the unit is realigning with the ITS mission of Technology As A Utility (TAAU). Data Center merged with several IT groups across campus, with the goal of providing excellent support and to provide redundancy to the campus systems infrastructure and several critical campus systems. Two staff members, one from Library IT, one from Student Health Center joined the Data Center team in October 2013 and January 2014 respectively.

Significant accomplishment for the Data Center includes: Student Health Center server migration; upgrade of the 20-year-old NCS exam grading program; virtualization of physical servers (13 from Library, 1 from SSD); establish a new Level 1 cluster to contain level 1 data; significantly improved SOTE operation process.
SOTE

In response to the Division of Academic Personnel’s policy, all courses were SOTE’d beginning Fall 2013. This translates to a significant increase in the processing of SOTE. IT Services saw an average increase of 250% in the number of SOTE processed quarterly. New hardware, and an improved process have been put in place to meet the campus’ needs.

<table>
<thead>
<tr>
<th></th>
<th>Paper 2012-13</th>
<th>Paper 2013-14</th>
<th>% Increase</th>
<th>Online 2012-13</th>
<th>Online 2013-14</th>
<th>% Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>43,520</td>
<td>71,389</td>
<td>64.04%</td>
<td>1,195</td>
<td>3,068</td>
<td>256.74%</td>
</tr>
<tr>
<td>Winter</td>
<td>39,164</td>
<td>64,487</td>
<td>64.46%</td>
<td>1,850</td>
<td>3,472</td>
<td>187.67%</td>
</tr>
<tr>
<td>Spring</td>
<td>36,411</td>
<td>61,163</td>
<td>67.98%</td>
<td>1,054</td>
<td>3,137</td>
<td>297.62%</td>
</tr>
</tbody>
</table>

Infrastructure upgrade

Since the inception of the Data Center’s virtual environment infrastructure, there has been a consistent increase in the demand. Utilization of memory grew by approximately 40%, storage utilization grew by approximately 80%, and CPU usage also grew by approximately 80%. With the increased demand in the data center, ITS upgraded the IBM Storage Area Network (SAN) in May 2014 from 88 TB to 166 TB (200% increase), paving way for many large scale projects for Academic Year 2014-15 such as the Hyland OnBase document imaging and workflow project.
Environment upgrade

The data center also underwent several upgrades to our environment monitoring system. With the separation of the helpdesk, the data center is no longer staffed 24/7. The data center team implemented new systems to monitor the physical health of the data center (temperature, humidity, water detection) which notify technicians automatically. Additional improvements to systems monitoring will be implemented in the next academic year.

The uninterrupted power supply (UPS) system in the data center is approximately 20 years old and has passed its end of life. Many new features such as remote monitoring and notification are not available with the current hardware, which pose a significant risk to the campus. The UPS will be replaced over Summer 2014, and a reconfiguration of the power infrastructure will
also be put in place. This is the largest data center physical infrastructure change in 20 years. This will provide reliable power back up to the entire campus’ core IT infrastructure such as network, systems, and virtual environment. This will also provide the capacity for campus to centralize many other data centers throughout campus.

**NCS exam scoring system upgrade**

CSUSB has been using the NCS exam scoring system for the past 20 years. The system has been reliable, however, it is becoming incompatible with many of the new operating systems, student information systems, and the scanner hardware is more prone to failure. New scanning software was programmed and the scanner was replaced by a newer model. The data center transitioned to the new hardware and software at the end of Spring 2014 and the transition was completely seamless to faculty. The new program added many new features including the automated error generation, e-mailing of grades, etc, and have decreased the processing time for test scanning by approximately 40%.

<table>
<thead>
<tr>
<th></th>
<th>2012-2013</th>
<th>2013-2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>N/A</td>
<td>364</td>
</tr>
<tr>
<td>Winter</td>
<td>100*</td>
<td>379</td>
</tr>
<tr>
<td>Spring</td>
<td>323</td>
<td>350</td>
</tr>
<tr>
<td>Summer</td>
<td>109</td>
<td>In progress</td>
</tr>
</tbody>
</table>

*Finals only

**Going Forward**

2014-15 will be another exciting year for the department of technology operations and customer support. We will continue to provide world-class customer server, with the target of beyond-world-class services to the campus. Aside from that, we will work towards bringing additional and emerging technologies to CSUSB to ensure student success, operation efficiency, and to provide system stability.

**Network and wireless enhancement**

The San Bernardino and the Palm Desert Campus will complete the network infrastructure by Fall 2014, along with the upgrade to redundant 10GB internet connection for the San Bernardino campus. The new network infrastructure will pave the way and provide the bandwidth needed for the many cloud migration project taking place. In additional, the following improvements will be made:

- By Fall 2014, a new redundant 1GB internet connection will be installed for the Palm Desert Campus to provide much needed back up for the PDC.
- A new redundant microwave network infrastructure will be put in place by Fall 2014 to provide University Village significant increase of bandwidth to students.
• Both campuses’ wireless infrastructure will be upgraded throughout the 2014-15 academic year, with approximate 35% to be completed by Fall 2014 and the remaining to be completed by Fall 2015.

Enterprise systems upgrade

By Fall 2014, several key enterprise systems, including Blackboard and Exchange, will be migrating to the cloud in order to provide more reliable services to our users. IT Services will also bring additional value-added features offered through the Microsoft O365 migration, including OneDrive Pro cloud storage, Lync video conferencing and unified messaging system, Sharepoint Online, to name a few.

• System Center Configuration Manager (SCCM) will be implemented beginning Fall 2014 to allow campus to better manage system and software updates, application rollout, and to provide inventory management.
• Hyland OnBase Document Management and Workflow project will begin digitizing paper records and documents in Fall 2014, and will also include an enterprise workflow management tool in the future.
• Unifying the campus’ learning management system will also take place beginning Fall 2014. Many departments including HR, EH&S, Parking, ISO have different learning management systems. Campus will greatly benefit from unifying these systems onto Learner Web and the systemwide Skillport training system.

Voice, telecommunication and billing enhancement

CSUSB will also undergo a significant upgrade of our VoIP platform in Fall 2014. The new system will provide new features such as call recording, visual voicemail*, message notification, desktop message access (voicemail to email), holiday schedule and greetings, etc.

The campus’ telephone billing process will also be reassessed, and a recommendation is due to the campus IT governance group by Spring 2015, with a targeted implementation for 2015-16. This goal is to fully assess the current telephone billing process and create a more sustainable and efficient model for voice and telecommunication billing for CSUSB.

*Dependent on IP phone model.
Administrative Computing & Business Intelligence

ACBI’s Mission

Administrative Computing and Business Intelligence, a division of ITS, develops, provides support for, and manages various campus enterprise software applications on a variety of hardware platforms. Support is provided for all CSUSB Administrative Systems. ACBI strategic plan cultivates functional and technical team members that thrive and succeed in a culture of change, involvement and continued learning. ACBI fosters the integration and adoption on enterprise software applications of today -- and tomorrow -- by engaging developers and administrative users together in various trainings that align professional growth with the IT strategic plan. ACBI teams excel as individuals while driving the campus toward an information rich technology vision of the future.

The following is a report that summarizes the most significant highlights, accomplishments, and support provided during the academic year 2013-2014

Highlights from ACBI

During the academic year (AY) 2013-2014, the ACBI team worked collaboratively with other divisions of the university to upgrade/implement several major administrative systems.

- **Advance Web**, also known as Web Leap went live October 2013. We teamed up with University Advancement Office to upgrade from Advance Windows to Advance Web. This was a 10 month project.
- **iDashboards** is an on-going project where we teamed up with Institutional Research to successfully complete the following dashboards: Enrollment Management-Class Enrollments, targets; Student Success-Retention and Graduation Rates, Current Enrollments, GE Deficiencies, Course Success: Identifying 'at-risk' students were completed by January 2014.
- **PeopleTools 8.53** for the HR and SA PeopleSoft System went live February 2014.
- **Finance Data Warehouse Upgrade to 11G** went live March 2014. We were involved in writing BPG’s and training the finance community on the enhancements and changes from the 10G version.
- **CFS Version 9.2** went live April 2014. We teamed up with all divisions of the finance office for the CFS 9.2 Upgrade – CMS Financial System-wide Upgrade. This was an 8 month project.
- **Early Start Program** underwent major modifications to include Coyote Ready and no fees for destination students in April 2014.
- **SOAR** changes to accommodate Palm Desert Students April 2014.
- **Maxient Student Conduct Software** implementation went live April 2014. ACBI teamed up with Student Affairs specifically the Student Conduct & Ethnical Development office.
- **EHDB (HR Data Standardization Phase I and II)** Part of the CHRS project was to standardize all the CSU’s data. This required data cleanup and modifying some of our business practices. These two steps were completed by April 2014
- **CourseLeaf – Online Catalog System** went live May 2014. Worked collaboratively with Academic Scheduling. *(8 month project)*
- **SAM – SSD** Went live May 2014. ACBI worked with the Services to Students with Disabilities to provide them with PeopleSoft data to better track their students.
- **Follett Discovery (BookNow+)** has two modules: Faculty and Student Discovery through Blackboard. It is in user acceptance phase.
- **Pre-provisioning of Staff/Faculty** – Allow future dated staff/faculty to be identified to receive online services before their start date with the university.
- **CO Driven Reports** – Such as the EOT reports. Team work between Student Affairs, IR, and ACBI to create reports as needed by the Chancellor’s Office.
- **Paylocity UEC – Human Resources/Payroll System** – June 2013 created data feeds from PeopleSoft for dual entry and testing of Paylocity. Also developed a method to continue to identify UEC employees in PeopleSoft.
- **EAB-SSC Education Advisory Board/Student Success** – In final phases. Next month will be for team acceptance testing and then deployment. This project is a joint effort where ITS has teamed up with Student Affairs to provide predictive analytics to student success.
- **Academic Partnership Program** – Many hours of meetings, analysis, and programming went into this program.
- **ADA Compliant** – fix all compliant issues with our systems.
- **Training/Business Process Guides and videos** – our training, BPG’s and videos are continually be updated as our administrative systems goes through upgrades and enhancements.

**Current and Future ACBI Projects**

During the academic year (AY) 2014-2015, the ACBI team will be teaming up with other divisions of ITS and the Campus Committee to upgrade/implement several major administrative systems.

- **Absence Management - Self Service** – On-going project started last year. Currently working with pilot group.
- **TridentHE Identity Manager System – From Aegis Identity**. Work collaboratively with ITS divisions to interface with all administrative systems.
- **MyCampus Portal – CampusEAI Consortium** – Work collaboratively with ITS divisions to interface with all administrative systems. This will replace our existing MyCoyote portal.
- **OnBase Imaging System** – First phase to replace all existing systems should be complete by the end of 2014.
- **U.Achieve Project** – CollegeSource completed the encoding review and are in the middle of reviewing the technical aspects of your upgrade.
• **Advance Web Leap modifications** – Majors changes needed to provide the Advancement Office with the data they need.
• **Reheer** – Working with the Advancement Office to integrate the Advance System to provide predictive modeling, new innovative tools to improve fundraising.
• **PeopleSoft PDL module** – begin migrating test score processing to the PDL module.
• **Course Scheduler** - expected to go live for Winter 2015 registration.
• **Online Academic & Event Management** – RFP’s being reviewed.
• **College of Extended Learning** – Look into software to support their division
• **Alumni Discovery Project** – The Advancement Office is teaming up with Student Affairs and ACBI to capture club and Athletics data in PeopleSoft and Advance.

**ACBI Support**

- ACBI coordinates with campus Subject Matter Experts (SMEs) to help administrative users adjust to changes through creative training course designs engaging enterprise software applications through *Instructor Led* and *One-on-One* hands-on training.
- We also offer information rich tutorials to massive campus users in support of self-services.
- More than 80% of the ACBI’s time is spent maintaining the administrative production systems.
- PeopleSoft is continually providing maintenance packs that need to be applied to production in a timely manner.
- Administrative users need help with business processes that change, hours are spent by our team and the administrative teams to test these modifications and enhancements.
- The Chancellor’s Office continually sends requests for new reports to be developed and maintained.
Information Security & Emerging Technologies

The Information Security and Emerging Technologies Office (ISET), promotes the confidentiality and privacy, integrity, availability and accessibility of university information resources. The ISET office promotes through collaboration, training and awareness the adoption of information security standards and best practices with the goal to provide reliable and robust information technology services in support of the university mission.

The following is an abbreviated list of the highlights and achievements of the ISET during the 2013-2014 academic year.

Information Security Management

- **Mobile Device Management** - Designed and deployed a Mobile Device Management infrastructure to support mobile devices that access sensitive data. This included support to the Advanced Web project coordinated by Administrative Computing and business Intelligence (ACBI).
- Designed and implemented a central monitoring system to provide concurrent mark sweep forecast and alert for critical computer systems such as blackboard and email exchange systems.
- Designed and implemented additional network access control to monitor computer system accessing, processing and storing sensitive data and improve the detection and response to malicious attacks.

Network Security

- Configured and deployed in collaboration with a production network load balancer (BIG-IP) to provide users with robust campus services.
- Collaborated with the Technology Operations and Customer Support Department on the physical relocation and network migration of system containing sensitive data. This included the relocation of the health center computer systems to the data center, network configuration of library and College of education computer systems.
- Coordinated with the Technology Operations and Customer Support Department on the migration of firewall rules in preparation for the new campus network upgrade. This required the coordination with different IT Staff across the campus in order to minimize interruption of computer services and access to the internet.

Information Security Access Controls

- **Absence management project**- in collaboration with ACBI configured and implemented the security roles for user's access to the absence management self-service application.
In addition, created access specifically for Absence Management Reports to meet CSU requirements.

- **Maxient Student Conduct Software** - worked with Student Affairs specifically the Student conduct & Ethical Development office on the implementation of a new process for requesting and granting access to this application.

**Business Continuity**

- **University Business Continuity Program** - In close collaboration with the Office of Risk Management coordinated the implementation of a business continuity program at CSUSB. The program provided training and guidance to the university divisions to identify essential functions and develop and test continuity plans.

**Identity Management Services**

- **CAS/Shibboleth** - Provided technical assistance and configured the campus authentication services to extend single sign on functionality to several computer applications, including Writing Center, CourseLeaf, Filesender -- Internet2, SHI -- Microsoft License vendor, Kivuto -- Employee Work at home/home use and Student Advantage program for Microsoft, and ASI election

**Web Accessibility**

- In support of the campus auditor, provided assistance for resolving accessibility issues to the HEOA Text book audit for Follett and AdAstra.
- Provided assistance and collaborated with the vendors to resolve accessibility issues for two major campus applications Sodexo and CourseLeaf (Bulletin).
- Conducted accessibility assessments of the to 80 campus websites and successfully resolved accessibility issues in 42 of them.
- Revised and updated all training accessibility materials in Compliance Sheriff, Copyright and Fair Use, Multimedia Accessibility, Online Forms, Posting your YouTube Videos to Blackboard, Setting up a closed caption video, Web Accessibility for Content Editors and Web Developers Workshop among others.
- Conducted 30 accessibility workshops and trained 195 campus personnel on different accessibility topics.

**Policies and Standards**

- **Information Security Standards** - reviewed and updated campus information security standards for consistency and alignment with the CSU Information Security Policies and Standards.
- **University accessibility Policy** - in collaboration with the Campus internal auditor and the office of the VP of ITS developed a new university policy to comply with CSU
accessibility requirements in all three areas - web accessibility, instructional materials and procurement.

Emerging Technologies

- **Mobile Apps** - In collaboration with the Department of Computer Sciences and Engineering developed, tested and published new mobile app for CoyoteRadio, RAFFMA, TourCSUSB v2, Student Advising, CSUSB Dining and SlideWinder Game
- **Virtual Desktop Infrastructure** - In collaboration with the Technology Operations and Customer Support Department configured, tested and deployed a secure VDI for accessing sensitive data.

Current Projects and Future Initiatives

- **Identity Management System - Upgrade** - TridentHE Identity Manager System – Aegis Identity. Work collaboratively with ITS division on the replacement of the current identity management systems. The expected day for the new IDMS to be moved to production is September 1, 2014.
- **MyCoyote Portal** - MyCampus Portal – CampusEAI Consortium – Work collaboratively with all the division on the services and configuration of the new MyCoyote portal. September 1, 2014 is the expected day for the new MyCoyote Portal to be made available to the campus.
- **Network Intrusion Detection System - Gigamon** - in response to the campus network upgrade, upgrade the network tap for the campus intrusion detection system. It is expected to get the new interface fully configured and operational by December 31, 2014.
- **Web Accessibility** - conduct a web accessibility gap analysis and risk assessment using the CSU-CO guidelines and develop a three years Web Accessibility Plan for the campus incorporating the new web environment. It is expected to have a tentative plan ready by September 15, 2014.
- **Authentication services business continuity** - research, implement and test an automated fail over to AWS for authentication services, in particular CAS/Shibboleth. This project is expected to be completed by June 30, 2015.
- **Absence Management Self-Service** - collaborate with ACBI to set up the security roles for self-service and reports for access as the pilot project implementation with the College of Natural Sciences is extended to other colleges. This is a year-long project with an expected completion date of June 30, 2015
- **ITS Business Continuity Plan** - conduct an impact assessment and review, update and test ITS critical functions. This project will start during the Summer-2014 and it is expected to be completed by June 30, 2015.
Creative Media Services
Creative Media Services

CMS Mission

Creative Media Services provides the campus community, design and support of a variety of media. From web development, Coyote Radio, Coyote Advertising, photography, media design and video production, we offer a wide array of services that the university relies on every day. Creative Media Services provides media solutions for web, print and video.

Web Development

The web development team offers services in the following areas:

- Design, Development, Site Hosting and Web Accessibilities.
- The team is responsible for the CSUSB homepage as well as academic departments, administrative offices, campus institutes and centers to promote a uniform web presence that reflects a positive image of the university.

CMS Highlights and accomplishments during the academic year 2013-2014:

- In November 2013, Drupal was selected as the campus wide Content Management System (CMS). Drupal will provide procedures to manage workflow in a collaborative environment. The initial pilot project in the implementation of the CMS will include eight websites from University Advancement.

The web development team launched 15 websites during 2013/14:

- Auxiliary Financial Services
- Palm Desert Campus
- College of Education
- College of Extended Learning
- Philosophy Department
- Department of Art
- ASI –Associated Students Inc.
- Alumni Affairs
- Career Center
- College of Arts and Letters
- Latin American Studies
- Arts & Music Festival
- Human Resources
- Office of Graduate Studies

Upcoming Initiatives

- Launch of University Advancement websites in Drupal CMS in August 2014. After University Advancement pilot project is completed, the web production team will begin the implementation of the development of campus, administration divisions and colleges, websites.
• The web development is working with faculty to create a “University Faculty Mentoring Network” website. Launch date is fall 2014.

Coyote Radio

Coyote Radio is a learning laboratory for radio broadcast, media production, promotions and marketing skills. The facilities have an award winning web radio station, multiple digital production studios. Coyote Radio is engaged with several academic programs on campus.

Coyote Radio highlights and accomplishments during the academic year 2013-2014:

• Coyote Radio celebrated its 20th anniversary with unprecedented accomplishments.

• In September, Coyote Radio was highlighted in a feature story on the front page of the San Bernardino Sun. In October, the station was recognized for our student public service work for the Inland Community by California State Assembly Member Cheryl R. Brown. At a special 20th anniversary ceremony the station was again recognized as an innovative learning laboratory by California State Assembly Member Cheryl R. Brown, as well as by San Bernardino Mayor Patrick Morris, President Tomas Morales, and Dean Fred Jandt of the Palm Desert Campus.

• Coyote Radio continued to produce the syndicated local program “My Awesome Empire”; broadcast on NPR affiliate KVCR 91.9 FM and KCAA NBC Radio News 1050, KMET “Smart Talk” 1490, Coyote Radio and iTunes Radio. My Awesome Empire highlights the business, community and student heroes of the Inland Empire. The show is produced by students from the colleges of Social Sciences, Education, And Arts and Letters.

• Coyote Radio concluded the school year by winning two national awards, presented by the Intercollegiate Broadcasting System: “Best Public Affairs Program: My Awesome Empire” and the Platinum “Peer-To-Peer Award” for outstanding service to our campus and to our students as a broadcast technologies learning laboratory.

• Over 200 students received hands-on instructional experience in broadcasting, media marketing, media promotions, digital production for radio and television, and media business administration. Nine students were placed in internships with Coyote Radio partners: KCAL FM, KOLA 99.9, KCAA News Radio, The American Advertising Federation, and with our newest internship partners: Clear Channel Communications. Since 2007, Coyote Radio has placed over 30 students into positions that have evolved into paid positions including recently: Ashlyn McCann who was hired by Y102 Victorville and Mindi McNeil, who was offered two internships with KOLA 99.9 and with KVCR 91.9 and upon graduation was hired by both stations!

• This year Coyote Radio began production of the first broadcast program to engage several disciplines on campus in the production. HOWL! Is a cultural/literary radio
magazine written by students from the English and MFA departments, performed by theater students, edited by recording arts students, and produced by Communication Studies students.

- Coyote Radio continues to enjoy a fruitful partnership with the Catalina Island Conservancy and Southern California Edison. The partnership maintains Coyote Radio as the home of the *Isla Earth Radio Series*. The award winning radio program broadcasts to over 300 stations nationally, including KFI Los Angeles and nearly every NPR station in America.

- The Communication 243b radio practicum continues to be the only class in the Communication Department fully impacted on a continual basis. As a result, 131 students from that class received hands-on experience in business administration, promotions, digital editing, media marketing, social media marketing and promotion, broadcasting, branding, news writing, and music programming. Eleven students were given Coyote Radio internships and student enthusiasm for the station brought us 15 new station volunteers.

- The promotions staff of Coyote Radio offered music, live on-air call-ins, an emcee and/or prize giveaways at many of our campus activities. These Coyote Radio promotions helped to elevate awareness of over 80 important campus events and programs.

**Coyote Advertising**

Coyote Advertising maintains its status as an official Instructionally Related Program (IRP). Coyote Advertising provides a wide range of media marketing and advertising services to internal and external clients. Coyote Advertising strives to be a one-stop media center where internal and external clients can go to find effective multimedia marketing solutions that fit their specific needs. Students involved primarily come from the College of Arts and Letters and the College of Business and Public Administration.

*Coyote Advertising highlights and accomplishments during the academic year 2013-2014:*

- Partnered with Art Department and Career Services to enter CSUSB student advertising work into the American Advertising Awards Competition. CSUSB students won a total of 24 awards, which represents 1/3 of all student awards given in the competition.

- Handled all marketing outreach and media planning for 2nd Annual Arts & Music Festival, increasing attendance by over 30% from previous year.

- Produced radio advertising to promote Lupe Fiasco show at the Coussoulis Arena.

- Provided ongoing marketing consulting services for several internal campus clients including the CSUSB MBA Program, RAFFMA, Student Leadership and Development and Rec Sports.
• Hosted the District 15 National Student Advertising Competition that included participating teams from USC, UCLA, UNLV, SDSU and UCI among others.

• Established a new internship program with Clear Channel Media and Entertainment allowing students from our program to easily transition from internships with Coyote Advertising to internships within their company.

• Leveraged our media connections to help transition several graduating students into career level positions with local media companies including Red Fusion Media and KOLA FM.

• Won several new business accounts and implemented numerous multimedia advertising campaigns for local clients including the Inland Empire 66ers, Macy’s, Sky High Sports, IHOP, Lucca’s Pasta Bar, Red Brick Pizza, Days Inn, Cresthaven Apartment Homes, Brandin’ Iron Saloon, and Guitar Center.

• Surpassed 5,000 voluntary opt-in subscribers to our Coyote Coupon Club email database.

• Began working with Student Leadership and Development and the Keep It On Campus (KIOC) committee on improving campus involvement through mobile SMS event notifications, utilizing our Coyote Mobile platform.

Photography

Creative Media Services offers photographic support for campus-sponsored events that need promotional, educational or archival images. The photographic team develops digital images that support web, print or archival format. The team maintains an archival photo database accessible to the university community.

Photography highlights and accomplishments during the academic year 2013-2014:

• Photographed over 420 events during 2013-14 ranging from studio portraits, Athletics, Public Affairs, University Enterprises Corporation, Advancement and the five Academic colleges.

• Currently working with the Water Resource Institute on digitizing and captioning over 130,000 aerial photographs. Currently, they are at 40,000 digital assets.

• Created a “Web Galleries” site on Creative Media Services Photography webpage. Slide shows of various events are on display for viewing including CSUSB Commencements and the Dr. Prem Reddy building naming.

• Maintain a 73,000 digital asset photo archive library.
Media Design

The Media Design team provides webpage design, interactive & video graphics, and publication design. Their expertise in graphic, web, video and branding design, they ensure CSUSB maintains a positive visual identity and that faculty and staff have access to the latest technologies and trends in visual communication.

Media Design highlights and accomplishments during the academic year 2013-2014:

- Arts & Music Festival graphic needs were coordinate through the Media Design team. The team produced brochures, banners, posters, signage and flyers for the festival.
- Coyote Radio graphics are produced by the team. This year, they design trophy for Coyote Radio awards banquet. Graphics and logos were designed to include the “Awesome Empire”.
- Media Design team conducted the 10th Annual Adobe Camp.
- Media Design team provided graphic designs for the 15 websites launched by web development this year.
- Media Design team created department badge designs, interactive forms and clothing graphics for various departments.
- The Student Health Center submitted several requests for graphics, calendar, flyers and brochures during the academic year.

Video Production

The Creative Media Services video production team provides the CSUSB campus community with professional quality academic and promotional video production services, live web streams and video archiving of campus events. Academic video productions vary, from simple classroom video clips to web-based learning objects. Promotional projects have ranged from short achievement-oriented videos, highlighting university support and accomplishments, to complex scripted productions used for University advancement and recruitment.

Video Production highlights and accomplishments during the academic year 2013-2014:

- The CMS video production team provided live web coverage of the Spring and Winter Commencements. Provide post-production to support web archival of the events.
- The Office of the President’s “Message from the President” is produced by the video production team.
- Latino Education and Advocacy Days live coverage is supported by CMS. The production team produced a promotional video highlighting the LEAD program.
- The CSUSB Men’s Basketball team hosted the NCCA West Regional and the video production team provided live web coverage of the tournament.
- The year in review Convocation video and the live web coverage of Convocation.
- The team produced a series of videos for the CPBA Marketing department
- Theatre Arts play The Balcony was video recorded for the department.

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• Video recorded the History Department’s China Lecture Series.
• Provided live web coverage of the University Diversity Committee’s Conversations on Diversity lecture series: Muslim Women Panel, The Black-Jew Dialogues and Latinos in Hollywood.
• Video recorded the Psychology department’s “Psychology Talks” lectures.
• College of Social and Behavioral Sciences’ Hall of Fame video.
Proposed Academic Year 14-15 Divisional Goals

Academic Technologies & Innovation Goals

Online Design

- The ATI Team under the leadership of the new Director, will foster and support faculty led innovation in support of the academic mission of the University.
- Work with the Provost, the Teaching Resources Center, the Deans and Department Chairs in increasing the number of online and hybrid learning courses.
- Introduce and Support student engagement technologies and mobile technologies to improve student success.
- Work with the faculty sandbox to experiment with and implement cutting edge technologies for student engagement and success.
- The ATI design team will provide support in the Blackboard Learning Management System (LMS) managed hosting through Blackboard. The hosted environment will ensure that Blackboard runs optimally, is at the current version and is always available for the Campus Community.
- Proposal to increase the ATI design team with two additional instructional designers.

Classroom Technology Support

- Twenty-four HD projection systems will be installed in University Hall classrooms during the summer of 2014.
- Re-evaluate the process of funding classroom technology. Propose baseline funding for SMART Classroom Refresh program.

Distance Learning

- For Summer 2014, the ATI team and PDC IT team will upgrade two distance learning classrooms in the Rogers Gateway building at the Palm Desert campus.
- The Media Services team is also in the design stage of a distance learning classroom in the Social and Behavioral Sciences building. The room will be available for distance learning courses for Fall 2014.
- Work with the Deans in discovering and implementing new distance learning modalities.
- The CSU Chancellor’s Office is conducting a Request for Proposal (RFP) to identify a new videoconferencing service for use by CSU campuses. The ATI team is involved in this RFP process. A new videoconferencing service will be available for academic 2014-15.
• Pilot iPad program will launch in Fall 2014. Ten iPads will be available to collected metrics to evaluate program’s impact.
• Three new accessible workstations will be operational for Fall 2014 at PDC.

Technology Operations and Customer Support Goals

Network and wireless enhancement

The San Bernardino and the Palm Desert Campus will complete the network infrastructure by Fall 2014, along with the upgrade to redundant 10GB internet connection for the San Bernardino campus. The new network infrastructure will pave the way and provide the bandwidth needed for the many cloud migration project taking place. In additional, the following improvements will be made:

• By Fall 2014, a new redundant 1GB internet connection will be installed for the Palm Desert Campus to provide much needed back up for the PDC.
• A new redundant microwave network infrastructure will be put in place by Fall 2014 to provide University Village significant increase of bandwidth to students.
• Both campuses’ wireless infrastructure will be upgraded throughout the 2014-15 academic year, with approximate 35% to be completed by Fall 2014 and the remaining to be to be completed by Fall 2015.

Enterprise Systems upgrade

By Fall 2014, several key enterprise systems, including Blackboard and Exchange, will be migrating to the cloud in order to provide more reliable services to our users. IT Services will also bring additional value-added features offered through the Microsoft O365 migration, including OneDrive Pro cloud storage, Lync video conferencing and unified messaging system, Sharepoint Online, to name a few.

• System Center Configuration Manager (SCCM) will be implemented beginning Fall 2014 to allow campus to better manage system and software updates, application rollout, and to provide inventory management.
• Hyland OnBase Document Management and Workflow project will begin digitizing paper records and documents in Fall 2014, and will also include an enterprise workflow management tool in the future.
• Unifying the campus’ learning management system will also take place beginning Fall 2014. Many departments including HR, EH&S, Parking, ISO have different learning management systems. Campus will greatly benefit from unifying these systems onto Learner Web and the systemwide Skillport training system.
Voice, telecommunication and billing enhancement

CSUSB will also undergo a significant upgrade of our VoIP platform in Fall 2014. The new system will provide new features such as call recording, visual voicemail*, message notification, desktop message access (voicemail to email), holiday schedule and greetings, etc.

The campus’ telephone billing process will also be reassessed, and a recommendation is due to the campus IT governance group by Spring 2015, with a targeted implementation for 2015-16. This goal is to fully assess the current telephone billing process and create a more sustainable and efficient model for voice and telecommunication billing for CSUSB.

Administrative Computing & Business Intelligence Goals

- Absence Management - Self Service – On-going project started last year. Currently working with pilot group.
- TridentHE Identity Manager System – From Aegis Identity. Work collaboratively with ITS divisions to interface with all administrative systems.
- MyCampus Portal – CampusEAI Consortium – Work collaboratively with ITS divisions to interface with all administrative systems. This will replace our existing MyCoyote portal.
- OnBase Imaging System – First phase to replace all existing systems should be complete by the end of 2014.
- U.Achieve Project – CollegeSource completed the encoding review and are in the middle of reviewing the technical aspects of your upgrade.
- Advance Web Leap modifications – Majors changes needed to provide the Advancement Office with the data they need.
- Reheer – Working with the Advancement Office to integrate the Advance System to provide predictive modeling, new innovative tools to improve fundraising.
- PeopleSoft PDL module – begin migrating test score processing to the PDL module.
- Course Scheduler - expected to go live for Winter 2015 registration.
- Online Academic & Event Management – RFP’s being reviewed.
- College of Extended Learning – Look into software to support their division
- Alumni Discovery Project – The Advancement Office is teaming up with Student Affairs and ACBI to capture club and Athletics data in PeopleSoft and Advance.
Information Security & Emerging Technologies Goals

- **Identity Management System - Upgrade** - TridentHE Identity Manager System – Aegis Identity. Work collaboratively with ITS division on the replacement of the current identity management systems. The expected day for the new IDMS to be moved to production is September 1, 2014.

- **MyCoyote Portal** - MyCampus Portal – CampusEAI Consortium – Work collaboratively with all the division on the services and configuration of the new MyCoyote portal. September 1, 2014 is the expected day for the new MyCoyote Portal to be made available to the campus.

- **Network Intrusion Detection System - Gigamon** - in response to the campus network upgrade, upgrade the network tap for the campus intrusion detection system. It is expected to get the new interface fully configured and operational by December 31, 2014.

- **Web Accessibility** - conduct a web accessibility gap analysis and risk assessment using the CSU-CO guidelines and develop a three years Web Accessibility Plan for the campus incorporating the new web environment. It is expected to have a tentative plan ready by September 15, 2014.

- **Authentication services business continuity** - research, implement and test an automated fail over to AWS for authentication services, in particular CAS/Shibboleth. This project is expected to be completed by June 30, 2015.

- **Absence Management Self-Service** - collaborate with ACBI to set up the security roles for self-service and reports for access as the pilot project implementation with the College of Natural Sciences is extended to other colleges. This is a year-long project with an expected completion date of June 30, 2015.

- **ITS Business Continuity Plan** - conduct an impact assessment and review, update and test ITS critical functions. This project will start during the Summer-2014 and it is expected to be completed by June 30, 2015.

Creative Media Services Goals

- Launch of University Advancement websites in Drupal CMS in August 2014. After University Advancement pilot project is completed, the web production team will begin the implementation of the development of campus, administration divisions and colleges, websites.

- The web development team is working with faculty to create a “University Faculty Mentoring Network” website. Launch date is fall 2014.
Appendix A -  
IT Governance at Cal State San Bernardino

The IT governance structure establishes the strategic, operational, and technical decision-making process required to ensure IT enables the University to excel in its mission. IT governance provides strategic leadership, establishes campus-wide IT priorities and policies, and is accountable and transparent to the University community. The following diagram illustrates the structure for IT governance at CSUSB. The IT Governance Executive Committee will form sub committees to set agendas that cover the topics of interest as depicted below and form task forces as needed to address particular areas:

**General Responsibilities of the IT Governance Executive Committee**

The IT governance executive committee is responsible for the following:

- Establishing and communicating a campus-wide IT vision that supports the University mission and goals
- Establishing IT policies that support strategic, campus-wide IT priorities
- Defining technical architecture and standards for the University
- Establishing best practices and tools for IT across campus

**IT Governance Values**

For IT governance to be successful, the committee must hold the following values:

- Transparency — Governance committee and processes must be clear. How decisions are made and who has input rights and decision-making rights must be readily apparent to campus.
- Communication — Communication must occur into, out of, and across the committee and with campus.
• Accountability — Sub Committees and task forces must be held accountable for delivering on their responsibilities. Clear escalation paths for issue resolution must be defined.
• Assessment – Making sure that measureable objectives are met within the agreed upon timelines
• Responsibility — Governance structure must focus on results rather than implementation and project management.
• Appropriate representation — Constituency groups across campus must be represented.
• Active support — Governance structure requires staff to support the process. Agenda setting, meeting logistics, issue tracking, and communication are all essential aspects of active support.

Agenda Setting

Members of the executive committee propose agenda items to be discussed in their respective committees. Agenda items can also be suggested by anyone in the CSUSB community (non-committee members) by directly contacting a committee member, a committee chair or the CIO's office. Agenda items for the committee meeting are vetted through the committee's co-chairs. The committee chairs meet monthly to coordinate the timing of committee efforts and ensure proper communication, inclusion and prioritization.

The agenda for meetings fall into the following broad categories:

• Project Status Updates
• Problems/Issues to be addressed
• New Project Proposals
• Horizon Projects

Reporting

The IT governance structure is supported by administrative and communications personnel who report to the Chief Information Officer. Notes for each regularly-scheduled IT governance meeting are available on the committee web pages. In addition to the meeting notes and executive summaries, IT governance progress and updates are communicated via the CIO's Weekly Update. Any policy related materials are posted on the CIO website. Some decisions and projects may need additional communications due to their scope. These communications will be determined on a case-by-case basis.

Projects

The IT governance executive committee focuses on setting direction and ensuring accountability rather than implementation responsibilities or IT project management. The
Committee can, however, ask for and receive presentations and updates on projects from any project teams or steering committees as needed.

- **Funding Continuum**

Projects are funded through four mechanisms; local funding, aggregate funding, aggregate funding with partial central support, and common good funding. Local funding is derived completely from the unit employing the service or administering the project. Aggregate funding involves the cooperation and coordination of funding through multiple units to save money by buying a service in bulk. By aggregating funds and purchasing power among and across units, the service can typically be acquired at a lower cost. When a service funded aggregately is identified as essential to a majority of units across campus, it may qualify for partial funding from the central IT budget. Common Good services are available to and serve all campus units and members. Common Good services are funded entirely through the central budget.

- **Subcommittees and Task Forces**

Subcommittees are defined as ongoing groups responsible for issues and decisions in a certain area of IT at the University. Task forces are defined as time-bound groups assigned specific problems to solve or tasks to accomplish. The IT governance executive committee can form subcommittees and task forces as needed. Existing committees may be asked to establish formal relationships with the IT governance executive committee. There is an intermittent need to create task forces to investigate issues and explore different IT solutions. Task forces can be appointed by the IT governance executive committee on an as-needed basis. The task forces meet for a set timeframe to accomplish specific objectives related to resolving an issue or implementing an IT strategy; they are not be considered standing or ongoing governing bodies. Task force membership can consist of IT governance executive committee members or any qualified personnel identified by IT governance executive committee members.

- **Customer Steering Committees**

Customer steering committees serve as representative customer groups that work with IT project teams to determine the best course of action and to provide accountability for IT projects at the University. Customer steering committees help project teams:

- Develop a project charter that directs the project towards what customers need most from the service
- Create a thorough and effective communication plan to distribute information to affected customers across the University
- Refine the project plan and be accountable for changes to that plan
- Direct research about the project or service at the University and peer institutions
- Deliver the projects and services that the University truly needs
Customer steering committees may be called upon to present information and updates to IT governance executive committee.

- **Committee Membership**

**Co-Chairs:** Dr. Andrew Bodman, Provost & Vice President for Academic Affairs, Dr. Samuel Sudhakar, Vice President for Information Technology Services & CIO

**Members:**

**Vice Presidents** – Mr. Bob Gardner, VP for Administration and Finance, Dr. Ron Freemont, VP for University Advancement, Dr. Brian Haynes, VP for Student Affairs

**Faculty Senate** – Dr. Ted Ruml, Chair, Faculty Senate, Dr. Kurt Collins, Professor of Art

**Colleges** – Dr. Jamal Nassar, Dean, College of Social and Behavioral Sciences, Dr. Lawrence Rose, Dean, College of Business and Public Administration, Dr. Jay Fiene, Dean, College of Education, Dr. Kirsty Fleming, Dean, College of Natural Sciences, Dr. Terry Ballman, Dean, College of Arts and Letters

**College of Extended Learning** – Dr. Tatiana Karmanova, Dean, College of Extended Learning

**Faculty Teaching Resource Center** – Dr. Kim Costino, Director TRC and Professor of English

**Staff (IT + Academic)** - Mr. Ian Jacobs – IT Consultant, College of Business and Public Administration, Mr. Jim O’Linger, Director, Technology Support Center

**Students**– Mr. Alfredo Barcenas, President, Associated Student Incorporated, CSUSB.
Appendix B - IT Governance Executive Committee Sub Committees

Sub Committees

IT Governance Sub Committees are charged with the investigation of university wide technology initiatives that increase access, solves problems, facilitates the teaching/learning process and improves efficiency. The membership of the sub committees are cross functional and cross institutional. They serve in an advisory capacity to the IT Governance Executive Committee (ITGEC) and bring recommendations for approval by the ITGEC.

Academic Technologies & Innovation:

Co-Chairs: Director of Academic Technologies & Innovation and Director of the Teaching Resources Center

Charge: The ATI Sub-Committee will be responsible for gathering and representing faculty perspective on questions related to teaching, learning or researching with technology, so that ITS can provide the kind of support that faculty most need. To this end, the sub-committee will be responsible for recommending mechanisms by which faculty are able to stay current on the latest research, scholarship, and best practices regarding instructional technology, distance education, instructional design, online and hybrid program and curriculum development (including course redesign) and online and hybrid pedagogies; for creating and implementing a process for faculty to experiment with, pilot, and ultimately make recommendations about technology tools, software licenses, etc. that the university should purchase for faculty use; and for gathering feedback from faculty on the effectiveness of the technology currently being employed.

CMS Executive Council

Co-Chairs: Director of Administrative Technologies & Business Intelligence and Director of Records, Registration & Evaluation

Charge:

- Business Intelligence Driven Decision Making
- Predictive Analytics
- Enterprise Data Warehouse
- Institutional Data Management
- Data Ownership and Access
- Common Management Systems Projects
Technology Operations and Customer Support:

Co-Chairs: AVP for Technology Operations & Customer Support and College Tech Leader

Charge:

- Best of Class Customer Support
- Infrastructure
- Cloud Technologies
- Web Technologies
- Centralization and Standardization
- End User Empowerment
- Operational Sustainability and Excellence
- PDC Technology Enhancements and Support
- High Performance Computing
- Research Networks
- Enterprise Applications Development

Information Security, Compliance & Emerging Technologies:

Co-Chairs: Director of Information Security and Emerging Technologies and Dr. Tony Coulson

Charge:

- Information Security and Privacy
- Identity Management Systems
- Technology Accessibility
- Emerging Technologies Research & Development
- Single Sign On and Portal Development and Enhancements
- Security and Compliance Audits
- Disaster Recovery & Business Continuity
- Information Technology Policies and Procedures
- Sensitive Data Security Audit
- Data Center Operations Audit

Last Updated May 2014
## Appendix C - Information Technology Services Roadmap
### 1-3 Years

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>FY 14</th>
<th>Status</th>
<th>Estimate Date Of Completion</th>
<th>Notes</th>
<th>Updated</th>
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<td>One-Stop Technology Support Center</td>
<td>$25,000</td>
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<td>1/31/2014</td>
<td>PO Issued. Staff Trained. Phone/Web Ticketing system ready to go</td>
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<td>Director of Project Management &amp; Assessment</td>
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<td>7/1/2014</td>
<td>Felix Zuniga started July 1, 2014</td>
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<td>100%</td>
<td>7/15/2014</td>
<td>Dr. Michael Chen started July 15, 2014</td>
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<td>4/1/2014</td>
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<td>eTextbooks</td>
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<td>Personalized Learning</td>
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<td>$10,000</td>
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<td><strong>Teaching/Learning Technologies</strong></td>
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<td>Online/Hybrid Course Delivery Methods</td>
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<td><strong>Enterprise Applications</strong></td>
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<td>Enterprise SSO Portal</td>
<td>$100,000</td>
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<td>9/1/2014</td>
<td>In Conversation with Campus EAI Consortium</td>
<td>$70,000</td>
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<td>Ad Astra Upgrade - Move to EMS</td>
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<td>5%</td>
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<td>U Achieve</td>
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<td>Project Description</td>
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<td>Start Date</td>
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<td>-------------------------------------------------------</td>
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<td>Blackboard to the Cloud</td>
<td>$90,000</td>
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<td>9/1/2014</td>
<td>Pilot Project to start Feb 2014 with all faculty/staff moving to Office 365 starting June 2014</td>
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<td>Self-Support Enterprise Apps to the Cloud</td>
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<td>Presentation by OnBase on 12/19</td>
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<td>NeoGov HR Applicant Tracking System</td>
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<td>Mathematica Institution Wide</td>
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<td><strong>Business Intelligence</strong></td>
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<td>Director of Administrative Computing/Business Intelligence</td>
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<td>100%</td>
<td></td>
<td>Lenora Rodgers Reassigned to this role</td>
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<td>Predictive Analytics/Academic Dashboards</td>
<td>$55,000</td>
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<td>12/6/13</td>
<td>CSUSB User acceptance</td>
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<td><strong>Institutional Data Team</strong></td>
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| Enterprise Data Warehouse/Reporting                       |         | 5%           |            | Discovery Project Scheduled                           | $250,000
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<th>Progress</th>
<th>Estimated Date</th>
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<td>Working with Physical Plant and Vendor</td>
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<td>SOTE Upgrades</td>
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<td>Planning Meeting Project Plan to be delivered by CO in January 2014</td>
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<td>Distance Learning /Smart Classroom Upgrades</td>
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<td>Centralization of Servers</td>
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<td>Totals</td>
<td>$855,000</td>
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<td>$805,000 $110,000</td>
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A VISION FOR INFORMATION TECHNOLOGY SERVICES @ CSUSB

INFORMATION TECHNOLOGY THE PAST

- Siloed
- Not Customer Centric
- Duplicate Services
- Lack of Governance
- Funding Limitations
- Lack of Support and Recognition for IT Initiatives
- Ongoing confusion between the roles of ODL, ACM & TRC
INFORMATION TECHNOLOGY SERVICES

- Focused on Student Success
  - World Class Customer Service
  - Centralization & Standardization
  - End User Empowerment
  - Innovation
  - Operational Sustainability & Excellence
  - Information Security & Privacy
  - Accessibility

FOCUSED ON SERVICE

- Name Change to Information Technology Services
- IT Governance Executive Committee & Sub Committees
- 1-3 Year Technology Roadmap Approved
- ITS Organization Reorganized into Teams focused around specific areas of expertise
- Institutional Data Team
- One-Stop Technology Support Center
- Collaborative Work with the TRC -Faculty Sandbox, Blackboard Upgrade
- Team Up with the College Techs (TAG Team)
- Distance Learning and PDC Initiatives
IT SERVICES REORGANIZATION

<table>
<thead>
<tr>
<th>Old Name</th>
<th>New Name</th>
<th>Administrator</th>
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</thead>
<tbody>
<tr>
<td>Data Center and Help Desk Services (DCHS)</td>
<td>Technology Operations &amp; Customer Support</td>
<td>Mr. Gerard Au, Associate Vice President</td>
</tr>
<tr>
<td></td>
<td>• Technology Support Center (TSC)</td>
<td><a href="mailto:gau@csusb.edu">gau@csusb.edu</a></td>
</tr>
<tr>
<td></td>
<td>• Data Center (DC)</td>
<td>909.537.5087</td>
</tr>
<tr>
<td></td>
<td>• Telecommunications and Network Services (TNS)</td>
<td>Mr. Jim O’Linger, Director of Enterprise</td>
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<td></td>
<td>Applications &amp; Technology Support</td>
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<td></td>
<td></td>
<td><a href="mailto:jolinger@csusb.edu">jolinger@csusb.edu</a></td>
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<tr>
<td></td>
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<td>909.537.5410</td>
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<tr>
<td>Academic Computing and Media (ACM)</td>
<td>Creative Media Services (CMS)</td>
<td>Mr. Michael Ross, Director</td>
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<td></td>
<td></td>
<td><a href="mailto:mross@csusb.edu">mross@csusb.edu</a></td>
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<tr>
<td>Administrative Computing Services (ACS)/Common</td>
<td>Administrative Computing and Business</td>
<td>Mrs. Lenora Rodgers, Director</td>
</tr>
<tr>
<td>Management Systems (CMS)</td>
<td>Intelligence (ACBI)</td>
<td><a href="mailto:lrogers@csusb.edu">lrogers@csusb.edu</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>909.537.7264</td>
</tr>
<tr>
<td>Information Security Office (ISO)</td>
<td>Information Security &amp; Emerging Technologies</td>
<td>Dr. Javier Torner, Director</td>
</tr>
<tr>
<td></td>
<td>(ISET)</td>
<td><a href="mailto:jtorner@csusb.edu">jtorner@csusb.edu</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>909.537.7720</td>
</tr>
</tbody>
</table>

IT GOVERNANCE SUB COMMITTEES

- **Academic Technologies & Innovation** – Dr. Kim Costino (Director of the TRC) and Dr. Amy Leh (Interim Director of ATI) – Co Chairs

- **Technology Operations & Customer Support** – Gerard Au (AVP for Technology Operations and Customer Support) and David Nimri (IT Consultant College of SBS) – Co Chairs

- **Administrative Computing & Business Intelligence** – Lenora Rodgers (Director of Administrative Computing and Business Intelligence) and Grace Dempsey (Registrar) – Co Chairs

- **Information Security, Compliance & Accessibility** – Dr. Tony Coulson (Professor, Information and Decision Sciences) and Dr. Javier Torner (Director of Information Security and Emerging Technologies) – Co Chairs
Purpose: To ensure and enhance the integrity, accuracy, accessibility (availability), security and timeliness of institution wide data
PROJECTS IN MOTION

- Website Redesign and Movement to the Cloud
- EAB Student Success Collaborative – Predictive Analytics
- Office 365 Migration
- Identity Management System
- Single Sign On Portal
- Comprehensive Network Upgrade
- Workflow Management System
- Distance Learning Systems Upgrades
- Enterprise Data Warehouse
- PDC Initiatives

TRANSFORMATIONAL ITS

Mediocre ➔ Responsive ➔ Routinely Proactive & Innovative

Current State

52
ODL TO ATI TRANSITION

Facilitate Seamless Support for Faculty on all areas of technology:
- Instructional Design
- Classroom and Student Engagement Technologies
- Blackboard and general Technology Support
- Development of Online and Hybrid Programs
- Quality of Online Courses
- Integration of Pedagogy and Technology
- Workshops, Seminars, Brown Bag Luncheons
- Faculty Led Innovation
- Faculty Sandbox(s)
- Research Networks
- High Performance Computing

The TRC will become the communication and coordination partner to ATI
- ATI will Enjoy the full Support of the Entire ITS Organization
- The ATI becomes the department that executes the vision of Academic Affairs in terms of Online/Hybrid Learning, Quality of Online Courses and Academic Technologies
- ATI will work with the Deans in executing their vision for their Colleges and Programs
- IT Governance Subcommittee (ATI) will bring recommendations to the IT Governance Executive Committee and Faculty Senate
- Instructional Design, Training, Workshops will be coordinated with TRC and ITS
WORK AHEAD OF US

- Expansion of Faculty Sandboxes
- Super Computing and Research Networks
- Advanced Technology Initiatives
- Expansion and Distribution of Distance Learning Classrooms
- Growth in Online and Hybrid Learning Programs
- Quality and Student Success Initiatives in Online/Hybrid Programs
- Moving Services to the Cloud
- Mobile Computing Initiatives

LEADERSHIP NECESSITATES FOLLOWERSHIP
PEOPLE

Equip
Recognize
Empower
Encourage
Good leaders make people feel that they’re at the very heart of things, not at the periphery. Everyone feels that he or she makes a difference to the success of the organization. When that happens, people feel centered and that gives work meaning.

- Warren Bennis

THE BEST IS YET TO COME!
Appendix E - Institutional Data Team

Business Intelligence Driven Decision Making

Purpose: To ensure and enhance the integrity, accuracy, accessibility (availability), security and timeliness of institution wide data

Charge:

1. Perform an Inventory of current data
2. Determine current sources of data – Primary, Secondary, Tertiary
3. Location of the data – Internal or External
4. Ownership of Data
5. How is the data currently accessed by those who need the data?
6. What data mining tools are currently used?
7. What data warehouses does the institution own/maintain?
8. How and in what frequency is the data dispersed? Ex. Dashboards, reports
9. Formulate recommendations for the IT Governance Executive Committee
Appendix F - Blackboard Managed Hosting Project

Introduction

Blackboard Learning Management System has been a resource for faculty and students at CSUSB since 2001. About 70% of our faculty use Blackboard for either fully online course delivery, hybrid courses, or as supplements to their face-to-face class. The adoption and use of Blackboard continues to grow as a student engagement and resource tool as faculty focus on student learning and success at CSUSB.

Challenge(s):

- While resource allocation for Blackboard has been increased and Blackboard has been upgraded since the unplanned down time in spring 2013, there is a growing need to allocate more resources in personnel and hardware to continue to support Blackboard usage and growth.
- Lack of redundancy in support personnel who are experts in Blackboard system administration.
- Growing need for enterprise applications support for the campus community.
- Performance of timely upgrades of the system for continued system stability and new features.

Alternatives:

- Train other staff within ITS to support Blackboard administration.
- Buy new hardware to support the growing needs of the Blackboard user community.
- Host Blackboard on the Blackboard Cloud with the Blackboard Managed Hosting Service.

Impact(s) if we do nothing:

- Possibility of lagging behind in patches as enterprise system administration staff are challenged to support other enterprise systems.
- Lower level of service to campus units that require support of other enterprise applications.
- Possibility of a decrease in our ability to provide service for Blackboard because of competing demands.

Recommendation

Host Blackboard on the Blackboard cloud with Blackboard’s Managed Hosting Service.

Rationale:
Given that Blackboard is a valuable student success and faculty resource on Campus, we want to make sure that Blackboard runs optimally, that we have the current version, and that it is always available for campus use. Three out of the eleven CSU campuses – San Diego, Long Beach and Dominguez Hills are now hosting with the Blackboard Managed Hosting Service.

Assessment Plan and Key Performance Indicators (KPI)

- Blackboard performance and uptime, timely upgrades
- Timely response from the Enterprise Applications Team

Key Stakeholders

- Academic Senate
- IT Governance ATI Sub Committee
- Students

Project Team

- Dr. Sam Sudhakar, VP of IT Services and CIO (Executive Sponsor)
- Gerard Au, AVP of Technology Operations and Customer Support
- Dr. Amy Leh, Interim Director, Academic Technology and Innovations
- Dr. Kim Kostino, Director, Teaching Resource Center
- Jim O’Linger, Director, Technology Support Center and Enterprise Applications
- Felix Zuniga, Director, Project Management and Assessment (Project Manager)
- Aaron Smith, IT Consultant - Blackboard Administrator (Technical Lead)
- Edward Szumski, IT Consultant
- Sunny Lin, Operating Systems Analyst
- Ben Derry, Operating Systems Analyst
- Edgar Chabolla, Instructional Designer
- Mauricio Cadavid, Instructional Designer
- Adrienne Lewis, Blackboard Project Manager

Process

Moving Blackboard to the cloud with Blackboard’s Managed Hosting Service will require some down time for the migration process. In order to minimize impact to users, the project team discussed several options for migrating course information from the current self-hosted system to the Blackboard Managed Hosting system. The goal is to minimize down time to active courses over the Summer 2014 quarter while meeting the project timeline of having all courses live on the Blackboard Managed Hosting system by Fall 2014. The team believes a batch approach is the best way to accomplish this goal. Thus, IT Services will work with Blackboard to move courses into the Blackboard cloud in three batches. No course sites will be moved while they are actively in use, including Summer 2014 courses.
• Batch 1 (July 2-7, 2014) – Future courses (Fall 2014 courses)
• Batch 2 (July 21-24, 2014) – Inactive/Archival courses (Spring 2014 and prior)
• Batch 3 (Oct 21-24, 2014) – Remaining courses (Summer 2014)

While no courses will be moved while they are actively in use, faculty will not be able to make changes to inactive courses while they are being moved. These down times have been schedule well beyond the beginning and end of an academic quarter in order to minimize impact. Any changes made during the “freeze periods” will not be reflected in the Blackboard cloud. Extensive communication will be made to the campus community via e-mail and the ITS website to keep our stakeholders informed.

Key Milestones

<table>
<thead>
<tr>
<th>Date</th>
<th>System Changes</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mar 2014</td>
<td>President Cabinet approved funding for moving Blackboard to the cloud</td>
<td></td>
</tr>
<tr>
<td>Apr 16, 2014</td>
<td>IT Governance Executive Committee approval</td>
<td></td>
</tr>
<tr>
<td>May 9, 2014</td>
<td>Contract with Blackboard Managed Hosting approved and signed by Chancellor’s Office</td>
<td></td>
</tr>
<tr>
<td>Jul 7, 2014</td>
<td>Fall 2014 (Batch 1) courses “go live” on Blackboard-hosted server</td>
<td></td>
</tr>
<tr>
<td>Jul 24, 2014</td>
<td>Spring 2014 and older courses (Batch 2) “go live” on Blackboard-hosted server</td>
<td></td>
</tr>
<tr>
<td>Oct 24, 2014</td>
<td>All courses (Batch 3) “go live” on Blackboard-hosted server</td>
<td></td>
</tr>
</tbody>
</table>

Impact to users

<table>
<thead>
<tr>
<th>Date</th>
<th>System Changes</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jun 30, 2014</td>
<td>Enabling CAS Single Sign On (SSO) on current CSUSB-hosted Blackboard server during the weekly Monday 2am-6am maintenance window.</td>
<td>Login screen will appear slightly different to users, allowing the system to utilize SSO to pass token from one system to another. Impact: Minimal</td>
</tr>
<tr>
<td>Jul 2-7, 2014</td>
<td>Fall 2014 courses will be “frozen” as we need to archive and export all Fall 2014 courses. After July 7, all Fall 2014 courses will be live on the cloud-based Blackboard-hosted server.</td>
<td>Faculty members (15) teaching Fall 2014 courses and already have a Blackboard course will be unable to make any changes during the long weekend while their courses are being moved into the cloud.</td>
</tr>
</tbody>
</table>
Impact: Minimal

Jul 21-24, 2014  Blackboard to import all inactive courses (Spring 2014 and older) into the Blackboard-hosted server. Faculty will not be able to make any changes to these inactive courses.

Impact: Minimal

Oct 21-24  Blackboard to import remaining courses (Summer 2014) into the Blackboard-hosted server. During this period, Summer 2014 courses will be unavailable.

Project Detail

Phase 1 – Setup and Testing

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jun 5</td>
<td>Kick-off meeting</td>
</tr>
<tr>
<td>Jun 5-12</td>
<td>Blackboard will begin setting up CSUSB managed hosting site</td>
</tr>
<tr>
<td>Jun 12</td>
<td>CSUSB will provide Blackboard with building block</td>
</tr>
<tr>
<td>Jun 13</td>
<td>CSUSB will provide Blackboard with SSL certificate</td>
</tr>
<tr>
<td>Jun 13</td>
<td>CSUSB to provide Blackboard with several test course to load onto managed hosting environment</td>
</tr>
<tr>
<td>Jun 18</td>
<td>Blackboard to provide CSUSB credentials to customize managed hosting environment</td>
</tr>
<tr>
<td>Jun 18-30</td>
<td>CSUSB to configure managed hosting environment, test SSO</td>
</tr>
<tr>
<td>Jun 30</td>
<td>CSUSB will enable CAS on current self-hosting environment</td>
</tr>
</tbody>
</table>

Phase 2 – Migration of Inactive Courses

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jul 2</td>
<td>Freeze date for all Fall 2014 courses. CSUSB will batch archive Fall 2014 and deliver (SFTP or overnight) batch file to Blackboard</td>
</tr>
<tr>
<td>Jul 3-6</td>
<td>Blackboard to load Batch 2 (Fall 2014) courses on managed hosting environment</td>
</tr>
<tr>
<td>Jul 7</td>
<td>Fall 2014 courses go live on managed hosting environment</td>
</tr>
<tr>
<td>Jul 7-18</td>
<td>CSUSB will test Fall 2014 courses</td>
</tr>
<tr>
<td>Date</td>
<td>Event</td>
</tr>
<tr>
<td>----------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>Jul 21</td>
<td>CSUSB to provide Blackboard with Batch 2 courses to load into managed hosting environment</td>
</tr>
<tr>
<td>Jul 24</td>
<td>Blackboard to complete importing Batch 2 courses</td>
</tr>
<tr>
<td>Jul 24</td>
<td>All courses other than Summer 2014 live on managed hosting environment</td>
</tr>
<tr>
<td>Jul – Aug</td>
<td>CSUSB to test migrated course, functionality, SIS integration</td>
</tr>
</tbody>
</table>

**Phase 3 – Migration of Remaining Courses**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct 20</td>
<td>Freeze date/shut down of self-hosted Blackboard. CSUSB will batch archive remaining courses (Summer 2014) and deliver (SFTP or overnight) batch file to Blackboard</td>
</tr>
<tr>
<td>Oct 21-24</td>
<td>Blackboard to load remaining courses (Summer 2014) onto managed hosting environment</td>
</tr>
<tr>
<td>Oct 24</td>
<td>All courses fully live on managed hosted environment</td>
</tr>
<tr>
<td>Oct 24</td>
<td>Redirect URL from <a href="http://blackboard.csusb.edu">http://blackboard.csusb.edu</a> to <a href="http://csusb.blackboard.com">http://csusb.blackboard.com</a></td>
</tr>
</tbody>
</table>
## CSU San Bernardino CNI ALU Refresh Project - High-Level Timeline

<table>
<thead>
<tr>
<th>PROGRAM MILESTONES</th>
<th>Duration (days)</th>
<th>Planned Dates</th>
<th>Owner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kickoff Meeting</td>
<td></td>
<td>Apr 4-Complete</td>
<td></td>
</tr>
<tr>
<td>Whiteboard Session</td>
<td></td>
<td>May 5-Complete</td>
<td></td>
</tr>
<tr>
<td>BOM Approved</td>
<td></td>
<td>Apr 7-Complete</td>
<td></td>
</tr>
<tr>
<td>MAO Approved</td>
<td></td>
<td>Apr 8-Complete</td>
<td></td>
</tr>
<tr>
<td>SOW Approved</td>
<td></td>
<td>Apr 21-Complete</td>
<td></td>
</tr>
<tr>
<td>PMA Approved</td>
<td></td>
<td>Apr 21-Complete</td>
<td></td>
</tr>
<tr>
<td>Network Health Check</td>
<td></td>
<td>May 21-Complete</td>
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</tr>
<tr>
<td>Equipment Deliveries</td>
<td>13</td>
<td>Jun 2-Jun 30 (85%)</td>
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### CORE

<table>
<thead>
<tr>
<th>Program Milestone</th>
<th>Duration (days)</th>
<th>Planned Dates</th>
<th>Owner</th>
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</thead>
<tbody>
<tr>
<td>Core Config Development (less SRX)</td>
<td>15</td>
<td>May 27-Jun 16-Complete</td>
<td>William</td>
</tr>
<tr>
<td>Core Config - Review/Approval</td>
<td>4</td>
<td>Jun 17-Jun 20</td>
<td>Campus</td>
</tr>
<tr>
<td>Core Installation</td>
<td>5</td>
<td>Jun 23-Jun 27</td>
<td>William</td>
</tr>
<tr>
<td>Finalize Core Configs with Link-agg</td>
<td>5</td>
<td>Jul 28 - Aug 1</td>
<td>William</td>
</tr>
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</table>

### ACCESS LAYER

<table>
<thead>
<tr>
<th>Program Milestone</th>
<th>Duration (days)</th>
<th>Planned Dates</th>
<th>Owner</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Skeleton Config&quot; and TR deployment Planning</td>
<td>5</td>
<td>Jun 10-Jun 16-Complete</td>
<td>Mike</td>
</tr>
<tr>
<td>Access Layer Config Template Development</td>
<td>7</td>
<td>Jun 17-Jun 25</td>
<td>Mike</td>
</tr>
<tr>
<td>Access Layer Template Review/Approval</td>
<td>3</td>
<td>Jun 26-Jun 30</td>
<td>Campus</td>
</tr>
<tr>
<td>Access Layer Config Development</td>
<td>15</td>
<td>Jul 1-Jul 22</td>
<td>Mike</td>
</tr>
<tr>
<td>Access Layer Config Campus Review/Approval</td>
<td>3</td>
<td>Jul 23-Jul 25</td>
<td>Campus</td>
</tr>
<tr>
<td>Access Layer &quot;Skeleton Config&quot; Installed (Rack-Stack)</td>
<td>21</td>
<td>Jun 30-Jul 29</td>
<td>Mike</td>
</tr>
<tr>
<td>Access Layer Installation (OmniVista Push)</td>
<td>2</td>
<td>Jul 30-Jul 31</td>
<td>Mike</td>
</tr>
<tr>
<td>Access Layer Pilot Migration</td>
<td>2</td>
<td>Aug 1-Aug 4</td>
<td>Mike,William</td>
</tr>
<tr>
<td>Access Layer Migration</td>
<td>12</td>
<td>Aug 5-Aug 20</td>
<td>Mike,William</td>
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### BORDER FIREWALL

<table>
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<tr>
<th>Program Milestone</th>
<th>Duration (days)</th>
<th>Planned Dates</th>
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</thead>
<tbody>
<tr>
<td>Border Configuration Analysis</td>
<td>3</td>
<td>Jul 7-Jul 9</td>
<td>Juniper, Brian</td>
</tr>
<tr>
<td>Border Firewall, Config Development (SRX)</td>
<td>4</td>
<td>Jul 10-Jul 15</td>
<td>Juniper</td>
</tr>
<tr>
<td>Border Firewall Config Review/Approval</td>
<td>3</td>
<td>Jul 16-Jul 18</td>
<td>Campus</td>
</tr>
<tr>
<td>Border Firewall Migration</td>
<td>2</td>
<td>Jul 21-Jul 22</td>
<td>Juniper</td>
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### BORDER ROUTER

<table>
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<tr>
<th>Program Milestone</th>
<th>Duration (days)</th>
<th>Planned Dates</th>
<th>Owner</th>
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</thead>
<tbody>
<tr>
<td>Border Router Config Development</td>
<td>7</td>
<td>Aug 1-Aug 11</td>
<td>Brian</td>
</tr>
<tr>
<td>Border Router Config Review/Approval</td>
<td>3</td>
<td>Aug 12-Aug 14</td>
<td>Campus</td>
</tr>
<tr>
<td>Border Router Installation &amp; Base Configuration T&amp;A</td>
<td>2</td>
<td>Aug 15-Aug 18</td>
<td>Brian</td>
</tr>
<tr>
<td>Border Router Migration</td>
<td>2</td>
<td>Aug 19-Aug 20</td>
<td>Juniper, Brian</td>
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### WIRELESS CORES

<table>
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<th>Duration (days)</th>
<th>Planned Dates</th>
<th>Owner</th>
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</thead>
<tbody>
<tr>
<td>Wireless Existing Analysis</td>
<td>5</td>
<td>Aug 21-Aug 27</td>
<td>Mike</td>
</tr>
<tr>
<td>Task</td>
<td>Start</td>
<td>End</td>
<td>Owner</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>---------</td>
<td>-----------</td>
<td>-------------</td>
</tr>
<tr>
<td>Wireless Existing Analysis Review/Approval</td>
<td>1</td>
<td>Aug 28</td>
<td>Campus</td>
</tr>
<tr>
<td>Wireless Core Config Development</td>
<td>5</td>
<td>Aug 29-Sep 5</td>
<td>Mike</td>
</tr>
<tr>
<td>Wireless Core Config Review/Approval</td>
<td>1</td>
<td>Sept 8</td>
<td>Campus</td>
</tr>
<tr>
<td>Wireless Core Installation &amp; Base Configuration T&amp;A</td>
<td>2</td>
<td>Sept 9-Sep 10</td>
<td>Mike</td>
</tr>
<tr>
<td>Wireless Core Migration</td>
<td>1</td>
<td>Sept 11</td>
<td>Mike</td>
</tr>
<tr>
<td><strong>SERVER FARM</strong></td>
<td></td>
<td>Jul 7-Aug 25</td>
<td></td>
</tr>
<tr>
<td>Server Farm Existing Analysis</td>
<td>15</td>
<td>Jul 7-Jul 25</td>
<td>William</td>
</tr>
<tr>
<td>Server Farm Config Development</td>
<td>10</td>
<td>Aug 4-Aug 15</td>
<td>William</td>
</tr>
<tr>
<td>Server Farm Config Review/Approval</td>
<td>2</td>
<td>Aug 18-Aug 19</td>
<td>Campus</td>
</tr>
<tr>
<td>Server Farm Installation &amp; Base Configuration T&amp;A</td>
<td>2</td>
<td>Jul 30-Jul 31</td>
<td>William</td>
</tr>
<tr>
<td>Server Farm Migration</td>
<td>4</td>
<td>Aug 20-Aug 25</td>
<td>William</td>
</tr>
<tr>
<td><strong>Palm Desert Campus (PDC)</strong></td>
<td></td>
<td>Sept 8-Oct 7</td>
<td></td>
</tr>
<tr>
<td>Core Configuration Development</td>
<td>10</td>
<td>Sept 8-Sept 19</td>
<td>William</td>
</tr>
<tr>
<td>Core Config. Review / Approval</td>
<td>1</td>
<td>Sept 22</td>
<td>Campus</td>
</tr>
<tr>
<td>Core Installation (Stand alone)</td>
<td>2</td>
<td>Sept 23-Sept 24</td>
<td>William</td>
</tr>
<tr>
<td>Core Migration</td>
<td>1</td>
<td>Oct 6</td>
<td></td>
</tr>
<tr>
<td>Access Layer Config Template Upd for PDC</td>
<td>1</td>
<td>Sept 22</td>
<td>William</td>
</tr>
<tr>
<td>Access Layer Template Review/Approval</td>
<td>1</td>
<td>Sept 23</td>
<td>Campus</td>
</tr>
<tr>
<td>Access Layer Config Development</td>
<td>2</td>
<td>Sept 24-Sept 25</td>
<td>William</td>
</tr>
<tr>
<td>Access Layer Config Campus Review/Approval</td>
<td>1</td>
<td>Sept 26</td>
<td>Campus</td>
</tr>
<tr>
<td>Access Layer Installed (rack/stack) (6 closets)</td>
<td>1</td>
<td>Sept 29</td>
<td>William</td>
</tr>
<tr>
<td>Core &amp; Access Layer Migration (6 closets)</td>
<td>1</td>
<td>Oct 6</td>
<td>William</td>
</tr>
<tr>
<td>Final PDC Test and Acceptance</td>
<td>1</td>
<td>Oct 7</td>
<td>William,Campus</td>
</tr>
<tr>
<td>PDC Complete</td>
<td>0</td>
<td>Oct 7</td>
<td></td>
</tr>
<tr>
<td><strong>CLOSE-OUT</strong></td>
<td></td>
<td>Oct 7-Nov 4</td>
<td></td>
</tr>
<tr>
<td>Final Test &amp; Acceptance</td>
<td>1</td>
<td>Oct 8</td>
<td>William,Campus</td>
</tr>
<tr>
<td>Administrative Closeout</td>
<td></td>
<td>Oct 7-Nov 3</td>
<td>PM</td>
</tr>
<tr>
<td>Project Closeout</td>
<td></td>
<td>Nov 4</td>
<td>PM</td>
</tr>
</tbody>
</table>
Appendix H - Management Action Plan -
Identity Management System

Introduction

The provisioning and deprovisioning of user accounts to information systems, as well as providing authentication services is performed through the Identity Management System (IdMS). CSUSB deployed its first IdMS in 2005 using the Sun/Oracle Identity Management software. This software currently creates accounts in Google, populates authentication systems, such as the campus Active Directory, in support of access to the wireless network, MyCoyote portal, smart classrooms, computer labs across the campus, Blackboard, Exchange, and campus web applications. In addition, the campus IdMS also provides the information necessary to support federated services, such as access to Connexxus (travel system) and many other cloud services. The IdMS is one of the most critical and essential system needed to provide users with access to computer systems and applications. The current Sun/Oracle Identity Management software will not longer be supported by the vendor after 2014. That is, the existing software version will be at its end of life by the end of the Summer-2014

Challenge(s):

● Timely evaluation and selection of the appropriate IdMS software
● Deployment of a new IdMS and migration of existing services with minimum impact to campus users.

Alternatives:

Possible alternatives are the following:

● Deploy an open source IdMS
● Deploy a vendor supported IdMS

Impact(s) if we do nothing: Termination of vendor support will have the following adverse effect:

● Availability of security and application patches for the correction of vulnerabilities and software bugs.
● Timely provisioning and deprovisioning of services as new technologies and software upgrades of other applications take place
● End user self-service functions such as password resets.
● Current automated process may no longer be supported.

Recommendation:

● Conduct evaluation and selection of alternative IdMS software during the Fall-2013 and Winter-2014
● Deploy development environment during Spring-2014.
● Migration and replacement of the existing IdMS during the Summer-2014

Cost: $$ (One time or recurring):

● Software and Licensing: varies between vendors from about $40,000 up to $200,000
● Professional services and training: $10,000 to $20,000
● Maintenance: 20% of software cost
● Hardware: No cost if use the campus virtual environment, otherwise $20,000 - $30,000

65
• Staff: Operating systems analysts for implementation and providing future support and maintenance: 1.5 to 2.00 FTE

Rationale:

A new IdMS is necessary for providing reliable, robust, flexible and timely provisioning and authentication services for end users to access computer systems and applications. eServices have and will continue to expand within our campus network and the larger CSU network of services and an improved, user friendly provisioning solution for both our on campus customers as well as those utilizing our delivery of services remotely will enable us to better serve our Students, Faculty and Staff with secure, reliable and effective connectivity.

Assessment Plan and Key Performance Indicators (KPI):

• Improved services measured by reduction of time in provisioning and access to systems and application;
• Increase self-service options and end user satisfactions
• Increase compliance with applicable CSU access controls policy and standards.
Appendix I - Management Action Plan – Office 365

Introduction

CSUSB’s e-mail system has evolved over the years from a Sun Microsystems based system to a Microsoft Exchange environment. The migration to MS Exchange started last year and is expected to be completed by the end of this year. The Campus community has been supportive of the move to Exchange but for some exceptions. The student e-mail system which was also housed in our Sun Microsystems environment was successfully migrated to the Google cloud in 2012.

Challenge(s):
The cost and manpower required to maintain the current system is on the rise with the volume of e-mails that go through the system on a daily basis – approximately 77,500

1. Lack of parameters governing the use of our e-mail system has caused the volume of e-mails and size of attachments to grow exponentially high.

Alternatives:
Continue to maintain the Exchange Server in house and incur the cost of software licensing, hardware maintenance and personnel costs ($50,000/year)

1. Migrate to Microsoft hosted Office 365

Impact(s) if we do nothing:
We will need to make significant ongoing investments on our hardware systems and data center.

Recommendations:
Implement e-mail parameters and quota on mailbox size

1. Partner with a consulting firm and migrate e-mail accounts to Office 365

Cost: $$ (One time or recurring): $100,000/$10,000

Rationale: Office 365, in addition to offering free hosting of e-mails offers the Online Microsoft Office Suite, 25 GB of cloud based storage, IM & Presence, Sharepoint Online Collaboration, and conferencing.

Assessment Plan and Key Performance Indicators (KPI): 1. Reduced cost as measured by total ITS spending 2. Faculty/Staff satisfaction and enhanced tools for collaboration.
Appendix J - Management Action Plan - Workflow Management

Introduction

At the end of the summer of 2011, Provost Bodman established a Document Management System task force to explore the possibility of implementing a document management system (DMS) at CSUSB. In December 2012, the taskforce recommended that CSUSB implement a campus-wide integrated DMS. Due to the impending research from the Chancellor’s Office to add a document management component to the CHRS system at that time, the decision to move forward with the recommendation was put on hold. The CO has subsequently dropped the document management discussion.

Challenge(s):
The current document management system, Singularity, is at end of life, was acquired by OnBase and will require a conversion process. OnBase has indicated that they have developed a conversion tool that will allow CSUSB to migrate seamlessly into the new system. Without further investigation, it would not be possible to determine whether OnBase is the right solution for the current needs of CSUSB.

Alternatives:
Continue to pay high maintenance ($25,000/Year) for the Hershey system and risk data loss

1. Migrate to OnBase ($72,800 and $26,400 yearly)
2. Investigate a workflow management system (WFMS) for the University

Impact(s) if we do nothing: Secure document access has become an issue for different departments within the University. Further, the current software does not allow form creation and storage of data collected from forms, resulting in forms and databases being created by divisions and departments across the institution. The cost of creation and maintenance of institution wide data and ensuring their security and privacy have become issues.

Recommendation: A request for proposal (RFP) process be initiated and a task force be formed to bring a recommendation to the IT Governance Executive Committee by January 2014.

Cost: $$ (One time or recurring): Approximately $200,000/$20,000

Rationale: A modern workflow management system will allow CSUSB to enhance information accessibility, promote organized collaboration and secure content in all its forms. These functions are essential as CSUSB seeks to improve efficiency, share knowledge and reduce risk

Assessment Plan and Key Performance Indicators (KPI): Improved efficiency (as measured by end user satisfaction) and reduced costs – budget impacts.
Appendix K - Management Action Plan- Technology Upgrade Proposal
Palm Desert Campus

Introduction

The Palm Desert Campus of CSUSB is an important part of the success of the University. Technology systems and processes at the PDC have not been necessarily kept up to date in the past several years. The goal is to bring PDC up to par with the San Bernardino campus so that students at the PDC enjoy the same level of technology systems and support as students at San Bernardino.

Challenge(s)

1. The IT Team at PDC does not have a reporting relationship to the Central ITS Team at San Bernardino
2. Personnel issues at the PDC has kept the IT Team at PDC from working together to serve the needs of the students, faculty and staff at PDC
3. Funds were not prioritized towards upgrading and replacing obsolete and aging equipment and software at the PDC
4. Distance Learning systems are aged and are experiencing compatibility issues at a time when enrollment and demand for distance learning classes are increasing

Alternatives

1. Continue to work with the PDC IT Team and improve technology systems and processes
2. Revamp IT Services at PDC:
   a. Hire a new leader with dual reporting relationship to provide hands on leadership and support to the PDC IT Team
   b. Invest in the upgrade of distance learning systems, technology equipment and software at the PDC

Impact(s) if we do nothing:

The PDC Campus will continue to operate in a mediocre fashion creating an equity issue for students, faculty and staff as well as being ill prepared for the enrollment growth at PDC

Recommendations:

1. Hire an Asst. Director of Technology to provide hands on leadership and support to all areas of technology at the PDC
2. Eliminate the ½ time technology support person (Currently they have 4.5 FTE’s supporting technology at PDC)
3. Invest $175,000 in upgrading distance learning equipment that are older than 2009

Cost: $$ (One time or recurring): $175,000/$75,000 – 1 FTE

Rationale

Growing enrollment and deferred upgrades at the PDC has caused unequitable and incompatible technology systems and processes at the PDC. It is important for CSUSB to invest in student success at the PDC by creating a technology rich environment that will enable students at PDC to succeed.

Assessment Plan and Key Performance Indicators (KPI):

Student, Faculty and Staff Surveys

Student Retention and 6 year graduation rates

# of courses/programs offered at the PDC

March 05, 2013
Appendix L - Cellular Phone Managed Plan

Recommendation

Introduction

CSUSB has 154 mobile devices currently managed by IT Services. The annual spending for cellular services for the University is approximately $90k ($88,019 for FY1213). The 154 devices are spread over three carriers: Verizon (107), Sprint (31), and AT&T (16). There are significant savings if we move towards a one-carrier and per-minute plan for low-usage users.

Challenges:

1. Time and Resources spent on managing cell phone plans for different individuals with different plans and devices
2. Wastage of minutes which translates in higher dollar amounts

Alternatives

1. Continue to use our current approach and stay with multiple carriers/plans
2. Standardize carriers and move into a managed plan approach
3. Issue stipends to employees and have employees manage their own

Details

A standardized cellular carrier for all University-provided cellular lines will help the University lower costs, and allow ITS to manage resources more effectively. It is proposed that low-usage users be moved into a per-minute (6¢/min) plan, while keeping high-usage users in their existing plan. The estimated savings to the University is 22% ($1642.41/month, or $19,708.92/year). The following is the cost-saving analysis by division, based on the last 3 months of minute usage. All cellular lines will continue to have an unlimited data plan.

<table>
<thead>
<tr>
<th>Division</th>
<th>3-mo. Avg* (Current)</th>
<th>Proposed * (Based on 3-mo. avg usage)</th>
<th>Savings*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Affairs (38)</td>
<td>$1,571.59</td>
<td>$1,162.52</td>
<td>$409.07</td>
</tr>
<tr>
<td>Administration (60)</td>
<td>$2,199.26</td>
<td>$1,585.32</td>
<td>$613.94</td>
</tr>
<tr>
<td>IT Services (36)</td>
<td>$1,858.10</td>
<td>$1,321.27</td>
<td>$536.83</td>
</tr>
<tr>
<td>President’s Office (8)</td>
<td>$367.41</td>
<td>$362.41</td>
<td>$5.00</td>
</tr>
<tr>
<td>Student Affairs (6)</td>
<td>$222.80</td>
<td>$184.79</td>
<td>$38.01</td>
</tr>
<tr>
<td>University Affairs (6)</td>
<td>$248.47</td>
<td>$208.91</td>
<td>$39.56</td>
</tr>
<tr>
<td><strong>Campus wide</strong></td>
<td><strong>$6,467.63</strong></td>
<td><strong>$4,825.22</strong></td>
<td><strong>$1,642.41</strong></td>
</tr>
</tbody>
</table>
*per month

**Possible Downsides:**

1. Devices from other carriers (Sprint and AT&T) are not compatible with Verizon. New in-kind replacement for these devices will incur a one-time upfront cost. (The cost is still being assessed.) However, this cost can be offset by device buy-back with the existing carriers.
2. Although Verizon has the most comprehensive cellular network, certain users may have poor coverage at certain locations.
3. Users who travel internationally may need to have a world-phone to utilize GSM network that is typically available outside of the US.

**Impact(s) if we do noting:**

CSUSB can continue to operate under the current cellular account model, however, this is not the best use of resources for campus. Moreover, cellphones are a benefit that the University is providing employees with no tax burden. Savings from cellular usage can offset any administrative costs of managing cellular accounts centrally as well as address IRS tax concerns that might arise in the future.

**Recommendation**

1. Pilot the standardization within IT Services (36 devices) to assess cost savings and ROI for moving into the one-carrier approach. Potential savings for ITS is $536.83/month, or $6441.96/year.
2. Roll this out to the entire University
3. Move to a stipend based plan

**Rationale**

Given the increasing costs of cellphones and plans and escalating administration costs, the University needs to reevaluate its employee cell phone plans.

**Assessment Plan (KPI):**

1. Reduced Costs
2. Reassignment of Personnel
Appendix M - Information Technology Services
Update – June 2014

Dear Campus Community,

Your Information Technology Services Team is working hard this summer to enhance the services we provide to our students, faculty and staff. Below are some of the projects our team is working on. These projects are being pursued around the academic calendar with minimal planned downtimes to University operations. Planned downtimes will be communicated well in advance to the Campus Community.

**Comprehensive Network Upgrade:** The ITS Team is working with the Chancellor’s Office in a comprehensive upgrade of our wired network. This upgrade will significantly improve connectivity and response times for network and server resources. This project is scheduled to be completed by mid-September 2014. A comprehensive wireless network upgrade will begin over the summer and will be upgraded in phases over the next several months, offering wider and denser wireless coverage throughout the campus.

**Upgraded Connectivity to the Internet:** Our redundant 1GB connectivity circuits to the Internet will be upgraded to redundant 10 GB circuits through CENIC. The first 10 GB circuit will be installed on July 11th. The Second 10 GB circuit will be installed on or about August 29th. These new circuits will provide significant performance increase for resources internal and external to the campus. These new circuits will allow us to do significantly more work with the research computing networks through XSEDE and Internet2.

**Office 365 Migration:** All the mailboxes in our current Microsoft Exchange environment will be moved to Office 365 on the Microsoft cloud. In addition to providing better performance on the mail processes, Office 365 provides a wide range of services for faculty and staff including: web conferencing, 25 GB of OneDrive file storage (soon to be 1 TB), spam and malware protection, Office Web App, audio calling using Lync-to-phone. This project will be rolled out in phases beginning July 2014 and into the Fall 2014 quarter.

**Blackboard Hosting:** Our Blackboard Learning Management System will be moved to managed hosting through Blackboard. The hosted environment will ensure that Blackboard runs optimally, is at the current version and is always available for the Campus Community. The migration will be pursued in stages starting in July and ending in October with minimal planned downtimes.
Identity Management System (IDMS): The Campus Community will be migrated to a new IDMS, which will offer superior identity management and security features and allow the ITS team to commission and decommission accounts more efficiently. This project is scheduled to be completed by the end of September.

Education Advisory Board – Student Success Collaborative: The ITS Team is working with different teams of stakeholders across the campus to implement the EAB SSC Predictive Analytics tool that will aid advisors, faculty, and staff to provide proactive advising services to our students. This tool will be piloted by the College of Business and Public Administration, the College of Natural Sciences and the EOP offices in Fall 2014 with a go live date of Spring 2015.

New MyCoyote Portal: All internal-facing authenticated resources will be faced behind the MyCoyote portal allowing students, faculty and staff to access all their resources with a single sign on authentication. In addition, users will have the choice to login with their usernames or the Coyote ID. This project is scheduled to be completed by the end of August 2014.

Web Migration: The Web Team at ITS is working with the University Advancement Team in the comprehensive redesign and migration of the University Advancement website. The new website is being created using the Drupal content management system and is hosted on the Pantheon One Cloud. Following this migration, the entire University web presence will be redesigned and moved into Drupal and Pantheon One in stages over the next 18 months.

Enterprise Workflow Management System: The University has partnered with Hyland Software to upgrade our current Hershey’s document management system to OnBase workflow management system. The first phase of the project which will start in the end of July will upgrade and consolidate our current Hershey’s databases. The second phase of the project will add workflow and automate many of our manual and form-based processes. The third phase will address procurement processes.

Enterprise Data Warehouse Project: The goal of this project is to provide a single source of current, reliable and accurate data access for the campus community for institutional intelligence driven decision making. We are at the preliminary phases of this project working with consultants from Illuminomics. This is an 18-month project.
Appendix N - Information Technology Services Update – June 2014 – Palm Desert Campus

Dear Campus Community,

Your Information Technology Services Team is working hard this summer to enhance the services we provide to our students, faculty and staff at the PDC. Significant investments are being made at the PDC Campus to ensure that students, faculty and staff at the PDC enjoy access to the same standards of technology as the San Bernardino Campus. Below are some of the projects our team is working on at the PDC. These projects are being pursued around the academic calendar with minimal planned downtimes to University operations. Planned downtimes will be communicated well in advance to the PDC Community.

1. **Comprehensive Network Upgrade**: The ITS Team is working with the Chancellor’s Office in a comprehensive upgrade of our wired network. This upgrade will significantly improve connectivity and response times for network and server resources. This project is scheduled be completed by mid-October 2014. A comprehensive wireless network upgrade will begin over the summer and will be upgraded in phases over the next several months, offering wider and denser wireless coverage throughout the campus.

2. **Upgraded Connectivity to the Internet**: PDC will be connected to a redundant CENIC circuit to the Internet by the end of July 2014. This will ensure uninterrupted connectivity at the PDC in the event of a circuit failure.

3. **Computer Upgrades**: Most of the computer classrooms and labs at the PDC and the Library will receive new computers in the next couple of weeks. In addition all the faculty/staff PC’s at the PDC will be upgraded. Smart classrooms throughout the PDC will also be upgraded as needed.

4. **Asst. Director of Technology Services**: A new Assistant Director of Technology Services has been appointed at the PDC to provide leadership to all aspects of technology operations and customer support.

5. **Distance Learning Systems Upgrade**: The ITS Team will be working with the faculty and staff at the PDC to upgrade all the distance learning systems this summer.