

UC DAVIS REPORT TO THE INFORMATION TECHNOLOGY LEADERSHIP COUNCIL  
May 24-25, 2005

**New Interim Vice Provost-IET.** On April 15, following John Bruno's decision to step down and return to teaching and research, Peter Yellowlees was named Interim Vice Provost-Information and Educational Technology. Dr. Yellowlees, Professor of Psychiatry and Director of Academic Information Systems at the UC Davis Health System, is an international expert in telemedicine and the long-distance electronic delivery of health care and education. He will serve in this position while a national search is conducted for a permanent vice provost. In his first few weeks, Dr. Yellowlees has laid out a preliminary roadmap for IT priorities at UC Davis. The roadmap focuses on three main themes: establishing a more standardized approach to information technology infrastructure, driving the campus' educational technology program, and supporting the campus' research mission (see [vpviet.ucdavis.edu](http://vpviet.ucdavis.edu)).

## I. CAMPUSWIDE TECHNOLOGY HIGHLIGHTS

**UC Davis Sakai Implementation.** Under the guidance of the UC Davis Sakai Oversight Committee, chaired by Dr. Yellowlees, UC Davis is preparing for the launch of several Sakai pilot implementations over the next few months. The project team, composed of representatives from the School of Veterinary Medicine, the School of Medicine, and IET, expects to roll out a production version of Sakai for the School of Medicine this fall and a pilot version for Veterinary Medicine next spring. The third pilot, including quiz and assessment modules, will be conducted by IET this fall with select faculty. In addition, IET is working to integrate authentication and authorization capabilities into the local version of Sakai. In parallel efforts, a subcommittee of the Campus Council for Information Technology is preparing migration and functional recommendations to guide the implementation of the next generation of course management tools at UC Davis. Included in this effort are consultations (held jointly with the UC Davis technical team) with other campuses (e.g., Indiana University, Stanford, and UC Berkeley). The recommendations are expected to be ready by mid-June.

**Faculty Merit and Promotion.** The Faculty Merit and Promotion project, led by Academic Personnel with support from IET, is gaining momentum. The feedback from the pilot (involving forty-five campus departments) has been very positive, and several other units have already expressed interest in joining this effort. The MyInfoVault application was originally developed by the Center for Health and Technology in the School of Medicine, with the goals of simplifying the assembly and review of faculty merit and promotion portfolios and building a repository capable of supporting the re-use of the data (e.g., for grant applications, curriculum vitae). The pilot, designed to evaluate the possible campuswide implementation of MyInfoVault, focuses on four types of actions: re-delegated merit actions, building packets, curriculum vitae, and use of the NIH BioSketch form. Recent statistics indicate a high level of usage (e.g., over 330 administrative/clerical accounts and 1220 faculty records had been created as of early March, and 53000 publications had been entered into the system). The next big milestone for the campus pilot will come in July when a go/no go decision for a broader campus deployment will be made (see <http://media.ucdavis.edu:8080/ramgen/IET/MyInfoVault.rm>).

**Electronic Research Administration.** A contract has been signed with InfoEd International Inc. InfoEd was selected to provide a system that will enable the electronic submission, review, approval, and tracking of research grant proposals. This initiative has been conceived and organized as a multi-stage project, with new systems and processes being implemented at phased intervals based upon the three InfoEd contract and grant modules: Proposal Tracking (01/06), Proposal Development (07), and Project Management (08). Implementation has begun on the first phase, which will replace the existing campus Contracts and Grants database.

**PeopleAdmin.** The campus recently purchased PeopleAdmin to meet specific needs in the areas of recruitment, applicant tracking and position descriptions. PeopleAdmin includes online application submittal, tracking, screening and status notification, as well as tracking of all employment and compensation actions beginning at the position description. An Implementation Committee, consisting of Human Resources professionals and campus representatives, was formed to ensure that campus needs were adequately addressed by the PeopleAdmin application. The PeopleAdmin Oversight Committee and the IET PeopleAdmin Project Manager have completed the business analysis, with a resulting recommendation to proceed to the configuration phase. A communication plan is in development to keep the campus up-to-date on the status of the project.

**Central Exchange Service.** The Office of Administration (OOA), with support from IET, is preparing to consolidate their existing decentralized Microsoft Exchange servers into a centralized service provided through the campus Data Center. Microsoft Exchange and Outlook are the primary tools used for email and calendaring in the OOA organization, and message stores are maintained on several discreet departmental servers. With the evolution of technology and increased need for business collaboration, the strategy of discrete servers has become more difficult to manage. Facilities will be the first OOA unit to commence migration in June.

**Lifetime email forwarding service.** IET has announced plans to provide a lifetime email forwarding service for UC Davis affiliates. With this service, faculty, students, staff and other campus affiliates will have the option of retaining their "ucdavis.edu" email addresses for as long as they desire. Rather than being discontinued upon separation from the university, these addresses will remain active, and email sent to them will be automatically forwarded to another email account of their designation (typically an external Internet Service Provider, or ISP, such as Yahoo, Hotmail, AOL, etc.). The service is expected to be available by Fall Quarter.

**File sharing.** Illegal file sharing notifications at UC Davis are at their lowest levels since the 2001-2002 academic year. The lower number of incidents coincides with the increase in the lawsuits filed by the Recording Industry Association of America. As of May 1, a total of 103 DMCA notifications had been filed against the campus during 2004-2005, a marked improvement from previous years (181 in 03-04, and 392 in 02-03). 70% of the notifications received this year were for students, most of whom are freshmen living on campus. Thanks to an efficient handling process developed with Student Judicial Affairs, few users have ever garnered a second notification, a step that typically results in the permanent loss of all network privileges. The great majority (75%) of the DMCA notifications received by UC Davis are the result of illegal sharing of movies (e.g., Star Wars, Lord of the Ring) and television shows (e.g., The Simpsons). In addition, according to the NACUA listserv, several campuses have received notices from the RIAA but were never issued subpoenas. UC Davis received two such notices (12/04 and 01/05) to identify users who had infringed musical recordings on campus networks. Although UC Davis prepared for this, the campus has yet to receive the subpoenas.

**Online Grade Submission.** Winter 05 marked the second consecutive quarter for the electronic submission of final grades. Based on feedback from instructors, representatives from the Office of the Registrar, the Teaching Resources Center, and IET developed new features for the online grading application (e.g., providing the ability to combine all course sections into one grade sheet, enhancing the system's email notification capabilities, and ensuring different types of spreadsheets could be uploaded). While these enhancements were generally well received, several other improvements suggested by faculty are planned (e.g., ability to use the Registrar's roster as the final grade sheet, and improving the final grade submission process within MyUCDavis' Gradebook). These enhancements will be available by Fall 2005.

**Faculty IT Needs Assessment Survey.** In April, the Chairs of the Academic Senate and Academic Federation issued a memo to all UC Davis instructors announcing the launch of the UC Davis Faculty Survey of Instructional Technology Use. This survey, developed by the Educational Technology subcommittee of the Campus Council for Information Technology, was designed to determine and address the technology needs and priorities of faculty teaching at UC Davis. Topics ranged from faculty's instructional use of the internet to educational technology resources, classroom presentation resources, as well as barriers and incentives affecting faculty's use of educational technology tools. A summary of the survey results will be available in June.

## II. COMPUTER AND NETWORK SECURITY HIGHLIGHTS

**New Cyber-Safety Program.** In April, an important new security policy named "the Cyber-Safety Program" was adopted. The policy defines both responsibilities and fourteen key practices for assuring the integrity, availability and confidentiality of UC Davis computing systems and electronic data. The program also requires annual reporting of campus units' progress towards implementing the recommended security measures. This program was discussed with various campus constituencies and has been broadly publicized. (See [security.ucdavis.edu/cybersafety.cfm](http://security.ucdavis.edu/cybersafety.cfm))

**Firewall Services.** Earlier this month, the campus signed a contract with Netscreen to provide a range of firewall solutions to campus departments. IET will offer four firewall service level options: Complete turnkey service managed by IET, department-owned and operated service, equipment sparing service, and custom installation service (see [security.ucdavis.edu/firewalls.cfm](http://security.ucdavis.edu/firewalls.cfm)). Firewall training for campus system administrators and other technical staff is anticipated to begin in July. On-going training will be provided by IET. Additional training opportunities are being explored, including web-based training and virtual laboratories.

### Improved authentication for key services.

**Form-based Authentication for MyUCDavis, Web-based Email.** Following a successful pilot, the MyUCDavis portal and the campus Web-based email program (Geckomail) now feature a form-based authentication mechanism. The form-based authentication allows end users to authenticate to secured sites without storing user name information in the Web browser. The form-based log-in application also completes

an effective log-out from the secured site, not possible with previous Web browser authentication. The Banner team has expressed interest in using the form for SISWEB authentication, and may be the next group to implement this improved authentication method (see [xbase.ucdavis.edu/itexpress/article.cfm?art=1065](http://xbase.ucdavis.edu/itexpress/article.cfm?art=1065)).

**Secure Authentications on Campus Email Servers.** The campus' central email servers were recently re-configured to accept only secure authentications for POP and IMAP connections. The changes were implemented over a four-week period, beginning in mid-February. This phased transition allowed the campus computing help desk to provide timely support to those who needed to make changes to their email client.

**Authenticated SMTP.** IET will implement authenticated SMTP on campus email servers this summer. Once implemented, authenticated SMTP will allow individuals who are off-campus to send messages to on- and off-campus email addresses over a third-party ISP connection. Target date: June 21. (See [security.ucdavis.edu/open\\_relay.cfm](http://security.ucdavis.edu/open_relay.cfm))

**Discontinuation of Unencrypted FTP/Telnet Access.** In mid-May, as part of a continuing effort to enhance computer and network security, UC Davis discontinued insecure telnet and FTP access to the central (ISUN) servers. These protocols previously allowed unencrypted password exchanges, which could permit an unauthorized individual to capture a user's password and use it for malicious purposes. Communications have been targeted to users who have attempted to access the ISUN servers via insecure means in the last year. Secure alternatives to the insecure telnet and FTP methods were provided.

**Campus Vulnerability Scanning.** In February, two key components, VLAN scanning and a honeypot, were integrated into the campus vulnerability scanning system. Both the daily VLAN scanning component and the honeypot were transitioned from the vulnerability detection system (originally developed in Fall 2003) to the newer, more robust and updatable system. The honeypot and daily VLAN vulnerability/infection scans gather information about malicious traffic on the campus computing network and logs the information in the searchable Computer & Network Security Report database ([secalert.ucdavis.edu](http://secalert.ucdavis.edu)). Reports and email messages are generated from the database to the appropriate VLAN administrator. An intrusion detection system (IDS) is expected to be integrated into the vulnerability scanning system in early June. For more information, see [security.ucdavis.edu/vuln\\_resources.cfm](http://security.ucdavis.edu/vuln_resources.cfm).

**IT Security Symposium.** Over 200 registrants from UC Davis, other UC campuses, the Office of the President, local schools, universities and the City of Davis are expected to attend the 2005 IT Security Symposium, scheduled for June 22-24. With nearly 30 lab sessions and lectures, a prominent keynote speaker, networking opportunities and an \$85 registration fee, this year's symposium has generated a lot of interest, especially among campus technical staff. Several sessions reached enrollment capacity within the first two weeks of the registration period. The keynote address by Scott Charney, Microsoft Chief Security Strategist, will be available at [itsecuritysymposium.ucdavis.edu/](http://itsecuritysymposium.ucdavis.edu/) (June 22, 9-10:30 am).

**Enhancements to Spam Filtering Service.** Planning is underway to enhance the spam filtering service that was first implemented in May 2003. Enhancements under consideration include: temporary quarantine of high scoring messages (for messages scoring 15 points or higher); real-time black listing; and Bayesian filtering and Distributed Checksum ClearingHouse (DCC). See [security.ucdavis.edu/spam.cfm](http://security.ucdavis.edu/spam.cfm).

### III. TELECOMMUNICATIONS & NETWORKING HIGHLIGHTS

**Telecommunications Master Plan.** The engagement with Western Telecommunications Consulting is nearing completion. WTC is working with IET to develop a comprehensive inventory of all campus telephony infrastructure, including a survey of all equipment rooms and closets (over 600 buildings and 1500 telephone rooms). This information will be used to assess costs for building remodels and possible upgrades to the core network system for years to come.

**Carrier Services RFP.** An RFP is under development for Outbound Interstate, Intrastate, International, Operator Assisted, and Directory Assistance Services from campus PBX (Private Branch Exchange) and Centrex locations; Calling Card Services, Toll-Free Inbound and Outbound Services, and Teleconferencing Services. Due to recent and ongoing changes in the telecommunications environment, this RFP will enable IET to reduce its fiscal and operational costs for all carrier services provided to campus while improving the quality and reliability of those services. The RFP will be distributed to vendors in late Spring. The new services should be available in August.

**Expansion of Core Campus Cellular Coverage.** IET, in coordination with the Office of Real Estate Services, will be issuing a cellular site licensing RFP that will make campus rooftops available to cellular providers that meet the campus' licensing criteria. This RFP will mark the first time that UC Davis has opened the core campus to cellular service providers. Current cellular coverage in the core campus area is insufficient to meet the anticipated future demand by students, staff, and faculty. Since only a small share of campus cellular phone users are managed by IET, the campus determined that site licensing agreements should be negotiated with the greatest number of cellular carriers, with a focus on coverage and site license revenue generation.

**Campus Wireless Upgrades.** IET is working to roll out a number of enhancements to wireless services over the summer. Two pilot projects are underway: one to test a Bluesocket wireless gateway (with the School of Law), and the other to improve network administrator access to AP usage statistics and traffic reports through a new wireless access point management system from Airwave. Barring any major problems, both services will be rolled out this summer. In addition, a new guest access service model is being explored to alleviate the requirement for MAC address registration and to allow different types of guest access, both short and long term. Lastly, testing will begin in late summer to add departmental Virtual Local Area Networks (VLANs) to the centrally managed public wireless access points using 802.1x secure authentication. Departmental VLANs have not previously utilized the centrally-managed wireless network because the campus "public network" is not encrypted. This will enable network administrators to integrate wireless and wired access for their departmental users.

#### IV. ADMINISTRATIVE COMPUTING HIGHLIGHTS

**PPS Enhancements.** Beginning on July 1, employees accessing PPS directly through the PPS Web site will need to use their Kerberos login (as they already do when accessing PPS via the MyUCDavis Web portal). New users will still have to request access; however, once the user is approved, the notification process will be faster and password resets will soon become a thing of the past. The PPS DS team is also continuing to work on improving identity management – how to successfully match records across the campus administrative systems (Banner and PPS), the Campus Data Warehouse, the PPS Data Warehouse, and the systems they support. The ongoing effort involves the functional offices, data stewards, and technical support members from multiple units.

**Data Warehouse.** The Campus Data Warehouse was significantly enhanced with the recent addition of Undergraduate Admissions population snapshots. By Summer 2005, the design will be finalized with the Undergraduate Admissions Office, the update schedule established, and the backdated snapshots loaded and ready for use. The data snapshot schedule was finalized for the upcoming terms and has been added to the Data Admin Web site: [www.dataadmin.ucdavis.edu/snapshot/index.html](http://www.dataadmin.ucdavis.edu/snapshot/index.html). Older records have also been updated to distinguish applicants who are "first generation" college attendees from their families, and to enable the system to hold more standardized test scores.

**MyAdmissions.** The MyAdmissions Web site, launched in 2004 to allow student applicants to accept their admission to UC Davis online, has received several new technical and functional improvements. The changes include improvements in handling the business rules that drive the information available in the site (i.e., term-specific date rules to display timely information), and changes to the pages displaying important required tasks that an applicant must complete. In addition, new data access rules were successfully implemented for the admission decision process.

**Deferred Payment Plan.** This spring, a new online sign-up feature was added to the existing Registration Fee Deferred Payment Plan (RFDPP). Students can now sign up for the service, which allows students to pay their fees per an installment schedule, via SISWeb (the student self service module of Banner). Banner automatically calculates the student's current balance, application fee, and installment schedule. Student Accounting maintains and adjusts the parameters used by the service.

**Banner 7 Upgrade.** The Planning Workgroup has completed research on the major tasks involved in upgrading to Banner 7, which was released this past January. The Banner Oversight Committee has completed its review of the report, and plans to implement Banner 7 next summer (2006). A communication plan has been drafted; development and testing is scheduled to begin in late Fall 2005.