

# UC DAVIS REPORT TO THE INFORMATION TECHNOLOGY LEADERSHIP COUNCIL June-September 2003

## I. CAMPUSWIDE TECHNOLOGY HIGHLIGHTS

**STRATEGIC PLANNING FOR UC DAVIS.** The campus recently completed a strategic plan. The plan articulates a vision and mission for UC Davis and identifies strategies for achieving its three primary goals: learning, discovery, and engagement (see <http://strategicplan.ucdavis.edu>). In parallel efforts, Vice Provost Bruno is developing a strategic information technology plan for UC Davis as well as a planning document for 2003-05. This summer, Dr. Bruno met with all the deans, vice chancellors, and vice provosts to discuss this planning effort and identify their needs regarding academic and administrative technology. A draft plan is expected to be available for review and comment during the fall. The plan will then be vetted with the deans, vice chancellors, and vice provosts during the Winter Quarter.

**NEW BUSINESS ARCHITECTURE UPDATE.** At UC Davis, the New Business Architecture (NBA) Initiative is a collaborative effort involving virtually all campus organizations (<http://nba.ucdavis.edu>). Every year, the NBA team will tackle a handful of business processes which, when re-engineered, will translate into simplified processes, cost savings, and/or greater efficiencies. Many of these processes, along with training and help resources, will be made available online via MyUCDavis, the campus portal (<http://my.ucdavis.edu/>). Earlier this summer, the NBA Project Management Office started working with various campus units on the first NBA projects. These first projects are: Payroll Personnel System Control Improvements, Minor Capital Improvements, Building and Space Management, Policy and Procedures, and a new, Web-based Facilities Ordering System. More information on these projects and on the NBA Initiative is available at <http://nba.ucdavis.edu/>.

**COPYRIGHT COMMUNICATIONS.** UC Davis has put in place a multi-pronged copyright awareness campaign for students, faculty and staff. An open letter to all members of the campus community was issued on May 1 by Provost Hinshaw, Vice Provost Bruno, and Vice Chancellor Nosek (Administration). A number of articles, Web pages, and other communications have also been developed, especially for students. These include an informational newsletter that was distributed to all Summer Advising students and their parents as well as a special section on the Student Computing Guide Web site (<http://scg.ucdavis.edu/downloading.cfm>) and several articles in the *California Aggie*, the campus student newspaper. Similar efforts are underway for Fall Quarter. In particular, the campus will be issuing an updated version of the open letter to all students, staff, and faculty. Since last Spring, when the open letter was first issued, the number of DMCA notifications the campus has received has remained low (24 for June, July and August combined).

## II. SECURITY HIGHLIGHTS

**IT SECURITY SYMPOSIUM.** The UC-wide IT Security Symposium, held at UC Davis, concluded on June 19, 2003. More than 200 attendees, including colleagues from seven UC campuses and UCOP, gleaned computer security knowledge from more than 30 presentations and hands-on labs in this two-day conference. Many of the presentations from the conference are now available in PDF format.

Conference evaluations revealed that 100 percent of those surveyed were glad they attended, with 54 out of 55 noting they would attend another such symposium if offered. The symposium was co-sponsored by the UC Davis Information and Educational Technology organization (IET) and the University of California Office of the President. For more information about the symposium and to access the presentations, see <http://ietsymposia.ucdavis.edu/security>.

**SPAM FILTERING.** On May 1st, IET started scanning for spam on incoming and outgoing messages sent through the campus email servers. SpamAssassin, a free open-source spam filtering software program, was selected. Two options are offered: client-side (Eudora and Outlook) and server-side (primarily for users of the campus Web-based email program). This service has been very well received

by members of the campus community, and several departments that run their own email servers have opted to use SpamAssassin as well, thereby providing stronger anti-virus protection for campus users. A number of refinements to this new service are being investigated, including the development of user-defined black and white lists. (See the UC Davis spam filtering Web site at <http://security.ucdavis.edu/spam.cfm>.)

**SECURE PASSWORD AUTHENTICATION FOR EMAIL.** A team including members of the UC Davis Technology Infrastructure Forum (TIF) submitted an implementation plan to Vice Provost Bruno outlining technical issues, options, and solutions for the implementation of secure password authentication on campus email servers. The plan has been divided into two projects, with the first project focusing on upgrading the campus POP servers in preparation for secure password authentication. Effective communications will be critical to the success of this project, as several thousand Eudora users will need to upgrade to Eudora 5.2.1. This phase is scheduled to be completed by the end of December 2003. Once the POP servers are upgraded, IET, in cooperation with the campus technical community, will launch the second project for securing password transmission on the campus email servers. (For more information, see the UC Davis Security Web site at <http://security.ucdavis.edu>.)

**CA CIVIL CODE 1798.** In response to this new law, UC Davis has developed several campus information resources regarding the prevention of identity theft and suggested actions for victims of identity theft. In addition, UC Davis has developed a notification plan should an unauthorized person acquire personal information belonging to students, staff, or faculty members. The plan outlines procedures for campus units to report possible identity theft incidents, the investigation of the incident, determination of whether identity theft has occurred and, if so, who will be notified and how the notifications will be made.

A number of communications were developed to inform the campus community, including several articles and two campus directives: one from Provost and Executive Vice Chancellor Hinshaw ("Network and Desktop Security: Protection of Personal Information"), the other from Vice Provost Bruno ("Preventing Unauthorized Access to Personal Information"). In both directives, campus units are encouraged to take "aggressive action" to protect against identity theft. In addition, a special section of the Security Web site, called "Identity Theft Prevention 101", has been created that describes what constitutes identity theft, how the campus is complying with the new California law (California Civil Code, Section 1798), frequently asked questions, and how campus students, faculty and staff can protect themselves and others. (See [http://security.ucdavis.edu/id\\_theft.cfm/](http://security.ucdavis.edu/id_theft.cfm/).)

**FIREWALLS WORKGROUP.** A campuswide departmental firewalls workgroup has prepared draft guidelines for campus units that are considering the use of network firewalls. The guidelines outline the benefits and disadvantages of network firewalls, architectural alternatives, procedures for coordinating the implementation of a network firewall, and a memorandum of understanding between the campus unit and IET that defines service parameters. The workgroup report will also include a set of basic firewall rules for departmental implementation (see <http://security.ucdavis.edu/FWWorkgroup.pdf>).

In addition to developing the guidelines, members of the workgroup participated in discussions with IET to examine the feasibility of a central network firewall that could support campus unit requirements. These discussions focused on the performance, support, scalability and cost considerations of several design alternatives. It was concluded that the firewall solution for the campus will require both central support of network firewalls in selected network locations and the continued use of department-administered firewalls. The campus will also be examining possible standardization of the platform of department network firewalls. Standardization would promote broader support and recoverability of department network firewalls.

**MICROSOFT VULNERABILITIES.** In July, UC Davis responded to the various Windows security threats by communicating the seriousness of the problem throughout the campus community, implementing measures to slow down the worm infections, installing the critical patches, and restoring compromised computers. Technical staff throughout the campus worked quickly to apply security patches to about 1,100 computers and inspect the computers for further damage.

While this effort addressed largely computers used by staff and students enrolled in the summer session, senior campus administrators were concerned that new students and returning students and

faculty members could have computers that remained vulnerable to the exploit or, worse yet, were already infected by the new virus worms. To prepare for this, IET engaged internal staff, Student Housing managers, and campus unit technology specialists. Together, the group developed a plan to prevent a potentially serious impact to the security and performance of the entire campus network, to control the spread of the new computer viruses, and to restore infected computers. The resulting plan included some inventive automated scanning mechanisms to identify vulnerable computers throughout the campus. This plan was implemented on September 19, 2003, in preparation for dorm move-in and prior to the beginning of the new academic year. (See [http://security.ucdavis.edu/vuln\\_resources.cfm/](http://security.ucdavis.edu/vuln_resources.cfm/).)

### III. NETWORK, VOICE, AND DATA HIGHLIGHTS

**PUBLIC HEALTH INITIATIVE NETWORK PROJECT (PHINet).** The Public Health Initiative Network (PHINet) project is charged with examining the correlation between the existing telemedicine network and the CENIC network infrastructure. A project team of individuals from UCD, UCDHS, and CENIC recently approved the detailed functional requirements for the network and selected seven telemedicine sites to serve as the basis for a cost benefit analysis. The results will be used to assess the financial feasibility to leverage the CENIC infrastructure for the telemedicine and Public Health Initiative services.

**CENIC SWAN (SACRAMENTO WIDE AREA NETWORKING).** The Cisco Extended Long Haul Multiplexors at the Davis campus and at the Sacramento POP (1107 9th Street) are installed and tested. Incremental progress is being made toward commissioning the Metropolitan Area Multiplexors. These will complete the UC Davis and Medical Center connections to the new CENIC backbone. The Extended Long Haul Multiplexors are due to be replaced by less costly Long Haul Multiplexors in mid-October.

In addition, the Davis and Medical Center Juniper border routers are in production. The first of two fiber optic paths from the campus to the Medical Center is complete and provisioned with Luxn Wave Division Multiplexors, and these units are carrying traffic. The second fiber path was completed at the end of August, making it possible to have fully redundant paths between the campus and the Medical Center by the end of September.

**WIRELESS COMMUNICATIONS.** The UC Davis campus continues to experiment with wireless (802.11) networking. Numerous departments have installed individual access points in various office locations, and IET has installed 50 access points with centralized authentication in various public and department locations. However, few services have been developed to meet the increasing needs of department wireless users. In particular, individual and group/conference guest Internet access has surfaced as a service need that could benefit from centralized, managed support.

**OUTAGE NOTIFICATIONS.** As part of an ongoing effort to improve communications with the campus community, IET formed a team with members of the Technology Infrastructure Forum-Client Support Issues subcommittee (TIF-CSI) to review and refine the process for communicating about network and telecommunication service outages. The team has developed a draft plan that outlines a phased approach to improving outage notification communications.

**CAMPUS PAYPHONES.** Last spring MCI decided to enact the portion of their state contract that stipulates the client must pay for the difference between a payphone's actual revenue and MCI's cost. Communications Resources convened a campus committee to consider UC Davis' options. Those phones that were profitable were retained, while those that were co-located with the profitable phones were removed. The committee also evaluated which payphones were essential to public safety and/or public relations, drawing on expertise from the Police Department, Student Affairs, and Public Relations. Phones deemed a public safety or public relations necessity were either retained or replaced with an emergency or courtesy phone; the goal was to leave no campus area vulnerable. As a follow-up, the Office of Administration will lead an effort to create a public access phone policy, outlining where to place public phones to ensure the safety of our constituents and visitors.

#### IV. ADMINISTRATIVE COMPUTING AND INFRASTRUCTURE HIGHLIGHTS

**DOCUMENT MANAGEMENT.** IET has been providing support to two campus units interested in purchasing a document management system. After evaluating several products, the Office of Student Affairs has purchased software by Matrix OnBase. IET is involved with the vendor and Student Affairs representative in planning for the local modifications, testing, acceptance, and roll-out of the system. The second campus unit, the Offices of the Chancellor and Provost, is exploring options available for document management systems, with a particular focus on administrative routing, reviewing, approval, and archiving.

**NEW BANNER FUNCTIONALITY.** Following changes made to the Banner system, this summer, students were able to enroll in summer sessions online and pay graduate school application fees using a credit card.

**IMPROVEMENTS TO BANNER INTERFACE.** Banner will be upgraded from version 5.0 to version 6.0 at the end of October, 2003. Banner users will not see significant changes aside from an improved main menu, but this upgrade will prepare us for version 7.0, which will offer a more user-friendly and Web-based interface. The Banner 7.0 release is scheduled for December 2004.

**UPCOMING DAFIS UPGRADE.** The Accounting & Financial Services DaFIS Team is planning to upgrade the DaFIS Transaction Processing (TP) database server over Thanksgiving weekend. The upgrade is part of a regular replacement cycle for, and is intended to ensure sufficient capacity and continued reliability of the server. DaFIS TP users may notice some performance improvement on queries and saves in TP, but otherwise will not be impacted by the upgrade. DaFIS TP will be unavailable during the cutover over the Thanksgiving weekend.

**WORKFLOW SYSTEM: ONLINE LEAVE AND TIMESHEET REPORTING PROJECT.** Leave reporting and timesheet reporting were selected as the focus of an IET internal workflow project that could eventually be deployed more broadly and offered to interested campus departments. The team is using the Oracle workflow engine and has developed a repository of roles and other data related to staff/supervisor relationships. The application will be rolled out to IET staff in the coming weeks.

*This report can be accessed on the Web at <http://iet.ucdavis.edu/pubs/ITLC/09.03.pdf>. For more information on these and other UC Davis technology developments, see the IET News Web site at <http://iet.ucdavis.edu/whatsnew/index.cfm>.*