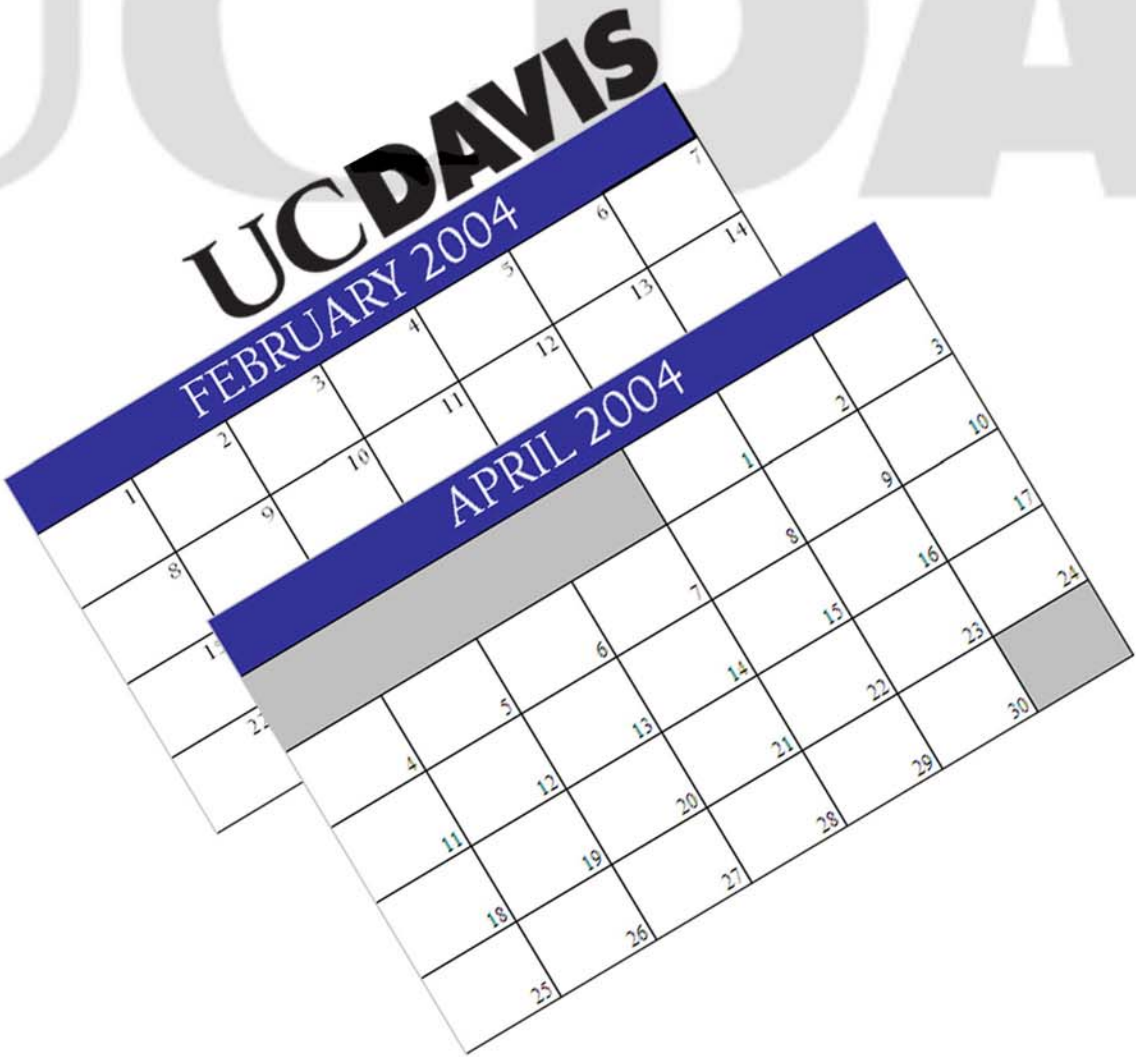


JORDAN



REPORT

INFORMATION AND EDUCATIONAL TECHNOLOGY

February - April 2004

INFORMATION AND EDUCATIONAL TECHNOLOGY REPORT

February-April 2004

This report is designed to provide UC Davis faculty, staff, and students with brief descriptions and updates on major projects and initiatives in which Information and Educational Technology (IET) has been involved since February 2004. IET's reports to the campus community are published three times each academic year (in September, January, and May), and each report covers a wide range of topics grouped into four major categories. These categories are:

- Campuswide Technology Highlights
- Infrastructure Highlights
- Educational Technology Highlights
- Administrative Computing Highlights

To obtain a copy of this IET Report, go to <http://iet.ucdavis.edu/pubs/reports.html>, where PDF versions of current and previous editions are available for viewing or printing.

For ongoing campus technology and computing news, see TechNews (<http://technews.ucdavis.edu>). This site provides a convenient, focused, and regularly-updated source of news ranging from IET announcements to stories about campus information technology initiatives, security alerts, newsletter articles about the application of technology in teaching and research, and more. To receive a weekly email abstract with links to the latest news, subscribe to TechNews at <http://technews.ucdavis.edu/subscribe.cfm>.

Feedback on this report is greatly encouraged. Please contact ietpubs@ucdavis.edu.

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CAMPUSWIDE TECHNOLOGY HIGHLIGHTS

This section focuses on the development and implementation of overarching campuswide computing and technology initiatives and policies. Some examples of these initiatives and policies include the development of an IT Strategic Plan for the campus, the New Business Architecture (NBA), and the MyUCDavis Web portal.

IT Strategic Planning Continues For UC Davis

After two rounds of campus review, a list of 29 proposed IT projects has been developed, discussed, and ranked by the Council of Deans and Vice Chancellors. In early April, a handful of those information technology projects were identified as priorities the campus should pursue during the next few years. Included in this short list of projects are the following:

- **Faculty Merit and Promotion**

Headed by the Office of Academic Personnel, with support from IET, this project proposes to simplify the time-consuming, paper-based task of assembling and reviewing faculty merit and promotion portfolios. A project team, oversight committee and implementation workgroup have been formed. In April, after carefully considering this project's goals, anticipated benefits, and options, the campus' Academic and Administrative Computing Coordinating Councils (AC4/AdC3) recommended to the Provost the pursuit of an online system as a high priority for the campus (see <http://ac4.ucdavis.edu>).

- **Electronic Research Administration**

Headed by the Office of Research, with support from IET, this project proposes to improve the process of research proposal development, review, submission and approval through the implementation of an online system. A project team, oversight committee and implementation workgroup have been formed, and a software package (InfoEd) has been selected. Demos and discussions with InfoEd are scheduled for early May. This is the second project that AC4/AdC3 members considered carefully this year and recommended be considered a high campus priority (see <http://ac4.ucdavis.edu> for details).

- **Document Management**

Drawing on the successful implementation of the OnBase document management system in the Offices of the Registrar, Undergraduate Admissions, and Financial Aid, a number of campus departments have expressed interest in a similar system and set of functionalities. A team will soon be formed to explore the potential use of an enterprise document management system as a solution to document routing, review, approval and storage. Specific outcomes will include the development of an implementation strategy for the campus and a coordinated, cost-savings approach to the purchase and distribution of software licenses.

For more information about the campus' information technology planning activities, see <http://itstrategicplan.ucdavis.edu>.

New Business Architecture (NBA) Planning Continues

IET continues to be actively involved in the UC Davis New Business Architecture Initiative projects and planning activities. The following are NBA highlights for February 2004 through April 2004. For more information about the NBA at UC Davis, see <http://nba.ucdavis.edu>.

- **New Phase for NBA Initiative**

In March, the New Business Architecture Steering Committee announced a new focus and organization for the NBA Initiative at UC Davis. Leveraging knowledge and experience garnered over the last few years, the initiative was re-crafted around a small team of experts who can help a larger number of campus departments plan and implement changes that support the full range of NBA principles. The NBA Office is now organized under the direction of Karen Hull, the Associate Vice Chancellor for Business Services, in the Office of Administration (see <http://nba.ucdavis.edu>).

MyUCDavis Portal News

MyUCDavis is the campus' portal, a secure and customizable Web site that integrates several UC Davis Web applications and online services into one convenient location. Based on an individual's affiliation with the university (as student, faculty or staff), the portal creates an entrance point into many UC Davis services from course registration and schedules to course management tools, news and Web-based email. The portal continues to grow and is available at <http://my.ucdavis.edu>. The following are just some of the latest additions and upcoming changes to MyUCDavis.

- **Spring into the Web Course Management Event Attended by 40 Campus Faculty Members**
Members of the MyUCDavis Development Team were on hand to assist the Teaching Resources Center (TRC, see <http://trc.ucdavis.edu>) staff with the first ever *Spring into the Web* event. This two-day event, held in Hutchison Hall on March 30-31, 2004, drew nearly 40 faculty members from across campus. *Spring into the Web* instruction covered MyUCDavis Course Management tools, with emphasis on Website Builder, as well as other Web site building tools such as Dreamweaver, the use of graphics, PDF documents and Flash. For more information about MyUCDavis course management training, see the TRC calendar at <http://trc.ucdavis.edu/trc/events/current1.html>. To access course management tutorials, see the MyUCDavis *Getting Started for Faculty* page at <http://my.ucdavis.edu/project/gettingstarted.html>.
- **End of Quarter Clinic Assists Faculty with Electronic Grade Submissions**
As electronic grading becomes more common, an increasing number of instructors are using the GradeBook and Final Grade Submission systems of the MyUCDavis Web portal for the first time. To assist these new users, the Teaching Resources Center (TRC) offered a week-long GradeBook Clinic, March 18-24, 2004 (Winter Quarter finals week). MyUCDavis Team members were on hand to assist, and instructors were able to drop in or telephone to get answers to last minute grading and final grade submission process questions. As a result, final grades for 1880 courses were submitted electronically for Winter Quarter 2004.
- **MyUCDavis and Course Management Usage Statistics**
As of March 2004

20,000	Average number of daily logins
44,432	Number of unique users (35,897 students; 2,261 faculty; 6,274 staff)
1,027	Number of courses using Course Management Tools in Winter 2004 (Website Builder, GradeBook, Communications tools, Quiz Builder)
1,612	Gradebooks in use in winter quarter 2004 (partial list)
73%	Percentage of all UC Davis students using one or more MyUCDavis Course Management Tools

INFRASTRUCTURE HIGHLIGHTS

This section discusses the extensive infrastructure technology services and support that IET provides to the campus. These cover quite a wide range, including: support for campus IT projects; campus network security; software and technology support; campus telecommunications and wireless networking; voice, video and photography services; and publications and news.

Campuswide Infrastructure Projects

- **Campuswide Effort Provides Students with Online Access to Admission Process**

A major technology project involving many campus departments was unveiled in Winter 2004, as the MyAdmissions site (<http://myadmissions.ucdavis.edu>) was rolled out to students applying for 2004-2005 admission to UC Davis. The purpose of the project was to provide students with a secure online method to check the status of their applications and, if accepted, complete the enrollment process. Through MyAdmissions, accepted students were able complete their Statement of Intent to Register (SIR) and pay their deposit by credit card. Following completion of the SIR, a student could create a UC Davis email account, view Financial Aid status, complete the Statement of Legal Residence, enroll in Summer Advising, access the Hepatitis B forms, view Housing arrangements, and take care of a variety of other steps necessary to complete enrollment. The MyAdmissions project was sponsored by Undergraduate Admissions & Outreach Services and supported by many units in Student Affairs and Information and Educational Technology.

In order build a campus communication mechanism for students that is accessible from the start of the application process to graduation, the MyUCDavis Web portal team worked with the Office of Undergraduate Admissions to develop a new messaging system. This system allows reliable and secure communications to individual applicants and groups of applicants. As a result, when the applicant becomes a student and transitions from MyAdmissions to the MyUCDavis Web portal, all admissions-related messages are still available through the Campus Messages channel.

March 2004 proved to be the most popular month for adding new accounts, and several IET groups worked together to provide customer service to the record numbers of visitors to the MyAdmissions site. Starting March 15, applicants could use the MyAdmissions site to receive the campus decision on their admission application. If admitted, students were able to set up their computing accounts. As a result, 15,397 applicants created Kerberos computing accounts in the ensuing few weeks, of which 3,369 were created in one day. To handle this enormous demand, additional staff from the IT Express, Technology Support, Software Site License, and Operations groups assisted with customer service.

There are several beneficial outcomes of the MyAdmissions project for both students and the campus. Students are now able to complete their enrollment package more quickly and easily from home, and receive official communications from UC Davis. Student Affairs was able to significantly reduce the workload for enrolling new students, as many tasks that were previously performed manually, such as matching stacks of paper to applicant names, are now performed by system automation. The project also has marketing aspects, as prospective students are made to feel part of the UC Davis community from the time of acceptance, which is expected to improve recruitment efforts. To date, applicants have accessed the system over 300,000 times.

- **Changes to Distauth Services Accommodate New Student Computing Accounts**

To accommodate the creation of new computing accounts for current undergraduate applicants, and allow for future growth of campus accounts, modifications were made to the directory structure of the files in the authentication directory on the AFS servers. These changes required IET programmers from the Middleware Team and the Data Center to make code changes to the distauth modules. The updated modules that IET maintains for campus distribution are available at: <http://distauth.ucdavis.edu>. Those users with unique configurations or who are running distauth software that is not supported by IET who have questions or require assistance, please contact the distauth support group at distauth@ucdavis.edu.

- **LDAP Upgrades Provide Increased Reliability**

On March 15, 2004, IET staff from the Middleware Team and the Campus Data Center upgraded the central LDAP service (<http://ldap.ucdavis.edu>) to a more robust and reliable platform. Consisting of a pair of replicated, load-balanced servers, the new servers are fully populated from the Computing Accounts (Mothra) system, while at the same time honoring privacy settings therein. For campus services requiring access to available account data, the directory now offers service-level accounts. If you wish to use LDAP for your directory-enabled applications, please contact ldapadmin@ucdavis.edu for an LDAP service-level account.

Computer and Network Security

- **Campus Makes Norton AntiVirus Available For Free Download to UC Davis Students**

In its continuing efforts to provide a more secure computing environment, UC Davis has made the latest edition of Norton AntiVirus software available for free download to students. An email memo from Vice Chancellor Judy Sakaki and Vice Provost John Bruno went out to all UCD students on March 31, 2004, announcing the availability of the software, and including instructions on how to obtain and configure the software. The full memo can be accessed here: <http://vpjet.ucdavis.edu/antivirus.html>. Both the PC and Mac versions of Norton AntiVirus can be downloaded from the Software section of the MyUCDavis Web portal (<http://my.ucdavis.edu/software>). Norton AntiVirus is also available to faculty and staff at a significant discount via MyUCDavis. The versions of Norton Antivirus available for students on MyUCDavis come with a subscription to the Live Update service that lasts through September 30, 2004. The campus is in negotiations with the software vendor, and hopes to offer this service again for the 2004-2005 academic year.

- **Remedy Help Desk Application Set for Pilot Rollout to Incident Response Team**

In an effort to improve the campus' ability to report, investigate, track and resolve security incidents, a project team was formed in November 2003 to facilitate the implementation of the Remedy Help Desk application. Remedy Help Desk provides an automated system to which problems can be reported and which in turn creates and routes trouble tickets to the appropriate help desk personnel in IET and other departments around campus.

The project team has acquired the necessary hardware, installed Remedy Help Desk and is configuring the application to meet IET and campus needs. In the first of several phases, Remedy Help Desk is expected to roll out in late Spring 2004 to the Incident Response Team, the campus group charged with managing the misuse or abuse of UC Davis computer or network resources. Subsequent project phases will provide enhanced help desk support for other critical campus applications and services. For additional information about the Remedy Help Desk implementation project, contact Sandra Stewart (smstewart@ucdavis.edu) or Mark Stinson (mpstinson@ucdavis.edu).

- **File Sharing and Copyright Infringement Notifications Lower During 2003-2004**

According to the campus Business Contracts and Analysis Office, which has been receiving, coordinating and tracking the numbers of Digital Millennium Copyright Act (DMCA) infringement "notifications" since the law's enactment in 1998, the number of notifications for UC Davis for October 2003-February 2004 continue to be lower than the same period of the 2002-03 academic year.

In May 2003, following lawsuits filed by the Recording Industry of America Association against four students from three universities for copyright infringement, UC Davis initiated a new awareness campaign to alert student, faculty and staff of the risks of illegal file sharing. The number of DMCA notifications peaked at 96 during the month of April 2003, with the type of files shared illegally primarily music, but also included some movie and software files. While the number of notifications received by the

campus dropped significantly after that, and stayed at typically low summer rates in 2003, the numbers again increased when Fall 2003 classes began. The good news is that the monthly numbers for October 2003-February 2004 are lower than during the same period of the 2002-03 academic year, with an average of 27 Notifications each month since October 2003, most of which are movie and software related (the average for October 2002-February 2003 was 32 per month).

The campus continues to try to raise awareness about copyright infringement. To do so, a number of Web sites and communications are available, including a special section on the Student Computing Guide (<http://scg.ucdavis.edu/downloading.cfm>) and a tip in the March 2004 IT Times Special Edition on Computer Security (<http://technews.ucdavis.edu/news2.cfm?id=691>).

For additional information about file sharing, see the UC's copyright education Web site at www.universityofcalifornia.edu/copyright/ or subscribe to DMCA@ucdavis.edu, the new DMCA-info listserv (limited to UC Davis campus community members) for questions and answers of interest to the campus community.

- **Lunchtime Security Discussions Continue to be Well Attended**

On Friday, March 12, 2004, Campus IT Security Coordinator Bob Ono hosted Apple Computer representatives in the second in a series of monthly vendor discussions designed to educate the campus community about computer and network security. Nearly 60 faculty and staff attended the presentation, lunch and discussion in the Silo Cabernet Room, where Apple representatives discussed the proactive steps the company is taking to provide secure computer networks and systems.

Since seating in the Silo Cabernet Room is limited, IET-Information & Events staff worked with a member of the MyUCDavis Development Team to develop a new reservation method. This feature, found in the Security Training section (<http://security.ucdavis.edu/training.cfm>) of the Computer and Network Security Web site, allows interested parties to reserve a seat and allows IET hosts to track and limit attendance as needed. Future events are in the early planning stages. Announcements and agendas will be available at <http://security.ucdavis.edu/training.cfm> as details become available. Suggestions for future topics should be sent to Bob Ono, IT Security Coordinator, at raono@ucdavis.edu.

- **IET Sponsors Two-Day Seminar on Computer Security**

In a continuing effort to provide ongoing support to the UC Davis technical community in the area of computer and network security, Information and Educational Technology (IET) is hosting a two-day security seminar with the Microsoft Corporation on May 10–11, 2004. Microsoft security consulting partners will be on campus to provide information critical to enterprise security. Topics covered will include security patch management, server security on Windows 2000 and Windows Server 2003, network and perimeter security, client security on Windows 2000 and Windows XP, application and data security. Also planned are demonstrations designed to illustrate how Microsoft security solutions address real-world security problems. For more information about this event and other security training opportunities, visit <http://security.ucdavis.edu/training.cfm>.

- **Workgroup Exploring Efforts to Expand RPC-Related Vulnerability Detection/Reporting**

During fall 2003, the campus deployed several methods to reduce the number of computers with vulnerable Windows RPC services or related worm infections. This vulnerability reduction effort included a scan of the campus computing network for RPC vulnerabilities; vulnerability check for individual hosts upon web-based authentication; web redirection of vulnerable hosts to corrective resources and a Web-based reporting mechanism identifying RPC vulnerable or exploited computers. A campus workgroup was formed in January 2004 to prepare a high-level plan and resource requirements necessary to expand the existing RPC-related vulnerability detection and reporting tools into a proactive campus-wide tool for emerging critical vulnerabilities. In a report released in mid-April 2004, the workgroup's findings and recommendations indicate that it is feasible to expand the existing vulnerability scanning and reporting

mechanism beyond Windows RPC vulnerabilities and that this expansion could be completed with moderate funding/resource augmentation (view the report at <http://security.ucdavis.edu/vulnscan.pdf>).

- **File and Disk Encryption Workgroup Submits Recommendations to Vice Provost**
The campus workgroup formed last December to define the functions and requirements for a file and disk encryption system that could support academic, research and administrative needs recently submitted their findings and recommendations to Vice Provost Bruno. The workgroup focused on file and disk encryption as a means to protect sensitive data residing on unit desktop and laptop computers and portable storage media, such as flash drives and CD and DVD media. In their report, the workgroup members recommend the development of a campus policy discussing the appropriate use of encryption services while providing operational safeguards for both privacy and public records access. The report also specifies functional specifications for a campus file/disk encryption program (see http://security.ucdavis.edu/file_encryption_report.pdf).
- **Finalists Selected for Campus Central Firewall Services**
Of the four bids UC Davis received for the Central Firewall Services RFP, two finalists were selected in early April and both were invited to present their proposed firewall designs. The RFP bid review committee will then evaluate the designs and pricing, and combine the resulting scores with the RFP bid scores to select a single finalist. The chosen vendor will participate in a pilot test in June 2004. For more information about firewall services and resources, see <http://security.ucdavis.edu/firewalls.cfm>.
- **New Firewall Section of Campus Security Site Created**
To support the campus demand for firewall information and related campus resources, a special section of the Computer and Network Security Web site was developed. The Firewall Web pages were posted in February, and in less than a month, the Firewalls pages have become one of the top ten most visited sections of the Computer and Network Security site. These pages will continue to be a primary source of information as the campus plans for acquiring and implementing a central firewall solution. For more on firewall services and resources, see <http://security.ucdavis.edu/firewalls.cfm>.

Telecommunications & Networking Highlights

The following are highlights of activities related to UC Davis networking and voice services. For more information about voice, data, and networking services, see <http://cr.ucdavis.edu>.

- **Telecommunications Master Plan RFIs Reviewed; Contract to be Issued May 2004**
Responses were received for the UC Davis telecommunications master plan RFI on March 12, 2004. The evaluation committee reviewed the responses and heard oral presentations on March 25. A finalist will be selected and negotiations will occur in April, with a contract expected to be issued in May. This analysis will result in a master plan that will guide telecommunications infrastructure capital improvement and replacement cycles over the next ten years, with the recognition that it should be re-evaluated every three years due to the rapid change in external trends and outside influences.
- **Campus- and Wide-area Networking Improvements Continue**
The UC Davis and Medical Center connections to the new CENIC backbone were completed, and the high-speed connections between the campus and Medical Center are now fully operational and carrying traffic. The Extended Long Haul Multiplexors that were initially installed have been removed and are being re-deployed into the National Lambda Rail network. The final efforts in the CENIC deployment involve moving Digital California traffic onto the CENIC backbone at the Sacramento POP, and optimizing CENIC traffic routing to provide maximum stability.

- **Flexible Route Selection and Five-digit Dialing Implemented**
IET-Communications Resources is implementing measures to reduce voice costs for campus constituents. In addition to five-digit dialing between campus users and Centrex locations, IET-CR is also implementing Flexible Route Selection (FRS) through SBC. Because of the large volume of campus calls, the campus generally has more favorable pricing compared to Centrex locations. FRS service allows the campus, at minimal cost, to route Centrex calls through the campus PBX when there is a cost savings for doing so. Those calls for which Centrex clients will not realize any cost savings by routing through the campus will be routed directly to their destination. IET-CR does not anticipate any additional capacity will be required to handle this increased traffic on the campus PBX.
- **Successful Multicast Connection Spurs Faculty Interest in Using Access Grid™**
On February 26, Dr. Marco Molinaro, Chief Education Officer for the UC Davis Center for Biophotonic Science and Technology, used a multicast Access Grid™ (<http://www.accessgrid.org>) connection from his personal computer to participate in the University of Texas Biophotonics Symposium. Access Grid™ is an ensemble of resources including multimedia large-format displays, presentation and interactive environments, and interfaces to Grid middleware and to visualization environments. IET-Communications Resources, in collaboration with key personnel at Argonne National Laboratories (<http://www.anl.gov>) and Internet 2 (<http://www.internet2.org>), successfully assisted Dr. Molinaro in achieving full audio and video using the Access Grid™. This was the first known use of the Access Grid™ by a campus department since multicast was deployed in early February, and several faculty members have expressed interest in using the system for future events.
- **“MyNetwork” Project Provides Single Web Entry Point for Accessing Network Information**
The “MyNetwork” project represents the convergence of several sub-projects, two of which are the data network information migration project and the online work order application.
 - **Data Network Information Migration Project Underway**
IET-Communications Resources is prioritizing the list of requirements for this project in order to provide a phased delivery of project deliverables. This project supports the implementation of Nagios, an open-source package that will provide network status pages and largely replace the current tool, HP Openview. The Nagios integration is scheduled for completion in Summer 2004, and this project will provide the Network Operations Center with the backend data necessary for the improved suite of network tools. One of the first priorities involves migrating data network information from a stand-alone system into the Pinnacle telemanagement system. Besides migrating existing data, additional network information will need to be captured and tracked. Acquiring this new information, and reconciling discrepancies among existing info, may require a partial audit of network resources.
 - **Work Order Application Initiated**
IET-Communications Resources has initiated an online work order application, which will greatly improve the telecommunications work order process. The current process is very manual and paper-centric, touches many stand-alone systems, and is labor intensive. The new online application will make use of Pinnacle’s workflow engine to streamline and accelerate the work order process. The application will integrate with other systems (e.g. NAM maps based on location), and will provide simplified interfaces for work order data entry, robust searching capabilities, and management reports. This application sets the stage for making the work order process client-centric in the future, whereby clients would be able to submit requests and check order status online, and receive automatic notifications.

Video and Photography Services

- **Mediaworks Continues to Meet Campus Audio/Video, Graphics Needs**

The Audio, Video and Graphics groups continued to develop and produce several new instructional and outreach programs for the campus during Winter 2004. The Video Group recorded over 100 hours of instructional lectures/seminars and provided 55 hours of encoded video streams, and continues to provide production services for the AP Spanish project, while the Graphics area produced key instructional materials for Nutrition, Veterinary Medicine, and FST.

The Video group continued to work closely with Public Communications to develop Web casting for the Storer Lecture Series and the Institute of Government Affairs "Mad Cow" forum. The Video Group also completed a very successful year of partnering with Intercollegiate Athletics to provide graphic and video display production services for all athletic events in the Recreation Hall.

- **New Film and Video Online Reservation Process Implemented for Faculty Use**

A new online reservation request service was added to the UC Davis Online Film and Video Library Database (<http://video.ucdavis.edu/>). The new service allows faculty to quickly fill out a reservation request form following a successful search for their video title. The request is sent directly to the Hart Media Distribution Lab (MDL) staff for processing. The previous process required the faculty member to contact the lab via phone or email and make the request.

In conjunction with the rollout of this new service, a complete physical inventory audit was performed, all video titles were standardized, and an additional process was added to update the online database on a nightly basis with any changes or additions that occur throughout the day.

Communication News

IET produces a number of publications and regular news items. All are designed to keep various segments of the campus community informed about services available to them as well as recent or upcoming on-campus technology developments. In particular, IET's newsletter, the IT Times (see <http://ittimes.ucdavis.edu>), is published quarterly in print and on the Web to inform staff and faculty of information and educational technology services, initiatives and activities at UC Davis.

- **Special Computer Security Edition of IT Times Very Popular with Campus Audiences**

The latest edition of the *IT Times*, a Special Edition which focused on computer security, has proven extremely popular with campus audiences, and may get reprinted. This issue offered a variety of practical tips and basic information on a number of security topics, including identity theft, firewalls, wireless, instant messaging, and data backups. This special issue met with great success (filling an obvious need for user-friendly security-related information), to the point that 15,000 additional copies have been ordered (see the PDF of this issue at <http://ittimes.ucdavis.edu/pdf/ITtimes0304.pdf>).

- **TechNews Highlights**

TechNews (<http://technews.ucdavis.edu>) is a convenient, focused, and easy-to-access source for computing and technology news. News items range from announcements about IET and campus initiatives to articles about new projects, security alerts, and computer viruses to informative stories about applications of technology in the classroom. During Winter 2004, articles in TechNews included security-related information such as computer system patching, anti-spam laws and resources, as well as links to computer-related columns in the Aggie student newspaper, IT Times stories, and announcements regarding IET services. Members of the campus community can subscribe to TechNews at <http://technews.ucdavis.edu/subscribe.cfm> to receive a weekly abstract with links to the latest headlines.

- **Hypertext, a New Quarterly Student Computing Newsletter, Now Available for Spring 2004**

The Spring 2004 edition of *Hypertext*, a new quarterly newsletter designed to keep students informed about the latest campus computing news, is now available on campus and on the Web. *Hypertext* was developed by a team of student employees within the Office of the Vice Provost for Information and Educational Technology, in collaboration with many other IET units, including Computer Lab Management, IT Express, the Software License Group and the MyUCDavis Development Team.

Hypertext provides students with the opportunity to regularly communicate important time-sensitive issues and developments (i.e., security info, service changes, computer room moves). Topics covered in the Spring 2004 editions include computer security, preventing identity theft, ways to donate or recycle old computers, student technology jobs, and features of the MyUCDavis Web portal. A downloadable PDF of *Hypertext* (<http://scg.ucdavis.edu/hypertext/2004spring/spring04.pdf>) is available on the Student Computing Guide Web site, and students can also pick up a print copy of this newsletter at IT Express (182 Shields Library) and any of the computer rooms. To submit comments or suggestions about this publication, or to be notified when a new issue is published, email ietpubsjr@ucdavis.edu.

- **Computing Through the Years: IET at Picnic Day**

A number of IET units collaborated to have a combined presence at this year's Picnic Day event, which was held on Saturday, April 17, 2004. With many of the estimated 60,000 attendees consisting of families of current or possible future students, IET groups (including members of Computer Lab Management, Information & Events, Software License Coordination, IT Express, Mediaworks and the MyUCDavis team) focused on providing student computing information. As viruses and identity theft are highly important topics these days, IET provided information on computer security, and handed out free copies of Norton AntiVirus software to UC Davis students. The theme of this year's Picnic Day was "Shifting Gears For 90 Years," and IET teamed with Professor Emeritus Richard Walters to display several of the interesting pieces from his Tech Museum as a way of showing the huge changes in computers and technology over time.

- **Student Computing Posters to be Displayed in Memorial Union, Campus Computer Rooms**

Several IET groups recently collaborated to develop a series of poster-sized advertisements, which will soon be displayed in the Memorial Union and the campus computer rooms. These posters will be used to communicate key messages about student-focused computing and technology services, including the MyUCDavis Web portal, the availability of Norton AntiVirus as a free download, and how to obtain student computing information and publications. The posters will be displayed in the Memorial Union, where two of the large display cases (which are located in the extremely high traffic area between the Coffee House and the UC Davis Bookstore) are available for use by campus departments. When not in the Memorial Union, the posters will be displayed in other high traffic campus areas, including the MU Station open access computer room and the IT Express walk-in at 182 Shields Library. The posters were designed by IET-Information & Events with the assistance of the MyUCDavis, Software Licensing, Computer Lab Management, and Campus IT Security groups.

EDUCATIONAL TECHNOLOGY HIGHLIGHTS

This section outlines some of IET's projects and service enhancements in support of UC Davis instructors and students. Often found within this section are the latest news from Mediaworks (the IET department that provides professional educational technology and media services to instructors for their classes and research), information on the campus computer rooms, and highlights of IET's efforts to provide students with the computing information they need during their time at UC Davis.

Online Courses & Educational Tools

- **Almagest Multimedia Teaching Tool Gains Momentum on Campus**
The multimedia teaching and learning tool Almagest, brought from Princeton University and installed in December 2003 by IET-Mediaworks, was successfully used by an American Studies 21 course in Winter 2004, and has become the focus of several ET Partners projects. In the AMS 21 course (Objects and Everyday Life), students were able to search online for all of the images used in the course and replay them in the order they were shown in class. Additionally, 25 groups of students each submitted their final projects online using the Almagest tool. Professor Carolyn de la Pena was quite pleased with the results, and posted the best projects on her Web site (<http://ams.ucdavis.edu/instructors/delapena/AMS21/>).
Almagest is also being considered as a departmental level resource in the departments of Art History, Textiles & Clothing, Landscape Design and Theater and Dance. As part of this process, the Mediaworks Photography Group scanned/digitized a record number of 35mm slides during Winter 2004 for faculty lecture materials and the Almagest Project.
- **Mediaworks to Offer Full Service Interactive Audio, Video and Text Chat Tool in Fall 2004**
Work continues towards delivering an interactive audio, video and text chat tool with interactive whiteboard capabilities as a full service Mediaworks offering to be delivered in time for Fall 2004. An early version will be tested in Spring 2004 in courses in language and history.
- **Interactive MRI Safety Test Adopted as Required Training by UC Davis Health System**
An interactive animated game-format exercise developed by Mediaworks and the UC Davis Health System to test/track employee knowledge of safety principles around the MRI (Magnetic Resonance Imaging) systems has proven extremely popular, and is being adopted as a required training module for all employees at the UC Davis Health System.
- **UC Davis Joins With Other Universities to Explore, Develop Course Management System**
The campus recently partnered with over 20 universities (including Harvard, Yale, and several UC campuses) to participate in the second phase of a project to develop and distribute a complete course management system that incorporates the best features of the participants' existing systems. The Sakai Project (<http://www.sakaiproject.org>) was created by four universities (Indiana, Michigan, MIT, and Stanford) in January 2004. The project received seed funding by way of a \$2.4 million grant from the Mellon Foundation. The Sakai Educational Partners Program was launched in February 2004, and facilitates technical collaboration, developer training, strategy briefings, and software sharing among universities.

Faculty Training and Presentations

- **Arbor Provides Support for Increased Faculty Use of Smart Panels and Portal Administration Tools**
The beginning and end of Winter 2004 saw an increase in the use of the Arbor faculty training facility, as faculty expressed greater interest in learning to use the Smart Panel classroom projection system and improving their skills using the MyUCDavis portal for course administration.

The Arbor facility provides training, consultation, and a work place for faculty to use technology to develop instruction and administer their courses. The academic community is provided one-on-one training and consultation, group training, seminars, workshops and demonstrations. A total of 81 individual departments were represented by the clients to The Arbor during this fiscal year. The Arbor has seen a 24% increase in new clients, even though the overall number of client appointments has decreased by 22%. This is explained in part by the fact that 55% of all telephone calls are consultations (an increase of 15%).

- **Popularity of ET Partners Program Leads to a New Approach to Partnerships**

Responses to the Educational Technology (ET) Partners, Call for Proposals for faculty participation, doubled in Spring Quarter 2004. This enthusiasm resulted in a new partnering approach. ET Partners will now offer several departmental partnerships, rather than pairing a student technology advisor with a single faculty member per quarter. This initiative is part of an ongoing effort to help a greater number of faculty who need assistance with incorporating educational technology into their curriculum.

This approach will serve to assist faculty with similar needs. Additionally, it will help to acquaint faculty with the use and benefits of the new Almagest teaching and learning tool that Mediaworks brought to UC Davis from Princeton University. The ET Student Partners are currently receiving training on the use of this online media management and presentation program, which also adds the option for faculty to pool from each other's resources. For more information about ET Partners, see: <http://etpartners.ucdavis.edu/>.

Computer Labs & Classrooms

- **New Pilot Program Teams CTS Support Staff With Graduate School of Management**

As part of a pilot project agreement reached in November 2003, Classroom Technology Services (CTS) began providing student consulting support at the Graduate School of Management (GSM) computer lab. During Winter 2004, CTS student employees provided 107 hours of GSM computer lab support during peak weekday hours (11am-2pm) and provided assistance with wireless connectivity, logging in, printing, and removing viruses on laptops. Under the agreement, the GSM paid all costs of the student support and provided additional technical training required to support GSM facilities. In Fall 2004, both the GSM and CTS will evaluate the potential of a longer-term agreement.

- **Computer Lab Network Connections Upgraded to 100 Mb/Second**

Classroom Technology Services (CTS) completed upgrading all network connections in the computer rooms to 100 megabits per second. The work began during Summer 2003 and involved upgrades in 14 computer classrooms, open access labs, and media facilities. The upgrade allowed a substantial increase in networking speeds to each computer, which was necessitated by the increasing need to access content-rich online materials. As part of the upgrade, CTS also replaced cables and switches in the computer rooms to optimize the faster networking.

- **Meyer Media Lab Gets New Carpeting**

At the start of the Winter 2004 quarter, Classroom Technology Services (CTS) replaced the seven-year-old carpet in 1154 Meyer Media Lab. Multimedia editing and creation necessitated the need for sound dampening carpet not needed in other CTS facilities. The new carpet was installed in tiles rather than the traditional large segments. This allows high traffic sections to be replaced while leaving less used areas untouched. The new carpet tile consists of floor tiles with padding for additional sound dampening.

ADMINISTRATIVE COMPUTING HIGHLIGHTS

This section covers the IET projects focused on improving the campus administrative computing environment. Frequently included in this section is information on campus administrative upgrades to major campus computing systems (i.e., Banner, DAFIS) as well as partnerships and projects IET is engaged in with other campus departments to improve administrative computing at UC Davis.

Payroll Personnel System (PPS)

- **New Reports Increase PPS Decision Support Usage**

PPS Decision Support usage by campus departments and central offices replacing the monthly payroll reports (Distribution of Expense, Payroll Lien and Time Benefits/Leave Usage) accounts for more than 15% of the total reports run this calendar year. The PPS Support Team has continued to work with the Payroll Office on improving departments' access to these reports—many of whom used to have an additional delay in receiving their reports as their account structure caused the paper reports to be forwarded first to a central office which then distributed the individual departments' reports.

A new series of detail and summarized reports were developed to assist the Accounting and Financial Aid Offices in resolving Work Study account balance issues and associating the correct higher ed codes for expense reporting to government agencies. Once the beta test with the Financial Aid Office has been completed, the detail Work Study expense report will be available to all departments. Similarly, a probation date audit report was developed in support of Human Resources and the Registrar's Office. This new report has just been released to departments for their use.

Additional system enhancements and a database upgrade will be completed before the end of this fiscal year in order to support the additional data requirements of the new reports, to handle increased usage load and to comply with the Oracle data base support. These changes will be timed so that they do not impact the system's usage. For more information on the PPS system, see the [PPS Web page](http://sysdev.ucdavis.edu/bsdu/pps/payroll_personnel.cfm) at http://sysdev.ucdavis.edu/bsdu/pps/payroll_personnel.cfm.

Banner Student Information System

- **Banner Upgrades for Accounts Receivable and Financial Aid**

While no major upgrades are planned for this academic year, minor upgrades are still expected for the various Banner modules. The Accounts Receivable system has a new release currently in development and planned for Spring implementation. The Financial Aid system is expecting a new release in April for the Spring regulatory requirements. After the completion of the Banner 6.0 upgrade, new auditing processes began to contribute to the growth of the database. Analysis of the database was conducted in order to identify steps to help manage this growth. Specific tables were resized or moved, and where possible certain temporary data is now regularly purged. More analysis is planned to determine what data can be archived. Information about the Banner Student Information System and its implementation at UC Davis is available at <http://sysdev.ucdavis.edu/bsdu/banner/faq.cfm>.